Declassified E.O. 12356 Section 3.3/NND No. 785019

ACC 150/PWU (1 OF 2) 10000/150/452
(VOL. 1)

EL
NO

Declassified E.O. 12356 Section 3.3/NND No. 785019

10000/150/452
(VOL. 1)

ELECTRICITY, SICILY
NOV. 1943 - FEB. 1945
(1 OF 2)

Declassified E.O. 12356 Section 3.3/NND No. 785019

Tel. 317

LWL/ac

M E M O R A N D U M

Reference : 150/PWU
Subject : Electric power for Caustic Soda Plant

17 Feb. 45

To : INDUSTRY SUB-COMMISSION, AC
(Attn Dr.Opatowski)
From : P. W. & U. Sub-Commission

1) - Reference AC/5628 IMD - 13 Dec. 44.

2) - Attached letter on above indicates that transformers of the present plant will have to be 20,000 Volt on the high side

3) - Request is made for loading curve, that is, will it be a 24 hour load or can it operate off peak 2200 hours to 0600 hours?

4) - The owners of the plant can no doubt answer the above points.

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

1 enclosure
letter 30/1/45

Declassified E.O. 12356 Section 3.3/NND No. 785019

272

ALLIED COMMISSION
SICILIA REGION HEADQUARTERS
APO 394

RECEIVED
P.W. & U. SUB-COM
14 FEB 1945 150 060

DAB/cb

11 February 45

In reply refer to : RTC 685

SUBJECT : Electricity.

TO : Public Works and Utilities Sub-Commission.

1. Reference conversation Lt. Col. Lapper_Major Boyd regarding electrical energy required for a caustic soda plant near to Agrigento.

2. A translation of a letter from the S.C.E.S. is forwarded

3. Would it be possible to give further information please.

For the Regional Commissioner

DAVID A. BOYD
Major R.E.
Regional Commissioner.

Enc 1.
translation.

see folios 269
270
271

Lt Col Lapper
7.27 W/L

Declassified E.O. 12356 Section 3.3/NND No. 785019

TRANSLATION

30 Jan.45

Subject : Caustic soda plant.

To : Regional Engineer. Sicily.

1. In reply to your letter N. 675 of the 13 Jan. 45

2. The technical characteristics of the energy which we distribute in the Provinces of Agrigento are :

Voltage 20.000±5% between the phases.

Frequency 50 cycles

and therefore not suitable for transformers indicated in the letter sent to us.

Regarding the possibility of supplying the power requested from our plant, the present difficulties of our production service are well known to you. However for a closer study of the problem it would be advisable to see the chart of loading proposed for the manufacture.

We would be glad to know precisely the eventual location of the factory.

S.C.E.S.
General Management.

Declassified E.O. 12356 Section 3.3/NND No. 785019

RECEIVED
W. & U S/C A.C.
8 JAN 1945 150

-4 GEN. 1945

Ministero dei Lavori Pubblici

Direzione Gen. Servizi Tecnici
Ispettorato Gen. Elettr.-Acqua-Gas n.° 307 di prot.

Headquarter's Allied Commission-Subcommission Public Works and Utilities APO.394 - Via Veneto - R O M A

Rispettata nostra del 19 dic. 1944 n° 150/PWU. Gen.

Oggetto: Fornitura di energia in Sicilia per la fabbricazione di soda caustica.

In ordine a quanto richiesto da cotesta Commissione per la fornitura in oggetto si fa presente che, assunte le debite informazioni presso l'Ufficio competente della Sicilia, risulta che la potenza richiesta potrebbe essere disponibile nel periodo gennaio-aprile dalle ore 21 alle ore 7 del mattino presso qualunque centrale idroelettrica della Sicilia. Tuttavia, qualora l'industria dovesse sorgere invece presso qualche centrale termica, la disponibilità di potenza potrebbe avere più ampi limiti di orario e di tempo compatibilmente con le assegnazioni del combustibile necessario.

L'ISPETTORE GENERALE
(M. Visentini)

Translation attached

Lt Col Kapper
Ref/1/ sect 270

P.S.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Tel.489081

HEADQUARTERS ALLIED COMMISSION
A.P.O. 234
Public Works and Utilities Sub-Commission

290

Reference : 150/P&U 13 Dec. 44
Subject : Power Supply in Sicily for Caustic Soda Plant

To : MINISTRY OF PUBLIC WORKS

1) - We have been informed through the Industry Sub-Commission that a unit for the manufacture of caustic soda should be located in Sicily in order to provide an amount of soap sufficient for the island's requirements.

2) - All technical data relating the above installation will be found in the attached letter.

3) - Will you please make an investigation on the location of this plant as well as the opportunity of the above request, keeping in mind the actual shortage of caustic soda, and then supply us with all necessary information in order this question be properly handled.

W.H. Lee
Lt-Colonel
Chief Elec.Liv.

cc : ECONOMIC SECTION
INDUSTRY SUB-COMMISSION

1 enclosure

See folio 269

Allowance for 271 Tonnes
11 Dec 44

Declassified E.O. 12356 Section 3.3/NND No. 785019

RECEIVED CT
P W & U S/C A.C
14 DEC 1944 150 ~~660~~

T[illegible].447

HGR/EGP 269

Ref.AC/5628/IND

13 Dec.44

SUBJECT : Power Supply Sicily - proposed Caustic Soda plant.

TO : Public Works & Utilities Sub-Commission
(Attn.: Capt. Laughlin)

1. This Sub-Commission is considering the installation of a unit for manufacturing Caustic Soda in Sicily which would produce, working continuously, about 2 Tons/day Caustic Soda. Under the present conditions, this would cover the island's requirements for soap production.

2. The plant is designed for an electric input of 30.000 Volts AC, 45 cycles and requires 550 KW. Will you please state if this power is available in Sicily, and if so at what location.

3. If the available power has characteristics differing from the above, the electrical equipment of the plant could no doubt be altered to suit. The following description of the plant is added for your information:-

1) Transformer : 600 KVA, Primary 29640-26500-24300 Volts. Secondary 530 Volts; 3 phase, 45 cycles.
2) Two convertor units, each consisting of an AC motor of 188 KW, 500 Volts, 45 cycles, 900 r.p.m.; a DC generator 160 KW at 40 Volts, and an exciter unit 76 Volts, 11,5 Amperes.
3) Electrolytic cells, consuming 320 KW at 40 Volts.

4. It would suit the purposes of this plant equally well if 450 KW at 500 Volts, 50 cycles, and 100 KW at 230 Volts 50 cycles, could be made available.

W.S. VAUGHAN,
Director,
Industry Sub-Commission.

Copy to:-
Economic Section
File 5655

Lt Col Rupper

As caustic soda is in very short supply and as Sicily can spare current we should do what we can to let them have it

all mems are tentative
attached to Folio 271 11 Dec 44

Declassified E.O. 12356 Section 3.3/NND No. 785019

File 250

Tel.489061

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394

LWL/ac

267

ACC/PWU

30 Sep. 1944

Subject : Electricity

To : HEADQUARTERS SICILY REGION
Attention Regional Engineer

1) - Reference is made to your letter 22 Sep. 44 - File RTC/675.

2) - In view of the present situation we will not permit the removal of any power station equipment whatsoever from Sardinia to Sicily.

3) - Therefore please cancel the permit for this trip.

L.J.BARRY
Major, C.E.
Acting Chief Elec.Div.

727

Copy file 150

Declassified E.O. 12356 Section 3.3/NND No. 785019

Ap Fik Unolis Electricity - Sicily -
R. Imprint Translation attached.

Capt. Vanny has discussed only with representatives of Sicily Grand Electric G

268

PRO-MEMORIA n.1 PER IL Sig. Maj.Renton

Iº) Tubi in ottone lega Ammiragliato per condensatori marini

ø est.25 mm ø int.23 mm lunghezza 4655	nº 4.000
ø " 19 " ø " 17 " " 4577	" 5.000

N.B. Questi tubi che furono da noi richiesti al Comando Alleato fin dal suo arrivo in Sicilia, ci è stato assicurato che sono già arrivati a Napoli. E' urgente farli inoltrare a Catania anche per evitare che possano andare destinati ad altri.

2º) Abbiamo presentato all'A.C.C. in varie riprese elenchi di materiali occorrenti per l'esercizio delle Centrali.
Quello allegato venne da noi presentato nel maggio scorso.
Fu sollecitato ultimamente con lettera 3596 del 17 settembre u.s. nella quale abbiamo indicato quali sono i materiali più urgenti.
E' opportuno e necessario sollecitarli ppichè ci troveremo presto in difficoltà per la mancanza di alcuni di essi.

3º) Ricordare al Sig.Maj.Renton che a Roma nel suo ufficio l'ing. Modica ricordò al Sig.Col.Lapper una quasi promessa che questo ultimo aveva fatta per l'assegnazione di 15 copertoni e 15 camere d'aria di misura, 6,00 x 16 per gli automezzi della S.G.E.S. che sono ridotti veramente in pessime condizioni.
Il Sig. Col. Lapper disse che avrebbe riesaminata la cosa anzi incaricò il Maj.Renton di ricordargli questa pratica.

4º) Chiedere al Maj.Renton la sua opinione e, se d'accordo, anche il suo appoggio sulle possibilità di riavere il gruppo portato via da Casuzze e che, a quanto pare, non andrà più all'impianto del Matese cui era inizialmente destinato.

5º) Circa la visita dell'ing. Modica in Sardegna voluta dal Sig. Col.Growden per esaminare la possibilità di spostare un turboalternatore da una delle Centrali della Sarda a Porto Empedocle.
La visita non è stata ancora effettuata perchè si è atteso che

Declassified E.O. 12356 Section 3.3/NND No. 785019

il col.Bolick prima e il Maj.Crowther dopo indicassero il giorno in cui detto viaggio si poteva effettuare in aereo.
Avendone ora riparlato col Maj.Boyd, attuale capo della T.C.U.P. W.Division dell'A.C.C.per la Sicilia,questi ha scritto a Roma per sentire se il Comando Alleato è ancora dello stesso parere circa lo scopo del viaggio.
Si è fatto presente al Maj.Boyd che noi siamo convinti che lo spostamento di un turbo-alternatore non è affatto opportuno nè facile.
Che però riterremmo lo stesso utile il viaggio, nella speranza di trovare parti di ricambio per la caldaia Gefia installata a Porto Empedocle,il cui funzionamento è attualmente molto precario specie pei mulini del carbone.
Il Maj.Boyd avrebbe anche chiesto a Roma se non ritenevano più conveniente, nel caso che il viaggio si dovesse effettuare, che l'ing. Modica si rechi da Palermo a Roma e quindi da Roma a Cagliari.
Questo agli effetti di facilità nei trasporti.

7.28

Declassified E.O. 12356 Section 3.3/NND No. 785019

Aide memoire for Maj Reuter to R.

1) Brass Tubing (Admiralty alloy) for main condensers

ϕ ext 25 mm	ϕ int 23 mm	lenght 4655
ϕ ext 19	ϕ int 17	lenght 4577

Note - This tubing has been requested by ourselves to the Allied Command at the moment of his arrival in Sicily and we have received information that it is now in Naples - It's most urgent that the tubing he ~~forwarded~~ sent to Catania also to avoid ~~that~~ it being allotted to others -

2) We have forwarded to ACe several lists of materials necessary for plants operation -
The one enclosed has been forwarded last May - and a request was pressed with our letter n 3596 sept 17th in which we have outlined the most urgent material -
It's necessary to speed up their arrival because we shall soon meet difficulty ~~with~~ without them -

3) Remember Maj Reuter that in his office in Rome engineer Modica told Colon Lapper about a promise that he had done concerning the allotment of ~~7~~ 4 ~~sets~~ of 15 tyres and 15 tubes (6.00×16) for the cars of SGES which are in very bad conditions and that Colon Lapper asked him to remember the question -

4) Ask Maj Reuter his opinion, and if favourable his help, about the possibility to have again

Declassified E.O. 12356 Section 3.3/NND No. 785019

2100

the groups which has been taken away from Corneliano because it seems that this group will no longer be employed in Motore plant-

5) The Trip of Engineer Modica to Sardinia, requested by Col Crowe in order to investigate the possibility of moving one group from one of the Sardo plants to Porto Empedocle, has not yet been effected because we wanted to know from Col Bolich first and then from Maj Crowther in which day it would have been possible to do this Trip by aeroplane - We have more discussed again the matter with Maj Boyd, actually chief of TELUPW Division of ACC for Sicily, and he has Written To Rome to ask if the Allied Command still thinks this Trip necessary- We have also Told Maj Boyd that we don't think that the movement of the group is not an easy and useful matter but that we believe this Trip to be useful Keeping in mind the possibility of finding spare parts 7/19 the Gelfo boyler installed in Porto Empedocle which operation is more very uncertain expecially because of the coal mills-

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has not yet been effected because we
waited to know from Col Bolich first
and then from Maj Crowther in which day
it would have been possible to do this Trip
by aeroplane - We have now discussed again
the matter with Maj Boyd, actually chief of
TEUPW Division of ACC for Sicily, and he
has written to Rome to ask if the Allied
Command still thinks this Trip necessary.
We have also told Maj Boyd that we don't think
that the movement of the groups is not an
easy and useful matter but that we believe
this Trip to be useful keeping in mind the
possibility of finding spare parts for the
Gelia boyler installed in Porto Empedocle
which operation is now very uncertain expecially
because of the coal mills -
Maj Boyd has also probably asked Rome
if they think that if this Trip has to be done,
Engineer Medici should reach first Rome
from Palermo and then Caylon from Rome -
because of easyer Transportation -

Declassified E.O. 12356 Section 3.3/NND No. 785019

0324

Declassified E.O. 12356 Section 3.3/NND No. 785019

File

Tel. 489081

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394

LWL/ac

266

ACC/150/PWS

30 Sep. 44

Subject : Metese ll Alto Police Unit

To : HEADQUARTERS SOUTHERN REGION
Attention Capt. Fyen

1) - Enclosed herewith is letter from DW requesting suitable covering or shelter be provided for the unit to protect it from the elements.

2) - Please take necessary steps to accomplish this work informing this Sub-Commission when it is completed.

E.J.BARRY
Major, C.E.
Acting Chief Elec. Div.

1 enclosure :
letter 26 Sep. 44 DW/4001/10/LNW

7417

Declassified E.O. 12356 Section 3.3/NND No. 785019

PWAU 9639

SUBJECT: - Matese 11 Alto Belice Unit.

DW/4001/10/P&W.

TO: -
Public Works & Utilities Sub-Comm.
H.Q. A.C.C.
(for attention of Lt.Col. LAFFER).

26 Sept. 44.

FROM: - Director of Works,
A.F.H.Q.

With reference to the Alto Belice generating unit at present at Matese 11. Will you please arrange for the set to be suitably housed before the rainy season commences. Any covering furnished by the C.R.E. is temporary and it is considered that special precautions should be taken protecting the set from weather conditions.

Please inform this Directorate on completion of the work.

HEADQUARTERS
27 SEP 1944
A. C. C.

A.G.J.DAVY,
Captain, R.E.,
for Brigadier,
Director of Works,
A.F.H.Q.

Declassified E.O. 12356 Section 3.3/NND No. 785019

150 Def (9 AUG R. P W & U

Subject:- Electric Power Supply
Satcom IV - Alto Relief Unit

52 CES Wks

DF HQ AAI
Adc A/C 394

Chief Engineer
3 District CES
Tel: Ext. 32
CE 6004/10.

5 Aug 1944

Ref 11 CE (Wks) letter
CE 1532/82 of 1 Aug 44.

The drawing referred to was for-warded to you under my CE 6004/10 dated 25 Jul 44.

(E.J. [illegible])
Major, CE
For Lt Gulick
Chief Engineer

Capt Tarpley delivered drawing 8 AUG 1944

Capt Tarpley delivered drawing to Jessie 9/8

Lt Col Kapper

Thanks 9/8

Declassified E.O. 12356 Section 3.3/NND No. 785019

15 AUG Recd Naples.

To:- Lt.Col. Lapper.

150 CCB

Ref. attached letter and tracings from Major Renton;

No instructions were left with me as to what to do with the 3 copies of each tracing I was asked by Major Barry to obtain. It was understood that Major Bell would deal with them.

I am however retaining one copy of each and will get them into the hands of Lt.Canning who is, I understand, directly concerned with the erection of the plant.

If any other action is necessary at this end will you please let me know?

C.W. Atkins Barry

7:15

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394.

AOI/112/PWU

30 June 1944.

Subject : Prints - Alto Belice Generator A.C. Connection Diagram.
Alto Belice Generator Governor Spring Motor
D.C. Control Diagram.

To : H.Q. Commandant.
Att. Employment and Printing Section.

1. May we have 5 copies of each of the attached prints, same size as original.

2. When completed please return to Room 77.

Recd 1530 hrs
5/7/44

A.W. ATKINS,
Lieut., R.A.,
Supply Officer.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Lt. Atkins

Q3 JUN Recd
150
R.O

Eng Sec (T W + U)
U 3346

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394

VSR/cp

PWrU

26 June, 1944

In reply
refer to: RTC 412.42

Subject: Electricity - Sicily. Alto Belice Generating Unit - Transmittal of Electric Drawings.

To : Director, Public Works and Utilities Sub-Commission
Attention Lieut. Colonel W.M. Lapper.

1. Transmitted herewith are the following tracings involving the Alto Belice generating unit:

"Alto Belice Generator, A.C. Connection Diagram".

"Alto Belice Generator, Governor Spring Motor, D.C. Control Diagram".

2. It is regretted that lack of facilities preclude the direct making of blueprints here. Additional drawings are now being prepared and will be submitted as soon as available.

VINAL S. RENTON
Major, Infantry.

2 - Incl. (Tracings).
1 - A.C. Connection Diagram
1 - D.C. Control Diagram.

Major Barnes

Lt Col Lapper

14 June 194

7114

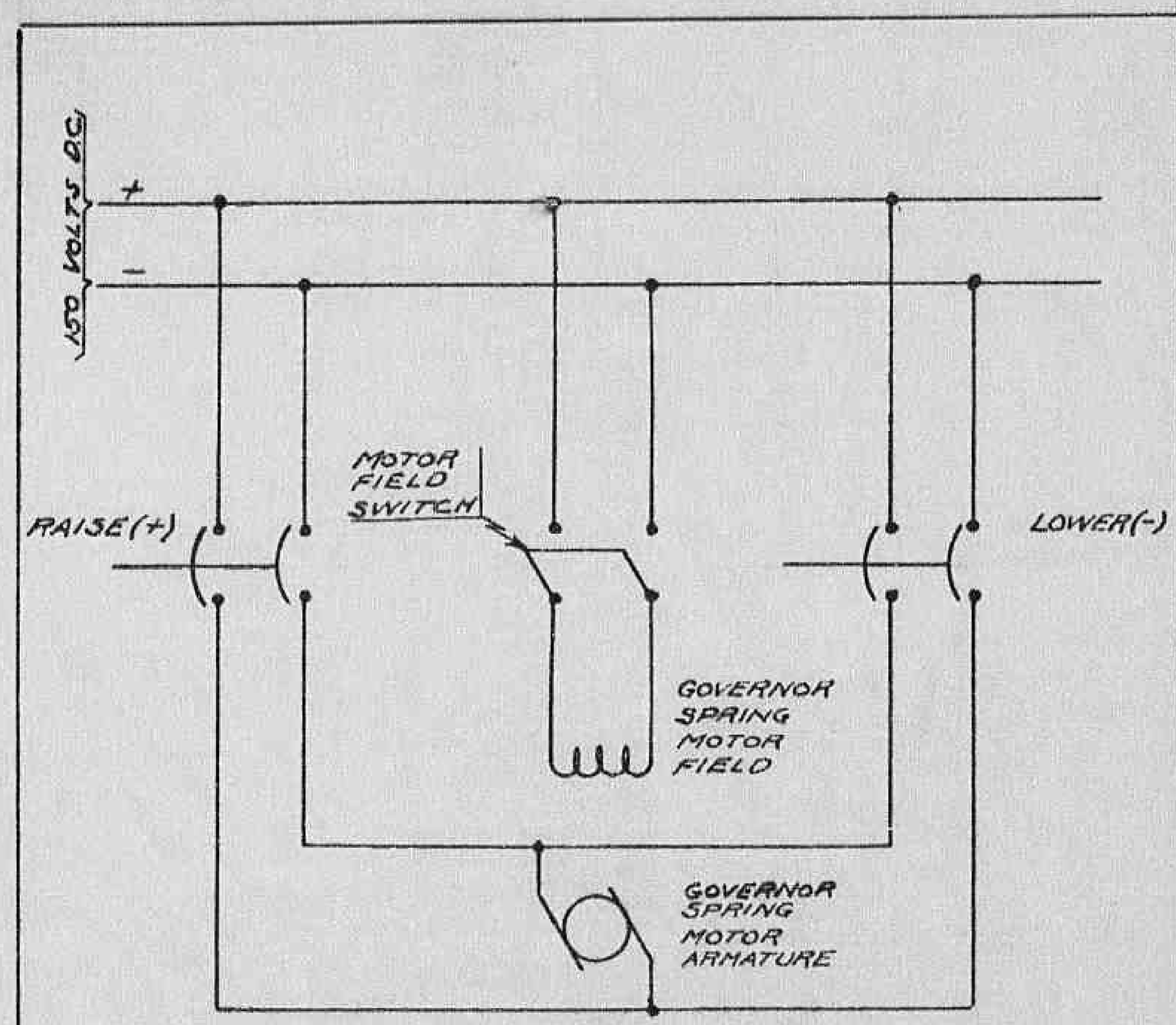
Declassified E.O. 12356 Section 3.3/NND No. 785019

TRACINGS

HEREIN.

Declassified E.O. 12356 Section 3.3/NND No. 785019

3



MOTOR CONTROLS LOCATED ON CONTROL BENCHBOARD SHOWN ON PHOTOGRAPH NO. 10

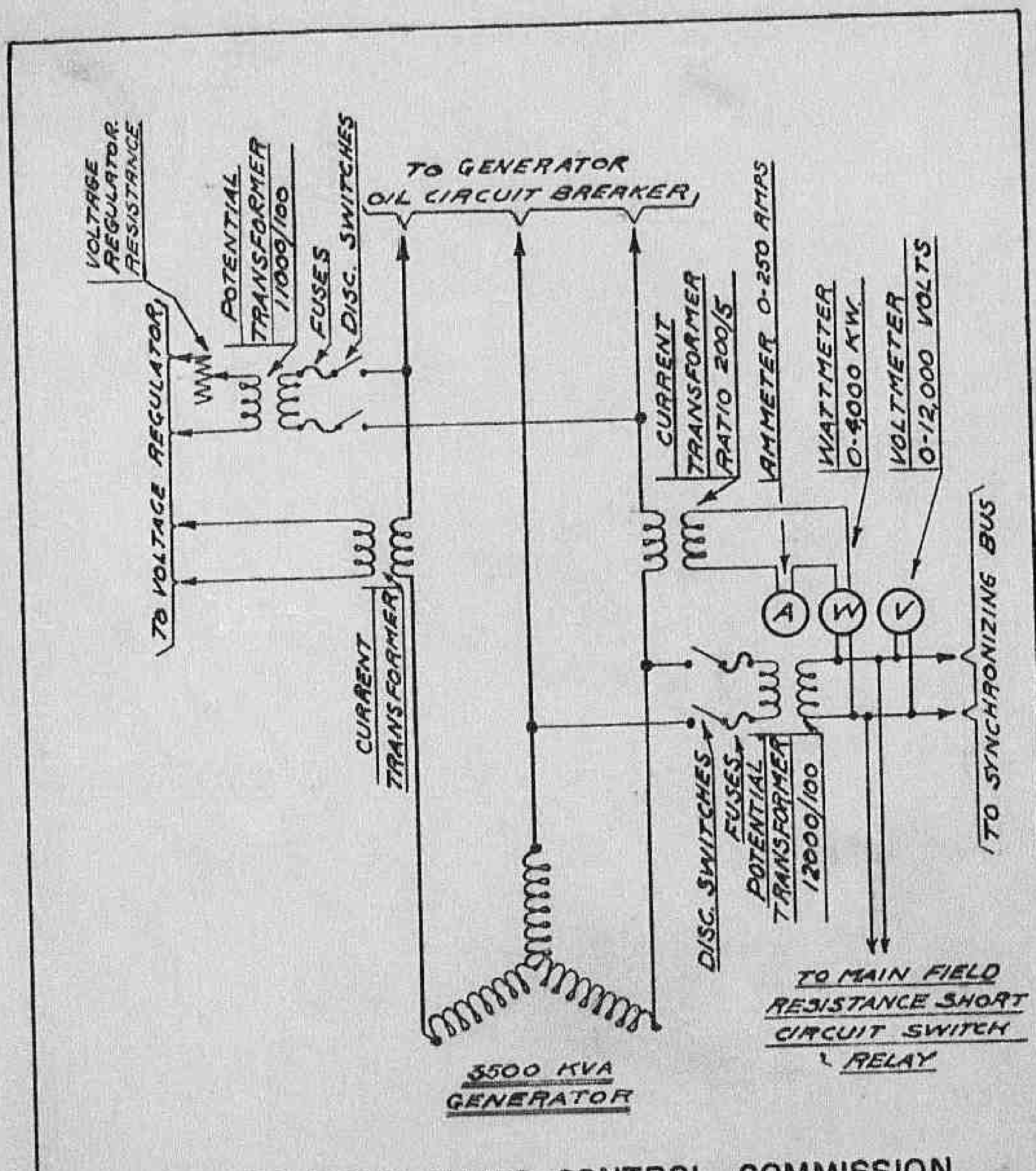
HEADQUARTERS ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES
SUB-COMMISSION 7.13

ALTO BELICE GENERATOR
GOVERNOR SPRING MOTOR
D.C. CONTROL DIAGRAM

24, JUNE 1944

P

Declassified E.O. 12356 Section 3.3/NND No. 785019



HEADQUARTERS ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES
SUB-COMMISSION

ALTO BELICE GENERATOR
A.C. CONNECTION DIAGRAM

24 JUNE, 1944

Declassified E.O. 12356 Section 3.3/NND No. 785019

Chief Records, Lab

Please call
next Pvt Tels

Lt Col Hoffman

Maj Renton
File Elec, Study -
no further action necessary
on this
Lab
7/28/44

Declassified E.O. 12356 Section 3.3/NND No. 785019

Gen Sec (Tw & U)

SUBJECT.- MATESE 11 -Alto Belice Turbine from Sicily. U-5197

52 CRE (Works)
Ref: J/B1/1094
9 Jul 44.

150
Rec'd 16 7

HQ Allied Control Commission
Public Works and Utilities-
Sub-Commission. A.P.O. 394.

Copy:- CE 3 District.
306 Wks.Sec. (Ref/your 29/7 d.7 Jul 44 Paras. 1 & 2).

For Attention of Major BELL.

1. It is understood that a drawing entitled "Alto Belice Turbine-Penstock Details", was handed by you to Lt.Canning R.E. of 543 E & M Coy.

2. It is presumed that this detail is the elbow and taper piece of set No.4 at PALERMO Hydro Station, and which is to be used with Set No 3 at the installation in PIEDEMONTE dIALIFE.

3. Will you please confirm and also state when this this item is to be delivered to site. It has not arrived with the rest of the Machinery now at OIEDEMONTE dIALIFE.

N. S. Rogers Capt.
Lieut Colonel; RE.
52 CRE (Works).

HEADQUARTERS
15 JUL 1944
A.C.

Ltr Col Rogers
Pls reply
Ra 16/7:11

15 Jul 56

Declassified E.O. 12356 Section 3.3/NND No. 785019

File

ADVANCE HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 794

RAM/br

AOC/150/PWU

11 July,1944

Subject : Power Plant Installation,Matese II.

To : Hq. Nº. 3 District
Att/Major Howe (for Lt.Canning)

1. In order to keep this office informed of the progress at the Matese II installation project, it is requested that an informal note be forwarded to us weekly through Region III Engineer , A.C.C. The work accomplished during the previous week and the percent completion of the project is sufficient.

2. Enclosed (enclosure Nº1) is a set of photographs of the Alto Bolice installation complete with descriptions of pertinent items and two sets each (enclosure Nº 2) of governor spring motor connections and the generator connection diagram.

3. The generator bed plate and the penstock valves should be in your hands by this time. A print of the penstock cone and elbow details (Alto Bolice), was left in the hands of Lt. Canning by Major Bell of this office. The dimensions on this print should be corrected to fit the Matese II conditions (as soon as the foundation has proceeded far enough to do so) and the revised print delivered to Region III Engineer's office (AC3C) so that the piece can be fabricated (probably Naval Mechanics Naples).

2 Encls: Pictures of Alto Bolice.
Four Electrical Diagrams.

W.R.LAPPER,
Lt-Colonel,
Chief,Util.&Aff.Div.

Copy to: Regional Engineer,Region III.

Declassified E.O. 12356 Section 3.3/NND No. 785019

BEST COPY POSSIBLE

Declassified E.O. 12356 Section 3.3/NND No. 785019

[redacted]

29 June 1944

Subject: Electricity for Cable Vault.

To : Director Cable Works & Cbl. Laboratory.
Attn: C.E.O.E. Engrs

1. The unloading of the above power plant was completed at 11 AM June 28, 1944 at the Port of Naples and is now proceeding by trucks to Volume 12 cable. Four copies of the receipts furnished by Major Smith were signed by Lt. Dowling at 545 W 43 St NYC U.S. He is a technical officer and is in charge of the installation at Volume 12 for Signal Corps Engineers. The original copies of the above mentioned receipts were distributed as follows:

1 cy to Lt. Dowling
1 cy to Sig C Engrs Washington
1 cy to Major Smith
1 cy enclosed herewith.

2. In regard to the connection between the generator and junction at Volume 12 a meeting is to be held by Lt. Dowling of the necessary cable, flanges, elbows and bolts. At the present writing, it appears some trouble is being had getting switchboard (in Naples, at Signal Corps Depot) and lamp (present ones not clear at the moment). The total number of the 1250 watts generators is 17.500 kva and at Volume 12, 35.000 kva. Lt. Dowling states that it will be approximately one month before the foundations and other necessary supplies will be ready at Volume 12. At this time it should be possible to determine the proper generator combination.

3. There are two classes of equipment still at 1250 Naples that should be shipped to Naples. These are the generator set (size and the main valve (lubricating between crank and bearings needle valve). This valve should be taken out until a little things is placed on this end of the crank.

R. [redacted] Jr.
Major S.C.

2 Incl.
1 Incl. 1 cy of signal shipping list (to Dowling)
Incl. 2 receipts signed by Capt Smithers.

7.09

2 cy 7 Jun
2 cy [illegible]
2 cy [illegible]
2 cy 3 Dec
1 cy [illegible]

Declassified E.O. 12356 Section 3.3/NND No. 785019

Declassified E.O. 12356 Section 3.3/NND No. 785019

Mauk Mechanical
Naples

Declassified E.O. 12356 Section 3.3/NND No. 785019

Meccanica
Coffey

Tubo di Raffredd.

(1)

Rivetto del tubo

130

ϕ 400

22

22

2500

ϕ 700

(2)

Flangia mobile

Anello

310

900

(3)

200

9 7/16"

This Portion of Pipe to be removed

(1)

91

39

ϕ 550

ϕ 400

ϕ 420

ϕ 511

ϕ 660

96

10

N° 16 for Bullons

115

(2)

86

69

65

110

135

ϕ 945

ϕ 854

ϕ 700

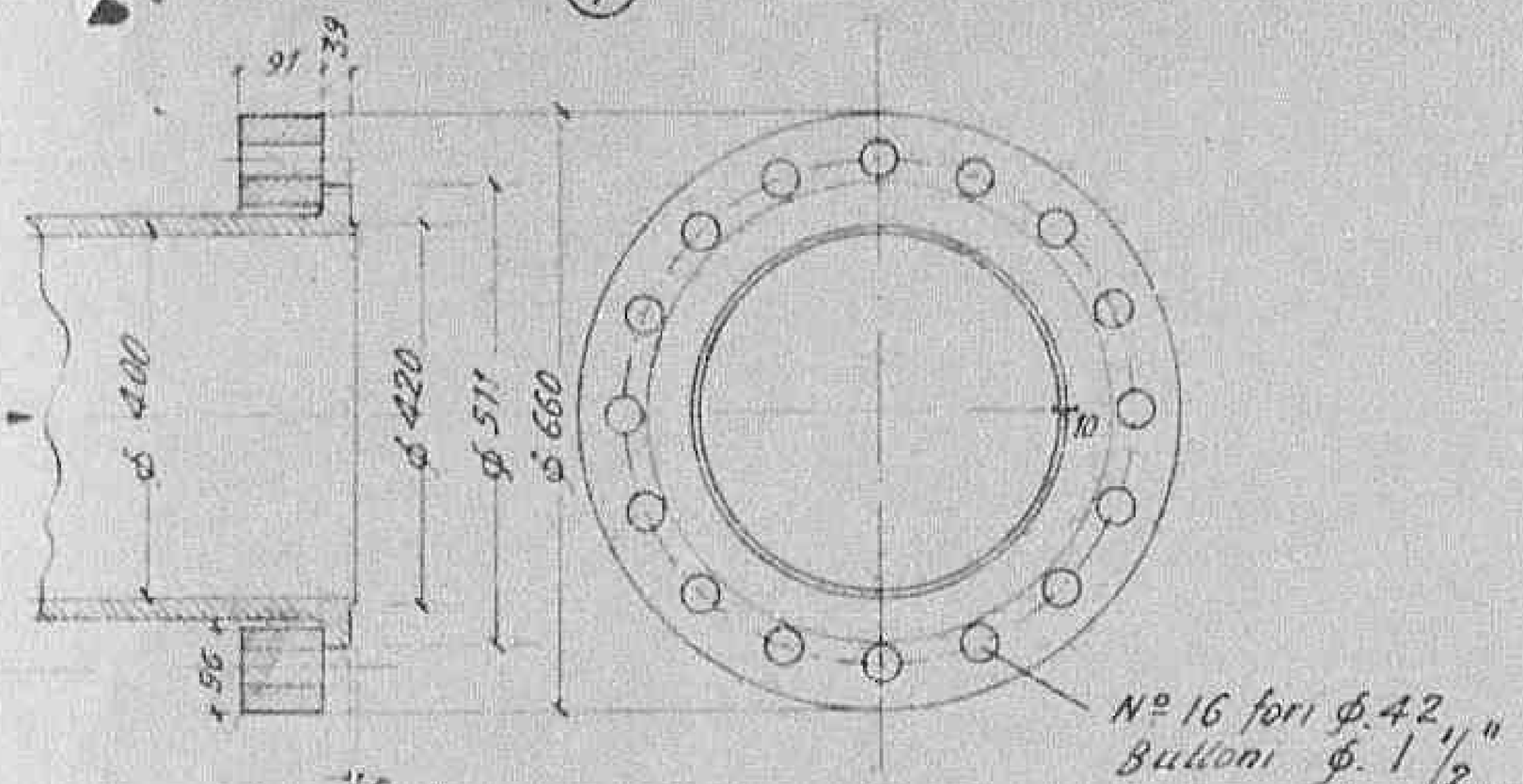
ϕ 1084

310

135

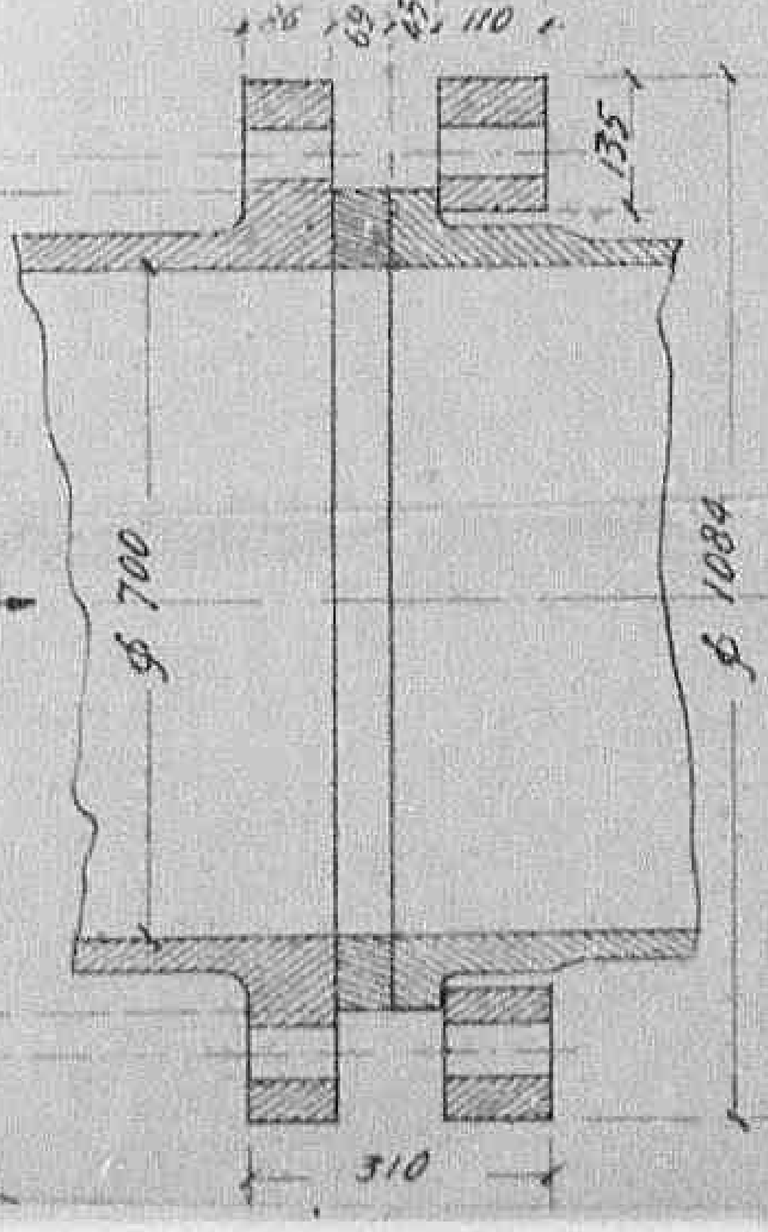
Declassified E.O. 12356 Section 3.3/NND No. 785019

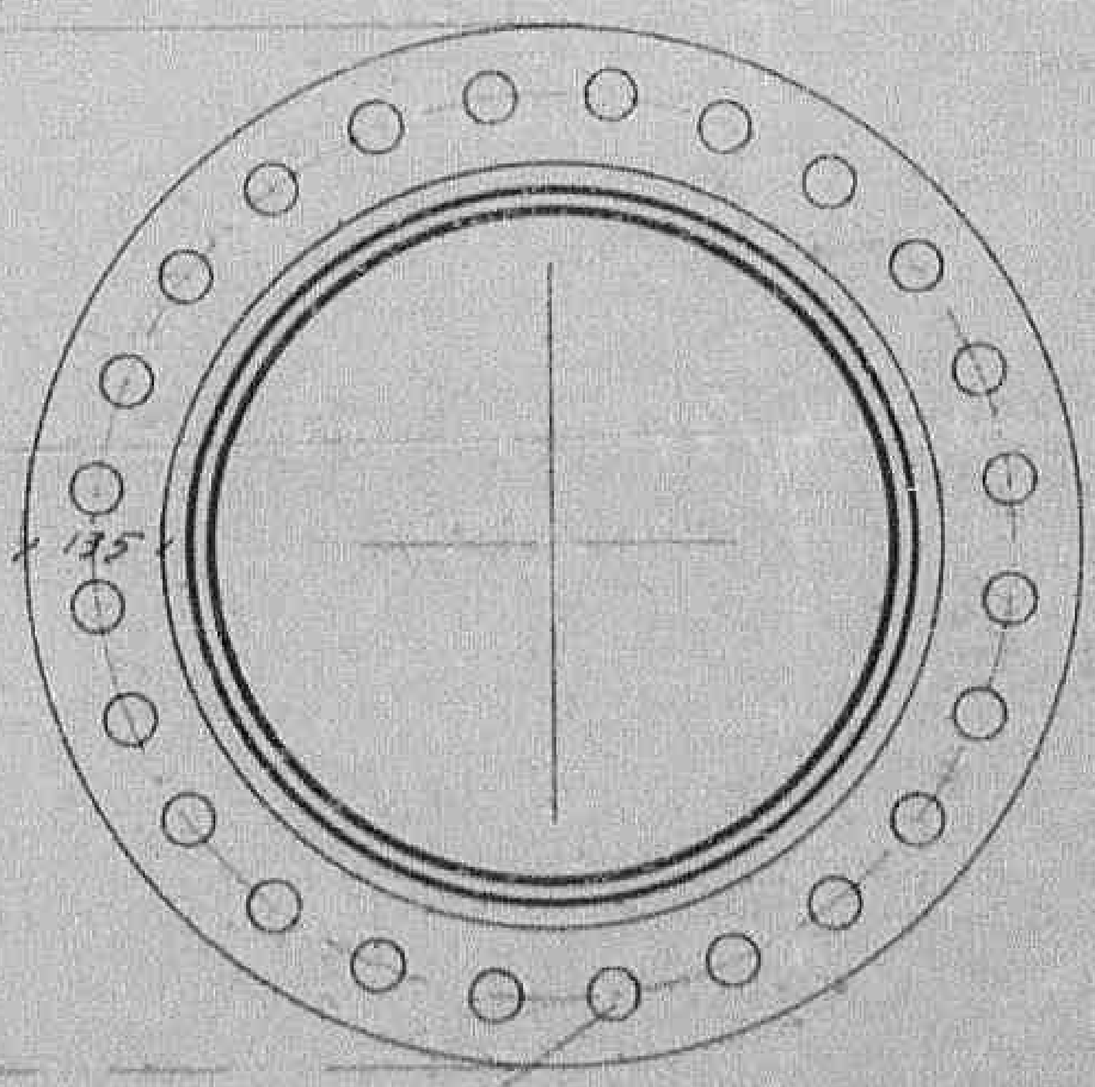
(1)



...tion of Pipe
...moved

(2)





Declassified E.O. 12356 Section 3.3/NND No. 785019

14" Ferro
89.3 cm Sect Ext

Risvolto del tubo

Flangia fisse

Flangia mobile

INTENDED FLOW

27

ϕ 700

27

Risvolto del tubo

240

ϕ 700

2

Flangia mobile

Anello

310

900

3

900

ϕ 945

ϕ 854

This portion of penstock to remain.

240

9 7/16"

3

ϕ 850 (33 1/2")

ϕ 700 (27 9/16")

ϕ 945 (37 3/16")

ϕ 1084 (42 11/16")

135

5 5/16

4 11/16

110

26

84

3 5/16

1 13/16

13 25/32"

18 19/32

21 13/32

R 350

R 472.5

R 542

Declassified E.O. 12356 Section 3.3/NND No. 785019

0344

(2) Flangia mobile

Anello

310

900

ϕ 945

ϕ 852

ϕ 700

ϕ 1084

135

310

(3)

ϕ 1084

$13\frac{25}{32}$"

$18\frac{19}{32}$"

$21\frac{9}{16}$"

R. 350

R. 4725

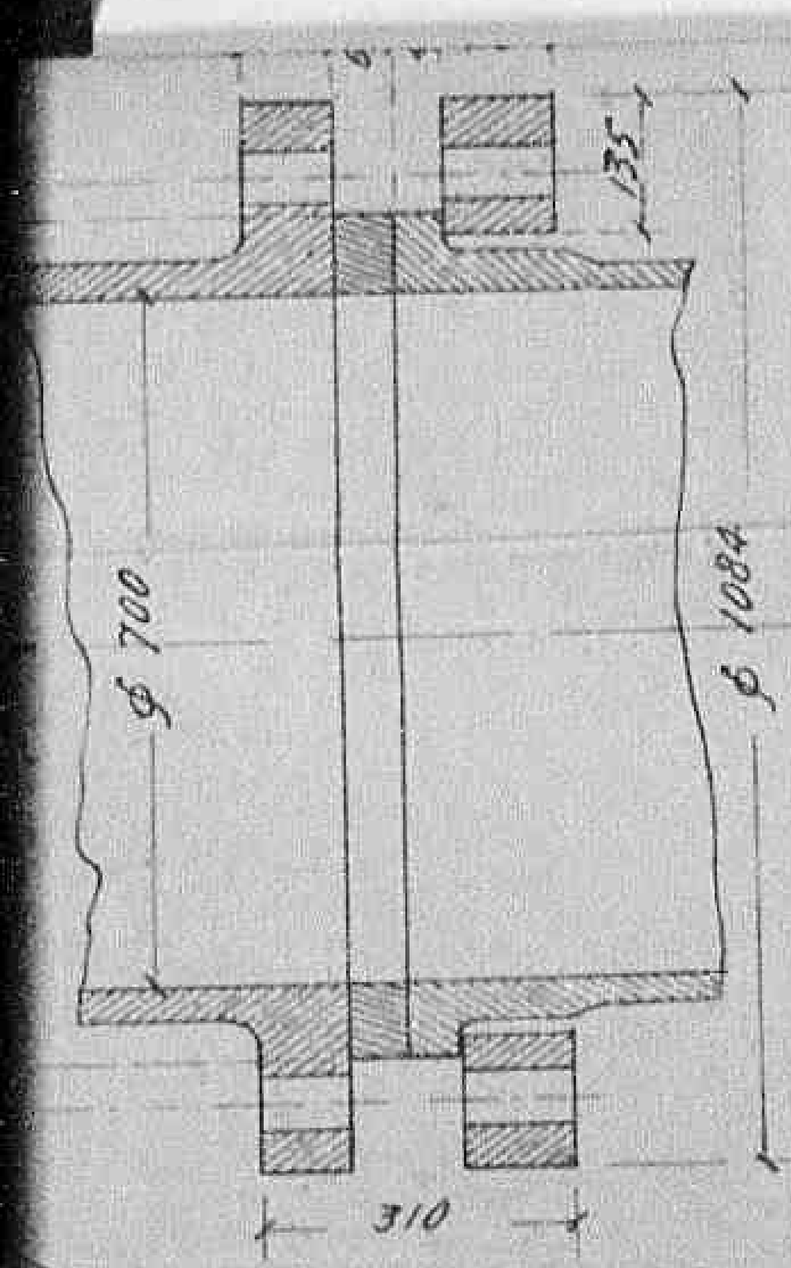
R. 542

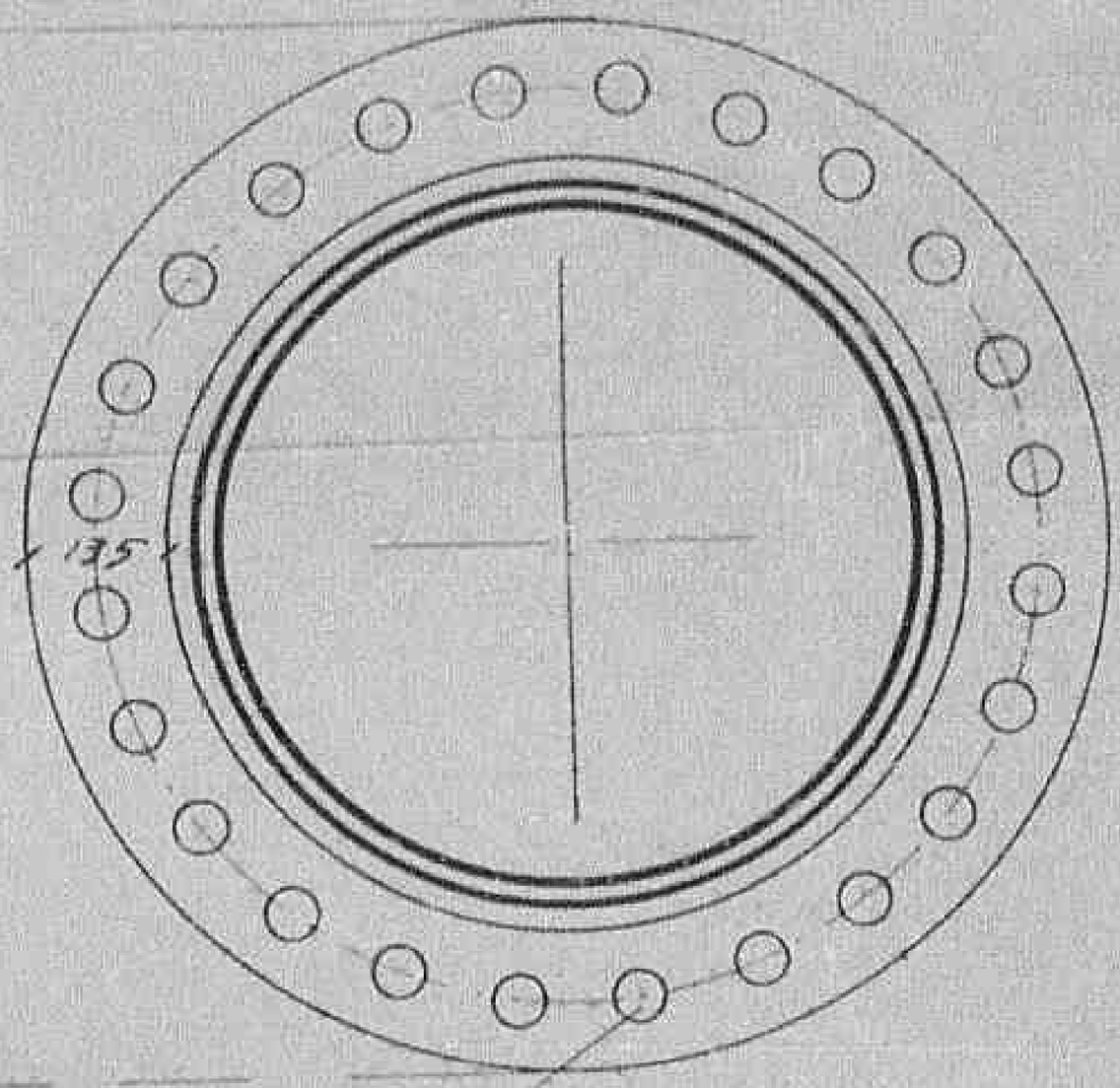
Fori N° 24 ϕ $2\frac{7}{32}$"
Bulloni ϕ 2"

Fori N° 24 ϕ 56
Bulloni ϕ

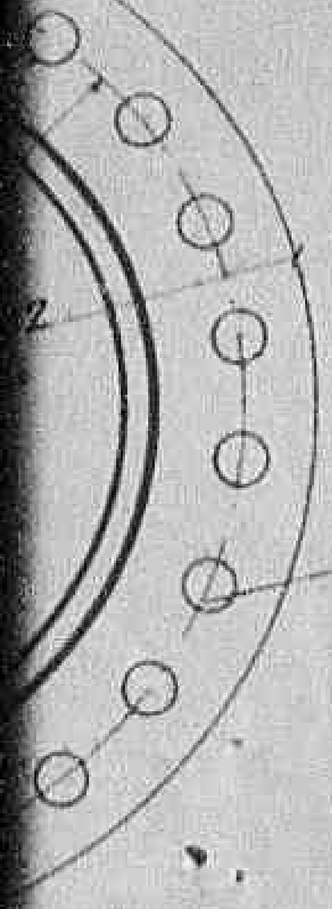
ALTO BEL
Fenstoc
1:

Declassified E.O. 12356 Section 3.3/NND No. 785019





Fori Nº 24 Ø 56
Bulloni Ø 2"



Fori Nº 24 Ø 56
Bulloni Ø 2"

ALTO BELICE TURBINE
Penstock Details
14 June 1944

C.F.C. Palermo 3595-282

Società Generale Elettrica della Sicilia

Sede Palermo - Capitale L. 300.000.000 - versato L. 228.000.000

Direzione Generale

Indirizzo telegrafico Teleletron Palermo

Telefono 15000

Riferirsi al N. 2243/N

Palermo 14 Giugno 1944 A

46, Via Libertà

H.Q. A.C.C.
Public Works and Utilities Sub. Commission
P A L E R M O

SOGGETTO: Rimozione di un gruppo dalla Centrale di Casuzze.-

All'attenzione del Sig. Maj. V.Renton.

Con riferimento alla Vostra RTC 095 (S.C.E.S.) del 31 Maggio u.s.

1.- Il Sig. Maj. Renton ci ha comunicato che, malgrado le nostre insistenze, il Comando Alleato ha deciso di portare via dal nostro impianto anche la curva a 90° ed il raccordo conico che dal collettore va alla turbina.

2.- Occorrerà pertanto costruire una flangia cieca da piazzare direttamente al termine della condotta forzata che in quel punto ha una sezione di 700 m/m di diametro. Il diametro esterno della flangia è 1084 m/m.

3.- Dato lo spessore che verrà ad avere tale flangia sarà certamente necessario sostituire anche i bulloni di attacco con altri più lunghi.

I bulloni sono in numero di 24 di un diamstro di 2".

4.- Ieri 13 giugno il nostro ing. Modica e il Sig. Maj. Renton sono andati alla fonderia Panzera - l'unica fonderia in Sicilia che possa fare fusioni in acciaio. L'ingegnere della fonderia ha dichiarato che non ritiene di potere fare un lavoro del genere, dando la garanzia necessaria.

Ritiene anche lui, come noi, che non sia in ogni modo prudente fare una

Declassified E.O. 12356 Section 3.3/NND No. 785019

Indirizzo telegrafico: Direttore Palermo
Telefono 15000

Palermo 14 Giugno 1944 A
46 Via Libertà

Riferirsi al N. 2343 /A

H.Q. A.C.C.
Public Works and Utilities Sub. Commission
P A L E R M O

SOGGETTO: Rimozione di un gruppo dalla Centrale di Casuzze.-

All'attenzione del Sig. Maj. V.Renton.

Con riferimento alla Vostra RTC 095 (S.G.E.S.) del 31 Maggio u.s.

1.- Il Sig. Maj. Renton ci ha comunicato che, malgrado le nostre insistenze, il Comando Alleato ha deciso di portare via dal nostro impianto anche la curva a 90° ed il raccordo conico che dal collettore va alla turbina.

2.- Occorrerà pertanto costruire una flangia cieca da piazzare direttamente al termine della condotta forzata che in quel punto ha una sezione di 700 m/m di diametro. Il diametro esterno della flangia è 1084 m/m.

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Ritiene anche lui, come noi, che non sia in ogni modo prudente fare una flangia cieca di queste dimensioni e per questo scopo, in acciaio fuso.

.../...

Declassified E.O. 12356 Section 3.3/NND No. 785019

Declassified E.O. 12356 Section 3.3/NND No. 785019

Sarebbe molto più appropriato fare una flangia fucinata o ricavarla da una lamiera da corazza.

Riteniamo che all'Ilva a Bagnoli si debba poter trovare facilmente un pezzo di lamiera che possa servire allo scopo.

La lavorazione, se si vuole, potrebbe essere fatta a Palermo.

5.-E' nostro dovere ricordarVi che a questa flangia è affidato un compito gravissimo ed è assolutamente necessario pertanto che dia completa sicurezza. Vi rendete conto del disastro che potrebbe succedere se questa flangia dovesse cedere.

Dovreste provvedere Voi stessi a fare costruire una flangia e i bulloni per questa chiusura.

Abbiamo fatto del nostro meglio per agevolare il Vostro lavoro e il Sig.Maj. Renton sa che abbiamo fatto il possibile perchè il lavoro di smontaggio venisse fatto al più presto e nel miglior modo possibile.

Per la flangia però Vi diciamo sinceramente che non ci sentiamo di assumerci questa responsabilità, tanto più che non è materialmente possibile costruirla a Palermo.

6.- Infine torniamo a pregarVi di riesaminare la opportunità di non toccare il gomito e il raccordo conico.

In questo caso non ci sarà bidogno di niente poichè abbiamo già una flangia che può servire allo scopo.

Distinti saluti.

SOCIETA' GENERALE ELETTRICA DELLA SICILIA

Direzione Generale

Ing Stefanini

AM/Ar.

7:05

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394.

VSR/op

15 June 1944.

In reply
refer to: RTC 412.42

Subject: Electricity-Sicily. Alto Belice
Turbine - Penstock Flange.

To : Director, Public Works and Utilities
Sub-Commission, Attention Lieut. Col.W.M.Lapper.

1. Enclosed herewith are two black-and-white prints bearing the penciled title "Alto Belice Turbine, Penstock Details, 14 June 1944". These prints show the details of the Alto Belice penstock which have been requested for installation elsewhere, and also show the point at which a blank flange will be required subsequent to the removal of the pipe. It will be noted that pencil notes have been added on one of the prints to show the dimensions in inches, and to show the pieces of pipe involved. These notes were intentionally omitted from the other print, to avoid confusion in the event that the flange will be fabricated in a shop using the metric system.

2. Also enclosed is a letter received yesterday from the Società Generale Elettrica della Sicilia, together with a translation, concerning the flange.

3. I very much appreciate any help which can be given me in having this piece made on the mainland. We have tried the two places we believed could do this work with the following results:

Shop	Remarks
Panzera Foundry - Palermo	Can make steel castings but is unwelling to accept responsibility for soundness of flange, claiming it would be

1779

Declassified E.O. 12356 Section 3.3/NND No. 785019

it would be so thick that the interior structure may be weak,or highly stressed.

Navy Yard

a. Can not make steel castings.

b. Does not have plate of sufficient thickness on hand.

c. Can make forgings but not size desired.

4. It was suggested that we build up a flange with 1 1/2 in. boiler plate available at the Navy Yard, and that we fasten the plates together by drilling and plug welding them, and also by welding them together at the edges. I did not like that because the welding may set up high stresses. I then considered the possibility of holding the plates together with body bound (close fitted) bolts but the shear between the plates is such a magnitude that so many bolts are required that there would be little left of the plates after the necessary bolt holes had been drilled. That also was another reason for rejecting the use of plug welds.

5. The flange will be subjected to the following operating conditions:

Hydrostatic head: 475 meters
Length of penstock: 800 meters
~~2 meters/sec~~. maximum velocity of water in penstock: 525 meters/sec.
Time required for turbine valves to close: 5 seconds

6. Representatives of the electric company have repeatedly told me, and have also said in their attached letter, that they do not feel obliged to accept the responsibility for any damage resulting from failure of the new flange. In my own company,I would likewise be unwilling to accept responsibility for the structural soundness of a piece of equipment which was fabricated elsewhere; I would expect the equipment manufacturer to stand back of what he built. Also there is a serious question as to whether a hydrostatic test on the flange, using the Alto Belice elbow and tapered piece as test pieces will show up any flaw which might later give way under shock conditions. I believe that we had better be in a position to state who will be responsible if the flange does break.

7103

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7. In consideration of the above, it would be appreciated if this flange could be forged at the Ava steel plant. It is suggested that the design conditions as given in paragraph 5, be given to the engineers at the plant, and that they determine the thickness of the flange, based upon their knowledge of the strength of their available materials, and that, if possible, they be given the responsibility to make a flange which will not fail under the specified conditions.

8. I believe that the flange had best be made with a plain machined face, with the idea that any changes will be made here when we open the penstock to see the nature of the mating face.

9. If, in reconsideration of the situation, it were decided to cast duplicate pieces of pipe in Naples, and leave the Alto Belice penstock intact I would be very happy.

Vinal S. Renton

VINAL S. RENTON
Major, Infantry

Incl.- 2 Prints showing penstock details.
1 Letter from S.G.E.S.
1 Translation of S.G.E.S. letter

Declassified E.O. 12356 Section 3.3/NND No. 785019

2.

P.W.+ U.

Subject:- Alto Relice Generating Set 6463

HQ ACC
Public Wks & Utilities
Sub-Comd.

DW HQ AAI

Chief Engineer
3 District CES
Tel: Ext. 34
CE 600½/10.

14 Jul 1944

Further to my CE 600½/10 dated 20 Jul 44.

On inspection I find the motor in question is A.C.D.C and not DC only as shown on prints.

The question of the DC supply does not therefore arise.

(P.J. [illegible])
Major RE
for Brigadier
Chief Engineer.

PJH/VH.

Lt Col Tappan
Dra 27/7

27 JUL 1944
A. C. C.

Declassified E.O. 12356 Section 3.3/NND No. 785019

22 JUL Recd

SUBJECT:- Alto Belice Generating Set. 150 cycs.

Chief Engineer,
No.3 District C.E.F
Tel: 3 Dist Exch: Ex.34.
Ref No:- CE 6004/10.

20 Jul 1944.

HQ ACC (Attention Lt-Col LAPPIN).
Public Wks & Utilities Sub-Comm.

DW AAI

1. It would appear that a source of DC at 150v is necessary for supplying the governor control motor. Presumably this was derived from an auxiliary D.C. control circuit at Sicily since the exciter is rated at 125v and in any case would not be available during the starting period.

2. It is not known whether the Alto Belice Set requires a D.C. source for control circuits other than that mentioned in Para 1 above, since no wiring diagrams have been received, but if it does, any details be forwarded please so that the necessary plant may be ordered. To date there has been no mention of D.C. circuits in any of the specifications, and the matter is therefore, immediately brought to your notice.

3. On the other hand provided only the governor motor is affected it would seem that a replacement by one of A.C. type with similar characteristics will be necessary.

A/Col Rapper

Pls. review and reply.

RJ 21/7

P.J. [illegible],
Major R.E.,
for Engineer,
Chief Engineer.

RJH/CC.

7101

Declassified E.O. 12356 Section 3.3/NND No. 785019

Tel:489081

VGR/tr

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

ACC/150/PWU

27 Jul,44

SUBJECT : Alto Belice Generator Unit
Source of Direct Current

TO : Chief Engineer, No 3 District CMF,
Att: Major F.J.Howe .

1. Reference is made to your letter dated 20 July 1944, Subject Alto Belice Generating Set, inquiring as to the need of a 150 volts direct current source for the governor motor of the unit removed from Alto Belice.

2. Such a source is needed,in order to operate both the governor motor and the oil circuit breaker. Additional data from Sicily has been delayed; it is expected here within the next few days and a schematic diagram of the oil circuit breaker control will be sent you as soon afterwards as possible.

3. It is believed that the unit can be operated satisfactorily without a governor motor, since the load and speed can be charged manually by means of the governor handwheel but a source of direct current is necessary for operation of the oil circuit breaker.

W.M.LAPPER,
Lt-Colonel,
Chief,Util.&Adm.Div.

7405

Declassified E.O. 12356 Section 3.3/NND No. 785019

Naples.

To:- Lt.Col. Lapper.

Ref. attached letter and tracings from Major Renton;

No instructions were left with me as to what to do with the 3 copies of each tracing I was asked by Major Barry to obtain. It was understood that Major Bell would deal with them.

I am however retaining one copy of each and will get them into the hands of Lt.Canning who is, I understand, directly concerned with the erection of the plant.

If any other action is necessary at this end will you please let me know?

cor

I think I should keep Major Renton's letter & tracings as Major Hunt wants like another copy I send

Declassified E.O. 12356 Section 3.3/NND No. 785019

SECRET

O 29250

ACC HAIF FOR COLONEL ROBERTS

WIRELESS FROM HANDOOK FROM KENYON

B 12175

JULY 5/1025

N 53/5

SECRET

ROUTINE

CITE MTC 43

CONFIRMATION BE PLACE IN TWO HALVES SHOLD ARRIVE ABOUT JULY 6 EACH HALF ABOUT WEB FEET LONG BY SIX FEET WIDE AND ONE FOOT HIGH WEIGHT EACH HALF ABOUT TWO TONS CONTENTS AS UNDER AS INSTRUCTIONS SUPPLIED

HEADQUARTERS
5 JUL 1944
A. C. C.

ACC AIR DISP

ACTION SCON WAC (3)
INFO DEP CC
FILE
FLOAT C

SECRET

FILE 5/1135

7398

Declassified E.O. 12356 Section 3.3/NND No. 785019

VSR/gf

ADVANCE HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

ACC/150/PWU

14 July 1944.

SUBJECT: Electricity, Sicily. Removal of Alto Belice Generating Unit.
TO : Regional Commissioner, Sicily Region.

1. As you know, the removal of the electric generating unit from the Alto Belice plant has been accomplished. The work was greatly facilitated through the assistance of the Sicily Region Headquarters and the cooperation of the Societa Generale Elettrica della Sicilia.

2. The help given by Lieut. Colonel C. P. Belick, Regional Engineer, Lieut. I. M. Galvanese, Regional Transportation Officer, and Ing. A. Modica of the electric company is deeply appreciated, and I would be grateful if you would express my thanks for their help.

L. A. JENNY,
Lt. Col., C.E.,
Director.

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394.

ACC/150/PWU 24 June 1944.

SUBJECT: Electricity - Sicily.
TO : Major V. S. Renton
Lt.Col. C. P. Bolick, Regional Engineer, Region I.

1. For your information, I shall be leaving Naples for Rome on Wednesday next. This will be a permanent change of station and, in fact, all the office with the exception of Lt. Col. Rhodes and Lt. Aldins will be moved to Rome by the end of the present month. It is expected that Lt. Col. Rhodes will remain here for approximately two weeks and as I am not quite certain as to whether you will be back before he leaves for Rome, I am arranging to take all your belongings from your office and will have them placed in your new office in Rome.

2. As I write this, the ship with the Sicilian plant is lying in the harbor and it is expected to be unloaded tomorrow or the next day. I shall give Sgt. Anzivino 7 days leave, after which he will return here for his belongings and proceed direct to Rome.

3. With regard to the taper piece and head and the blank flange which you require before you can remove this, I have put this job in the hands of Major Berry and he will be checking it with the S.A.C. arranging for manufacture and shipment to Palermo. Major Berry will communicate with you immediately the material is shipped.

4. I am asking Lt. Col. Rhodes to see that your mail is forwarded each day.

5. When you have completed your work in Sicily you should report to Lt. Col. Rhodes at this office and, if he has moved to Rome by that time, there will be a Rear-Headquarters left in Naples. I wish you to proceed at once to Rome after your work is completed in Sicily.

6. I have today written to Lt. Col. Bolick in connection with electricity supplies to sulphur mines in Sicily. I have mentioned to him that as sulphur carries a high priority, he should see to it that electricity is made available and I have suggested that he may wish to have your help in considering some rationing scheme if he foresees any difficulties.

W. M. LAPPER,
Lt. Col.,
Chief, Util. & Adm. Div.

CC: Lt.Col. Rhodes
Major Berry.

7394

Lt. AHRinn

To note — & file

Pt. stand to (4)

SHAEF
25/6

Declassified E.O. 12356 Section 3.3/NND No. 785019

ADVANCE HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

AEP/tr

ACC/150/PWU

11 July,1944

Subject : Repairs to Elect. Plant -Sicily

To : Fabbrica Albertini Attilio -Catania
Manufactures of Electric Machinery
Via Tripoli 38
C A T A N I A . Sicily

1. Reference your letter dated 9 June 1944 addressed to Soc. Generale Elettrica of Sicily.

2. It is regretted that the stores required are not available.

W.M.LAPPER,
Lt-Colonel,
Chief,Util.&Adm.Div.

C.C. To Soc. Generale Elettrica
of Sicily
CATANIA,Sicily

7395

Declassified E.O. 12356 Section 3.3/NND No. 785019

ADVANCE HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394.

WML/oe

ACC/150/PWU

11 Jul 44

Subject: Condenser Tubes for S.G.E.S. Co., Sicily.

To : Regional Engineer, Region I.

1. Thank you for letter of 23 June/44 re Condenser Tubes for S.G.E.S. Co., Sicily.

2. It is fully appreciated that the condenser tubes are most urgently needed for the Catania steam plant and everything possible has been done to obtain delivery. The information which you now send regarding the factory where the tubes were originally ordered will be most useful and we will follow this up as the military situation allows.

W.M. LAPPER,
Lieut-Colonel,
Chief, Utilities & Adm.Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

6-1

PWoU

9 JUL Recd

Gen Sec (PW+U)

150 Rah

Subject:- Repairs to Elec. Plant - Sicily.

Directorate of Works,
H.Q. A.A.I. C.M.F.

11 JUL Recd CCS 150

To:- Allied Control Commission,
Public Works & Utilities Sub-Commission,
A.F.O. 394.

1247/DW

4 Jul 44

(Refer to letter No. 242.)

Reference your ACC/150/PWU undated.

It is regretted that Stores required are not available.

Lt Col Rogers

P. BURD,
Major R.E.,
for Brigadier,
D. W.

FB/NP.

Declassified E.O. 12356 Section 3.3/NND No. 785019

30 JUN Recd
150 RD

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394

27 June, 1944

In reply
refer to: RTC 412.42

Subject: Electricity, Sicily. Removal of Alto Belice Penstock.

To : Director, Public Works and Utilities Sub-Commission. Attention Lieut Colonel W.M. Lapper.

1. I understand that a member of the Sub-Commission staff is endeavoring to locate a piece of steel plate, 1 1/2 inches thick for use as the blind flange on the Alto Belice penstock. I was told that although time had not been taken to calculate the stresses in a flange of this thickness, it was believed that the piece would be sufficiently strong since it is thicker than the walls of the penstock, and if the penstock walls are capable of withstanding the internal pressure, the flange should be too.

2. I respectively point out:

a. That the stresses in the penstock walls and in the flange are in no way comparable. The stresses in the penstock walls are almost entirely tension; in the flange, a large bending moment exists, and there is both tension and compression.

b. That according to my calculations, the maximum stress in the penstock walls will be 14,250 lbs per sq. in., and the maximum stress in the blind flange will be 142,000 lbs per sq. in. The ultimate strength of structural steel plate usually runs between 50 and 65,000 per sq. in. Hence the stress in the flange will be more than the breaking stress.

c. That even the flanges on the existing penstock, for bolting only, are two to three times thicker than the proposed 1 1/2 inch plate.

3. In view of the foregoing, I consider the installation

Declassified E.O. 12356 Section 3.3/NND No. 785019

of a blind flange of 1 1/2 inch steel plate to be very dangerous and almost certain to result in disaster. It is difficult for me to believe that such an installation would be considered without at least rough calculations having being made. Also I feel that unless it is possible to calculate the strength of any stiffining members which might otherwise be added empirically, there is absolutly no assurance that the flange will hold.

4. Therefore, if it is your decision that the 1 1/2 inch thick flange be installed here, I request that I be immediately relieved of this mission, and if necessary, from the Sub-Commission and that the job be finished by anyone at all who feels that the flange will hold. In the meantime, I shall continue with the study of the Sicilian electric power system, and will endeavor to have my notes in such shape that they will be of use to my successor.

5. I also respectfully point out that rumors now exist that consideration is being given to installing the machine in a location other than the one originally intended, but in a location that is as yet undetermined. In that case, I believe that there is even less need of taking any pipe from here; it is not known either whether the pipe would ever be needed, or specifically what size would be required.

VINAL S. RENTON
Major, Infantry

To Col. H. H. Fisher.
Please be advised of this
letter that Blind Flange
has been entirely abandoned
and work is progressing
with Section 3 and that the Corporation
of Ely. Each of the Asst. Comm. plans all
being made to read the above and
reduce it to actual operations at
Fort Hunter. H.Q. Block at Potsdam
has been notified of this change.

739:

Major Ely C.E.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Pw & CV

28 JUN 1944

Eng Sec (P W + U)

ISD Rab

ALLIED CONTROL COMMISSION
SICILY REGION HQ.
APO 394

Rec'd Rome 30.6.44 150

CPB/mm U-2907

23 June 1944

150 Kew,

In reply
refer to: RTC 412.42

Subject: Condenser Tubes for S.G.E.S. Company, Sicily.

To : Public Works and Utilities Sub - Commission.
(attention Lt. Col. W.M. Lapper). ✓ for information and action R.A.S. 28/6

1. In a recent discussion with one of the S.G.E.S. engineers a thought was expressed in connection with condenser tubes ordered by the company previous to the invasion. It was reported that the tubes had gone down with a ship, however all efforts to trace this equipment have failed. We were not able to determine whether the equipment was shipped or whether it was retained by the company.

2. In view of the military situation in Italy it was thought that a check can be made on this matter in the near future. The condenser tubes are urgently needed for the Catania steam plant and the last information received concerning approved requisition dated Feb. 15, 1944 was to the effect that tubes had not yet been located in the United States.

3. The factory where tubes were originally ordered is located at Livorno, Italy. The order also called for boiler tubes.

4. I asked the company to furnish me with any information they may have on the transaction and I have attached two documents concerning the transaction.

For the Regional Commissioner:

C.P. Bolick.
C.P. BOLICK
Lt. Col., F.A.
Regional Engineer

7399

2 Incl.

Incl. 1 - copy of order form (S.G.E.S.)
" 2 - copy of bill (S.G.E.S.)

28 Jun 10

2077

Declassified E.O. 12356 Section 3.3/NND No. 785019

COPIA

SOCIETÀ GENERALE ELETTRICA DELLA SICILIA

CAPITALE SOCIALE L. 300.000.000

Indirizzo telegrafico: DIRELECTRON - PALERMO
Telefono N. 15-600 — C. P. C. Palermo 95/5-282

N. 4138/II Rich. Uff. Prod.

Avvisi di spedizione e fatture dovranno riferirsi al numero e alla data della presente

Palermo, li 17 Novembre 1942
46, Via Liberta

Spett. - CENTRALI TERMICHE

SOCIETA' METALLURGICA ITALIANA

Via Leonardo, 18

MILANO

In conformità vs. off. 11/5 N°55877 UC e 14/11 N°14290 U.A.

ci pregiamo ordinarvi quanto sottoelencato da spedire il più presto possibile

al nostro indirizzo di CATANIA - Via D.Tempio,4

Pagamento entro 30 giorni data fattura

Quantità	DESCRIZIONE MATERIALI	PREZZO	IMPORTO
	TRASFORMAZIONE DI KG.18000 ROTTAMI E TUBI USATI DI		
	OTTONE DI CUI DISPONIAMO LA SPEDIZIONE AL VOSTRO		
	STABILIMENTO DI LIVORNO SAN MARCO :		
2500	Tubi m/m 23 x 25 x 4655 peso teorico Kg.7541 ai Kg.	7,45	
1150	" " 17 x 19 x 3590 " " " 2021 " "	8,10	
3020 (circa)	" " 17 x 19 x 1577 " " " 6799 " "	8,10	

Autorizzazione Sabbrigucra N° 827774 dell'11.11.1942 XXI

D.V/C

Per merce resa franca di spese portelisc , dogana — , imballo 73.89 al costo

Dichiariamo sin d'ora di non accettare conferma che modifichino in tutto o in parte la presente ordinazione e di non riconoscere condizioni diverse inserite sulle vostre lettere e fatture se non esplicitamente da noi accettate.

Declassified E.O. 12356 Section 3.3/NND No. 785019

COPIA

PA.

EPEPT.GOC.GENERALE ELETTRICA DELLA SICILIA
Via Liberta,46
PALERMO

26 Maggio 1943

77244 L.

3761 3762 3763

FABBISOGNO NETTO A 30 GIORNI DATA FATTURA

SPEDITO A 2/2 FERR.P.V. IN PORTO ASSEGNATO AL VS.INC. DI SANTA PAOLA
CATANIA

1638	TUBI MODEL DI CARTONE				
	2500 DA M/M 23X25X4655	7591.80		7.45	56.558.91
	1150 " " 17X19X3590	1934.60		8.10	15.665.40
	1809 " " 17X19X4577	3923.20		8.10	31.777.92
	SALDO ORD.4138/II 17/11/42		13.449.00		
	AUTORIZ. SERVIZIO 67603 20/11/42				
1202	TUBI TONDI DI RAME				
	34 PAS. DA M/M 10 X 12	432.90		10.33	4.476.37
	SALDO ORD. 3845/II 24/11/42				
1203	DETTI COME SOPRA				
	5 DA M/M 26 X 30	33.40		4.75	158.65
	5 PAS. DA M/M 17 X 20	34.10		5.95	202.89
	SALDO ORD. 4035/II 24/11/42		500.00		
	AUTORIZ. SERVIZIO 65626 28/11/42	KG.	13.949.00		
					108.840.14
					2.176.85
	PASSA ENTRATA			LIT.	111.017.00

CONTRO TRASFORMAZIONE CONTRO

13.449.00	110% ROTT. OTTONE	KG.	14.793.90
500.00	102% ROTT. RAME	"	510.00
13.949.00		KG.	15.303.90

MATERIALI REGISTRATI A SCARICO LIBRO 51 MERCI IN LAVORAZIONE
IL MATERIALE DA LAVORARE DI E' STATO CONSEGNATO CON NOTA DI
CARICO DEL 6/2/1943.

7384

ASSEGNO POSTALE N° 146 SUL C/C 5-12780 DI DATA 31/5/1943 PER
L. 2.176.85 PER PARI ENTRATA PAGATA SULLA PRESENTE FATTURA.

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

29 June 1944

348 051 Rlw.

Subject: Electricity Alto Belice Plant.

To : Director Public Works & Util. Sub-Comm.
Att: Lt.Col. Lapper

1. The unloading of the above power plant was completed at 11 AM June 28, 1944 at the Port of Naples and is now proceeding by truck to Matese II site. Four copies of the receipts furnished by Major Renton were signed by Lt. Canning of 543 E & M coy R.E. He is a technical officer and is to be in charge of the installation at Matese II for District III Engineers. The signed copies of the above mentioned receipts were distributed as follows:

1 cy to Lt. Canning
1 cy to T/Sgt A.Anzivino
1 cy to Major Renton
1 cy enclosed herewith.

2. In regard to the connection between the penstock and turbine intake at Matese II a drawing is to be made by Lt. Canning of the necessary tubing, flanges, elbow and bolts. At the present writing, it appears more feasible to have this equipment fabricated (in Naples, at Naval Meccanica) and leave the present cone and elbow at Alto Belice. The inside diameter of the Alto Belice penstock is 27.559 inches and at Matese II, 35.15741 inches. Lt. Canning states that it will be approximately one month before the foundation and other necessary repairs will be ready at Matese II. In this time it should be possible to fabricate the proper penstock connections.

3. There are two pieces of equipment still at Alto Belice that should be shipped to Naples. These are the generator bed plate and the cone valve (installed between cone and turbine needle valve). This valve cannot be taken off until a blind flange is placed on that end of the cone.

Robert A. Bell
ROBERT A. BELL
Major S.C.

2 Incl.
1 Incl. 1 cy of signed shipping list (28 items)
Incl. 2 receipt signed by T/Sgt Anzivino.

Rlw/wrt 7381

Declassified E.O. 12356 Section 3.3/NND No. 785019

Inc # 1

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394.

VSR/cp

13 June 1944.

I have received the following described equipment, formerly installed at the Alto Belice Generating Station, of the Società Generale Elettrica della Sicilia.

Piece Number	Description
1	Oil Circuit Breaker Tank.
2	Oil Circuit Breaker Tank.
3	Oil Circuit Breaker Tank.
4	Oil Circuit Breaker Mechanism.
5	Current Transformer 200/5 Ratio.
6	Potential Transformer 12000/100 Ratio,
7	Potential Transformer 11000/100 Ratio.
8	Current Transformer. 2 Set Potential Transformers WSR. Disconnecting Switches.
9	Box containing the following: a. 12 exciter brush holders. b. 4 Fiber insulators used between bottom of generator outboard pedestal and generator bedplate. c. 40 Shims used under bearing pedestals under generator stator.

-/-

7386

Declassified E.O. 12356 Section 3.3/NND No. 785019

Piece Number	Description
	d. 1 Wire clamp.
	e. 1 Alternator brush holder.
	f. 4 Turbine oil rings.
	g. 4 generator oil rings.
	h. 1 belt 50 mm wide for governor drive.
	i. 1 Belt - 100 mm wide for oil pump drive.
Items l to s added 15/12.	l. 8 Bolts for generator bearing pedestals.
	m. 4 Bolts between generator stator and bedplate.
	n. 16 Bolts for main turbine valve
	o. 6 Shaft coupling bolts.
	p. 11 Bedplate bolts.
	q. 27 Bolts for turbine cover
	r. 8 Bolts for entrance Flange
	s. 1 Key for shaft coupling.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Piece Number	Description
10 ✓	Exciter Stator and Base Nameplate data: Direct Current Generator No. 1201519 Type EC - 7 - 4 - 20 - 750 Form A Amps: 160. Speed 750 Volts no load: 125 Volts full load: 125 Manufactured by General Electric Company. Schenectady, New York.
11 ✓	Generator Field Resistance.
12 ✓	Miscellaneous Parts. a. Stand for hand wheel operating needle valve. b. Stand for speed indicator and water height indicator. c. Hand wheel (used with item a). VAR. d. 2 - Rods forming part of valve gear. e. 4 - Small bronze valves. f. 2 - Grease cups.

7384

SHEET 3 OF 6

Declassified E.O. 12356 Section 3.3/NND No. 785019

Piece Number	Description
13 ✓	Generator field and exciter armature on shaft.
14 ✓	~~Governor~~. Oil Pump and speed Regulator 15k.
15 ✓	Pelton wheel with shaft.
16 ✓	Generator bearing pedestal.
17 ✓	Generator bearing pedestal.
18 ✓	Turbine needle valve and entrance pipe.
19 ✓	Needle valve support.
20 ✓	Turbine Casing, bottom half with bearing pedestals.
21 ✓	Turbine Casing, top half.
22 ✓	a. Marble benchboard containing:
	b. Oil Circuit breaker control switch .
	c. 1 - a.c. Voltmeter, 0 - 15000 volt range.
	d. 1 - a.c. Ammeter 0 - 250 amper range.
	e. 1 - d.c. Ammeter 0 - 250 ampere range.
	f. 1 - d.c. Voltmeter 0 - 150 volt range.
	g. 1 - Wattmeter resistance.
	h. 2. Condensers for Terrill regulator. 7383

Declassified E.O. 12356 Section 3.3/NND No. 785019

Piece Number

Description

i. 1 - Condenser for overvoltage relay.

l. 1 - Resistance for overvoltage relay.

m. 1 - a.c. Wattmeter, 0-4000kw range.

n. 2 - Push buttons to control governor spring motor.

o. 1 - Synchronizing plug.

23 ✓

Generator Stator
Name Plate Data:

Alternating Current Generator
No. 3096635 Type ATB/8/3500 ~~Space~~ M/750
Form S.
Amperes 202/187. Speed: 750
Power Factor: 0. 7
Kw 2450
50 cycles
10000/10806 volts.
3500 kva, - continuous
Stator Rise 50°continuous
Rotor rise 60° Manufactured
by General Electric Company,
Schenectady, New York.

24 ✓

Marble Vertical Benchboard containing:

a. Generator field resistance short circuiting switch, single pole, double throw.

b. Exciter field rheostat.

c. Terril regulator rheostat.

d. Manual control for Generator Field Switch.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Piece Number	Description
	e. Generator Field Resistance Short Circuit Switch Relay.
	f. Governor spring motor Field Switch, double pole, single throw.
	g. Turbine Speed indicator, belt driven.
	h. Water height indicator (out of order).
25 ✓	Terrill Voltage Regulator.
26 ✓	Generator Field Switch.
27 ✓	Terrill Regulator Resistance.
~~28~~ 29.	short Supporting Flange ✓

These parts are boxed these boxes not been checked in detail

Pvt. A RE
543 Eng Coy R.E.

Signature of officer receiving equipment from HQ. Allied Control Commission.

7381

Declassified E.O. 12356 Section 3.3/NND No. 785019

C. P. C. Palermo 9375-218

Società Generale Elettrica della Sicilia

Anonima per Azioni - Capitale L. 300.000.000 - versato L. 228.000.000 - Sede sociale Palermo

Riferire al N.°

3 giugno 1944 A

CENTRALE ALTO BELICE"

COLLO n° 1

Elenco del materiale contenuto:
Cassa per interruttori in olio

Palermo

il Capo officina
(illegible)

p. le Autorità Alleate
G. M. Anzuino
Lt. Col. I/Sgt.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Telegramma Circolare

CENTRALE ALTO BELICE

COLLO nº 2
Elenco del materiale contenuto/
Cassa per interruttore in olio

il Capo Officina

p.Le Autorità Alleate
G. M. Anzuino
T/sgt. R.C.C.

7379

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "ALTO BELICE"

COLLO n° 3

ELENCO DEL MATERIALE CONTENUTO

Cassa per interruttore in olio

il Capo officina

3 Giugno 1944

il Rappresentante delle Autorità Alleate

7378

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "ALTO BELICE"

COLLO nº 4

Elenco del materiale contenuto

COMANDO A DISTANZA PER INTERRUTTORE

Il Capo officina
Marullo

Il Rappresentante delle Autorità Alleate
A.M. Augustino
Msgt. A.A.C.C.

3 giugno 1944

7377

Declassified E.O. 12356 Section 3.3/NND No. 785019

C[illegible]TRALE IDROELETTRICA "ALTO BEL[illegible]E"

COLLO nº 5

Elenco del materiale contenuto

TRASFORMATORE di corrente per alternatore

il Capo officina

Marullo

, 3 giugno 1944

il Rappresentante le Autorità Alleate

A.M. Augustus
7/5gt A.C.C

7376

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "ALTO BELICE"

COLLO nº 6

TRASFORMATORE DI TENSIONE PER ALTERNATORE

Il Capo officina

M. Marsala

3 giugno 1944

Il Rappresentante le Autorità Alleate

a M Augustino
1 Sgt. A.C.C.

7375

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "ALTO BELICE"

COLLO nº 7

TRASFORMATORE DI TENSIONE PER TIRRILL

Il Capo Officina

Marsala

p.Le Autorità Alleate

G.M. Augustino
1 Sgt. a.b.c.

7374

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "ALTO BELICE"

COLLO nº 8

Elenco del materiale contenuto

a- trasformatore di corrente

b- nº 2 coppie di valvole per tyrrill

il Capo officina
Marullo

p. Le Autorità Alleate
A. M. Augustus
1/Sgt. A.A.C.

3 giugno 1944

7373

C.P.C. Palermo 9575-282

Società Generale Elettrica della Sicilia

Anonima per Azioni - Capitale L. 300.000.000 - versato L. 228.000.000 - Sede sociale Palermo

Riferirsi al N°

3 giugno 1944

CENTRALE "ALTO BELICE"

COLLO N° 9
ELENCO DEL MATERIALE CONTENUTO

a- n° 12 portaspazzole per collettore eccitatrice con relative spazzole
b- n° 4 spessori di cartone per supporto isolato alternatore
c- n° 40 spessori di lamiera vari
d- n° 1 morsetto per attacco fili di uscita
e- n° 1 settore portaspazzole per anelli alternatori
f- n° 4 anelli lubrificanti per cuscinetti turbina
g- n° 4 " " " " alternatori
h- n° 1 cinghia in cuoio per regolatore velocità da 50 mm.
i- n° 1 " " pelo cammello per regolatore di velocità da 100 mm.
l- n° 8 bulloni per supporto alternatore
m- n° 4 " " fissaggio statore alternatore
n- n° 16 " con dado per flangia saracinesca principale
o- n° 6 " per accoppiamento turbina alternatore
p- n° 11 spine di riferimento
q- n° 27 bulloni per coperchio turbina
r- n° 8 " " introduzione turbina
s- n° 1 chiavetta per accoppiamento turbina alternatore

Il Rappresentante dell'Autorità Alleata
A. M. Anzuino
1/Sgt. A.C.C.
il Capo Officina

737

Declassified E.O. 12356 Section 3.3/NND No. 785019

Declassified E.O. 12356 Section 3.3/NND No. 785019

C. S. C. Palermo 9325-282

Società Generale Elettrica della Sicilia

Società per Azioni - Capitale L. 300.000.000 - versato L. 238.000.000 - Sede sociale Palermo

Stabilimento per Azioni - Capitale L. 300.000.000 - versato L. 238.000.000 - Sede sociale Palermo

Riferirsi al N.

3 giugno 1944 A

CENTRALE "ALTO BELICE"

COLLO n° 10
ELENCO DEL MATERIALE CONTENUTO

INDUTTORE ECCITATRICE CON BASE

Il Capo officina

p Le Autorità alleate
C. M. Ritzmann
I/Sgt. A.C.C.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Telegramma

3 giugno 1944

CENTRALE "ALTO BELICE"

COLLO n° 11

Elenco del materiale contenuto

Resistenza di campo alternatore

Il Capo officina

p Le Autorità Alleate

A. M. Anzuino

Il Sgt. A.C.C.

7378

Declassified E.O. 12356 Section 3.3/NND No. 785019

SOCIETÀ GENERALE ELETTRICA DELLA SICILIA
Anonima per Azioni - Capitale L. 300.000.000
Versato L. 225.000.000
SEDE SOCIALE PALERMO
DIREZIONE GENERALE

PALERMO, 3 giugno 1944

CENTRALE "ALTO BELICE"

COLLO n° 12

Elenco del materiale contenuto

a- colonnetta turbina per messa in moto
b- " per manometro e contagiri
c- n° 1 volantino
d- n° 2 tiranti per turbina
e- n° 4 valvole in bronzo per acqua
f- n° 2 ingrassatori per turbine

il capo officina

p Le Autorità Alleate
C. M. Augurino
1/sgt. A.C.C.

7369

Indirizzo telegrafico: DIRELECTRON PALERMO - Telefoni 16-59
C. P. C. Palermo 5575-82

Declassified E.O. 12356 Section 3.3/NND No. 785019

SOCIETÀ GENERALE ELETTRICA DELLA SICILIA
Anonima per Azioni - Capitale L. 300.000.000
Versato L. 228.000.000

SEDE SOCIALE PALERMO

DIREZIONE GENERALE

PALERMO, Via Libertà 46

3 giugno 1944

N.

CENTRALE "ALTO BELICE"

COLLO N° 13
ELENCO del materiale contenuto

Rotore di alternatore con indotto eccitatrice

il capo officina
Mandis

p. Le Autorità Alleate
a M. Augusto
I/Sgt. a. c.c.

7368

Telefono Interno Telegrafico DIREZIONE PALERMO
C. P. C. Palermo 9875-782

Declassified E.O. 12356 Section 3.3/NND No. 785019

SOCIETÀ GENERALE ELETTRICA DELLA SICILIA

Anonima per Azioni - Capitale L. 300.000.000
Versato L. 228.000.000

SEDE SOCIALE PALERMO

DIREZIONE GENERALE

PALERMO, 3 Giugno 1944
Via Libertà, 46

N.

CENTRALE "ALTO BELICE"

COLLO nº 14

Elenco del materiale contenuto

Regolatore completo di velocità

il capo Officina

P.le Autorità Alleate

Q.M. Anzuino
f/Sgt. Q.C.C.

7367

Indirizzo telegrafico: DIRELECTRON PALERMO Telefono 15-XX
C. F. C. Palermo 95526

Declassified E.O. 12356 Section 3.3/NND No. 785019

Centrale Idroelettrica "ALTO ADIGE"

COLLO nº 15

Elenco del materiale contenuto

RUOTA PELTON con albero

Il capo officina

5 giugno 1944

p.Le Autorità Alleate

A. M. Augusino
1/Sgt. A.C.C.

7366

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "ALTO BELICE"

COLLO nº 16

Elenco del materiale contenuto

CUSCINETTO ALTERNATORE LATO ECCITATRICE

Il capo officina

3 giugno 1944

p.LE Autorità Alleate

A. M. Augustus
1. Sgt. A.C.C.

7365

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "ALTO BELICE"

COLLO n° 17

Elenco del materiale contenuto:

CUSCINETTO ALTERNATORE, LATO ECCITATRICE

Il capo officina

5 Giugno 1944

p.Le Autorità Alleate

Q.M. Aiutante
1° Sgt. Q.C.C.

7364

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "A[illegible]O BELICE"

COLLO N°18

TUBO CON UGELLO PER TURBINA

il capo officina

Manuel

5 giugno 1944

p.Le Autorità Alleate

G.M. Augusto
1.Sgt. A.C.C.

7363

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA ALTO BE CE

COLLO N°19

Elenco del materiale contenuto:

FLANGIA PER INTRODUZIONE TURBINA

Il capo officina

Marelli

5 Giugno 1944

p.Le Autorità Alleate

Q.M. Augusino
1 Sgt. A.C.C.

7362

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "ALTO BRENTA"

COLLO nº 20

Elenco del materiale contenuto:

CASSA TURBINA CON CUSCINETTI

Il Capo officina

5 giugno 1944

p.Le Autorità Alleate

A. M. Augustus
1 Sgt. Ca. C_C.

7361

Declassified E.O. 12356 Section 3.3/NND No. 785019

CENTRALE IDROELETTRICA "ALTO [illegible]ELICE"

COLLO N° 21

Elenco del materiale contenuto:

COPERCHIO TURBINA

Il Capo Officina

[signature]

5 Giugno 1944

p.Le Autorità Alleate

C. M. Anzuino
1/Sgt. A. A. C. C.

7309

Declassified E.O. 12356 Section 3.3/NND No. 785019

Electrical file
Lot

150 Rab

Eon Sec
CPW + US
V - 7743

ALTO BELICE TURBINE
ITEMIZED SHIPPING LIST
10 June 1944

Shipped to: Lieut. Col. W. M. Lapper
Headquarters Allied Control Commission
[redacted] DUKO

Shipped by: Major V.S. Renton. Allied Control
Commission Region I APO 394.

Piece Number	Piece	lbs. Weight	Shipping Dimensions Feet
1	O.C.B. Tank	500	3'-6"high 2'-3"wide 3'-10"long
2	O.C.B. Tank	500	3'-6"high 2'-3"wide 3'-10"long
3	O.C.B. Tank	500	3'-6"high 2'-3"wide 3'-10"long
4	O.C.B. Mechanism	500	2'-3"high 2'-3"wide 3'-0"long
5	Current Transformer	200	2'-0"high 1'-3"wide 2'-0"long
6	Potential Transformer	200	3'-0"high 2'-6"wide 2'-0"long
7	Potential Transformer	150	2'-high 1'-wide 2'-long
8	Current ~~Disconnecty~~ Transformer and Disconnecting Switches.	200	1'-1"high 2'- "wide 3'- "long

19 June 121

735

Declassified E.O. 12356 Section 3.3/NND No. 785019

Piece Number	Piece	lbs. Weight	Shipping Dimensions Feet
9	Bolts, Nuts, Small Parts	400	1'- 4"high 1'- 7"wide 3'- 3"long
10	Exciter Stator	1,500	4'- 5"high 3'- 7"wide 2'- 3"long
11	Field Resistance	600	2'- 0"high 2'- 0"wide 3'- 7"long
12	Miscellaneous Parts for Servomotor	500	3'- high 2'-wide 4'- long
13	Field	20,000	6'- high 7'- wide 13'- long
14	Servomotor	4,000	6'- 0"high 4'- 9"wide 4'- 5"long
15	Turbine Wheel and shaft	4,000	4'- 7"high 5'- 3"wide 9'- 1"long
16	Generator Bearing Pedestal	1,500	3'- 6"high 4'- 0"wide 2'- 0"long
17	Generator Bearing Pedestal	1,500	3'- 6"high 4'- 0"wide 2'- 0"long
18	Needle Valve	4,000	3'- 9"high 4'- 1"wide 8'- 2"long
19	Needle Valve Support	150	1'- high 3'- wide 3'- long

7399

Declassified E.O. 12356 Section 3.3/NND No. 785019

Piece Number	Piece	lbs. Weight	Shipping Dimensions Feet
20	Turbine Casing Bottom half	4,000	4'- 0"high 8'- 2"long shaft 8'- 6"wide
21	Turbine Casing Top half	1,500	3'- 5"high 4'- 1"along shaft 7'- 3"wide
22	Bench Board with Meters	400	2'- high 4'- wide 4'- long
23	Generator Stator	40,000	10'- 10"high 4'- 7"along shaft 15'- 8"wide
24	Vertical Panel Board with controls Also speed indicator and water height indicator	~~400~~ 450	2'- high 4'- wide 4'- long
25	Voltage Regulator	150	2'- high 2'- wide 3'- long
26	Alternator Field Switch	75	1'- high 1'- wide 2'- long
27	Regulator Resistance	150	1'- high 2'- wide 3'- long
28	omitted.		
	Mechanical instruments (Speed indicator and water height indicator.	~~50~~	~~2'- high~~ ~~2'- wide~~ ~~3'- long~~
29	Short supporting Flange.	50	1'- high 1'- wide 1'- long
30	Generator bedplate half.	1,500	1'- high 6'- wide 12'- long
31	Generator bedplate half.	1,500	1'- high 6'- wide 12'- long

Declassified E.O. 12356 Section 3.3/NND No. 785019

VSR/cp

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION

14 ~~12~~ June 1944

In reply refer to: RTC 412.42

Subject : Electricity - Sicily. Alto Belice Turbine - Itemized Shipping List:

To : Director, Public Works and Utilities Sub - Commission, Attention Lieut. Colonel W. M. Lapper.

1. Transmitted herewith are the following:

a. Two copies of a list entitled "Alto Belice Turbine, Itemized Shipping List, 10 June 1944.

b. Receipts signed by Technical Sergeant A. Anzivino for the equipment already removed from the Alto Belice Generating Station.

c. Four copies of a receipt, listing the equipment shipped, and prepared for the signature of the responsible officer receiving the material from Headquarters, Allied Control Commission.

2. The itemized shipping lists are intended to supersede those sent with my letter dated 9 June 1944 in that the more recent lists show the piece numbers used to mark the equipment.

3. Copies have been made of the receipts signed by Sergeant Anzivino, and are being retained here. However, since the removal of the unit has been under the direction of Headquarters, Allied Control Commission, it is believed better that the enclosed signed receipts be sent there. Receipts have not been signed for the items still at the plants.

4. It is requested that the responsible officer receiving the equipment from Headquarters, Allied Control Commission sign the four copies of the enclosed receipts, prepared for his signature and that one copy be made available to Sergeant Anzivino, and another to me. It is suggested that the signing officer receive

Declassified E.O. 12356 Section 3.3/NND No. 785019

the third copy, and that the fourth be retained at Headquarters, Allied Control Commission.

VINAL S. RENTON
Major, Infantry.

3 Incl.
Incl. 1 - 2 Copies Shipping List
2 - 2/ Signed receipts
3 - 4 Copies of receipts.

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4

PW&V file (2 cys)

2 cys Col Kaplan
2 cys Maj Lenton Log I
2 cys III Corps
1 cy Col Handley Log III

Lt Col
Duty SC
24/6/64

Declassified E.O. 12356 Section 3.3/NND No. 785019

BEST COPY POSSIBLE

Declassified E.O. 12356 Section 3.3/NND No. 785019

[redacted]
[redacted]
[redacted]

29 June 19[redacted]

Subject: Secretary Ike Dallas Visit.

To : Director Public Works & Util. Sub-Comm.
Asst. Ltr.Col. Lapham

1. The unloading of the above power plant was completed at 11 AM June 25, 194[redacted] as the work of Engrs and is now proceeding by truck to Helena II site. Four copies of the receipts furnished by Engr Depot were signed by Lt. Crowley (AT 503 2 A E org H.T. He is a competent officer and is to be in charge of the installation at Helena II for Capital Improvement. The signed copies of the above mentioned receipts were distributed as follows:

1 cy to Lt. Crowley
1 cy to Dist Administrator
1 cy to Engr Depot
1 cy original received.

2. In regard to the connection between the penstock and turbine intake at Helena II a meeting is to be held by Lt. Crowley of the necessary trades. Flanges, elbow and bolts. At the present writing, it appears more feasible to have this equipment fabricated (in Helena, at Naval Yard, Seattle) and have the present one and elbow at Alta below. The inside diameter of the Alta Helena penstock is 27.05 inches and at Helena II, 30.1875 inches. Lt. Crowley states that it will be approximately one month before the penstock and other necessary repairs will be ready at Helena II. In this time it should be possible to fabricate the proper penstock connection.

3. There are two pieces of equipment still at Alta Helena that should be shipped to Helena. These are the generator belt plate and the one valve (installed between cross and suction nozzle valve). This valve should be taken off until a blind flange is placed on that end of the cross.

[redacted]
Major C.E.

2 Incl.
1 Incl. 1 cy of signal shipping list (70 items)
Incl. 2 receipts signed by Capt Andrews.

735

Declassified E.O. 12356 Section 3.3/NND No. 785019

F-2ll

CMA/hf 2

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

ACC/150/PWU

Subject: Repairs to Electric Plant Sicily.

To : D.D.W. A.F.H. A.A.I.

Ref attached copy letter dated 9 June 1944 from the electrical firm of Albertini Attilio-Catania addressed to the Soc. Gen. Elett. of Sicily, Catania.

The work on which this firm is engaged and for which the copper wire is requested is urgently required in the rehabilitation of flour mills and irrigation works in Sicily.

Will you please issue the necessary authorisation for the early release of this material.

W.L.LAETER
Lieut.Colonel
Chief, Util.& Adm. Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

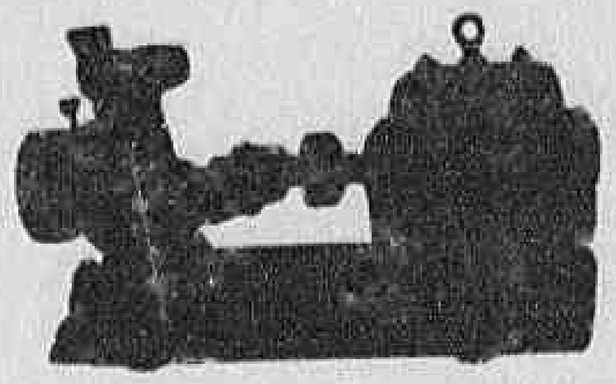
246

PREMIATA FABBRICA DI MACCHINE ELETTRICHE

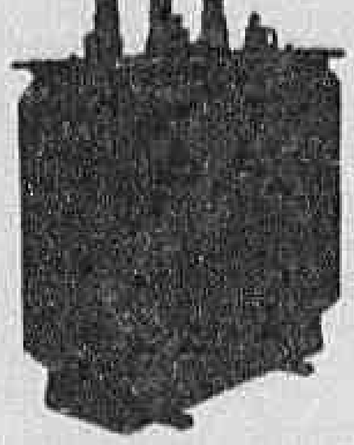
ALBERTINI ATTILIO - CATANIA

OFFICINE - FONDERIE PER COSTRUZIONI ELETTRICHE - MECCANICHE

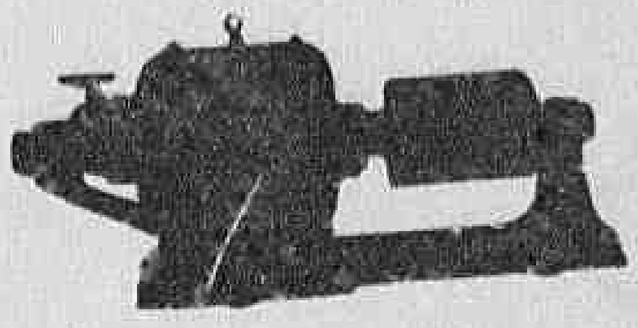
MOTORI - TRASFORMATORI - VENTILATORI
ALTERNATORI ELETTROPOMPE CENTRIFUGHE
INGRANAGGI FRESATI



ELETTROPOMPA CENTRIFUGA "ALBERTINI"



TRASFORMATORE ELETTRICO TRIFASE
A RAFFREDDAMENTO IN OLIO PER FORNITURE A GRANDI POTENZE



MOTORE ELETTRICO TRIFASE
ACCOPPIATO CON TIMONE SU PORTO PER NAVI E GRANDI POTENZE

FORNITORE DELLE FERROVIE SS. - DELLA R. MARINA - DEL R. ESERCITO E DELLA AERONAUTICA

Telegr.: Albertini Via Tripoli
" " Telefono N. 10-530
Telefono Abitazione N. 15-104

CATANIA, 9 Giugno 1944
VIA TRIPOLI N. 56

Spett/ Soc. Generale Elettrica della Sicilia

C A T A N I A

Per la riparazione dei V/ trasformatori e per le riparzioni di N° 60 motori elettrici per uso irrigazione - pastifici e mulini, ci occorre del filo di rame isolato, ci siamo rivolti alla nostra abituale fornitrice F.I.C.E Fabbrica Italiana Conduttori Elettrici - Napoli, la quale può dare corso alle nostre ordinazioni, sempreché sia autorizzata dallo Spett/ Comando Inglese che ha requisito il loro stabilimento

DIRECTORATE OF WORK D. D. W. NAPOLI

Perciò ci rivolgiamo alla vostra cortesia perché vogliate interporre i vostri buoni uffici, presso le Autorità Militari Alleate per accelerare la nostra richiesta alla spett/ F.I.C.E. di NAPOLI.

Elenchiamo il quantitativo e i diametri del filo di rame che ci interessa d'urgenza in circa Kg. 1500= a due coperture di cotone o fiocco o smaltato e questo con una copertura di cotone, e per consegne mensili di circa 400 Kg.

Ø	6/10	Kg. 100=	Ø	14/10	Kg. 100=
"	7/10	" 100=	"	15/10	" 100=
"	8/10	" 100=	"	16/10	" 100=
"	9/10	" 100=	"	17/10	" 100=
"	10/10	" 100=	"	18/10	" 100=
"	11/10	" 100=	"	19/10	" 100=
"	12/10	" 100=	"	20/10	" 100=
"	13/10	" 100=			

In attesa di un vostro benevole riscontro, vi ringraziamo e ben distintamente vi salutiamo.

ALBERTINI ATTILIO

Ly C C Rapper
Ref 332/c

103 N 114

Declassified E.O. 12356 Section 3.3/NND No. 785019

(7 51 Tabs) 23 JUN rec'd

To: PUBLIC WORKS & UTILITIES. (Electrical Division)

From: Regional Director.

Reference your verbal query concerning availability of condenser tubes on requisition ENGR-I-17-Misc. of 24 Jan 44 and letter from Region I on this same subject, see copy of letter Ref. E-1 dtd 16 June 44 from C-5, NYHA, copy of which was forwarded to you.

412.4 To be completed on or before 31 July 44 Regional Dir.

Declassified E.O. 12356 Section 3.3/NND No. 785019

1-1

10 June 44

Lt. Col. Lapsley.

re the condenser tubes for Catania the Air Force staff thy ~~note~~. manufacturing tubes is about one month. last shipped 8 second from stock = availability not known. as of 7 May 44. See OS-2 folio 85

Declassified E.O. 12356 Section 3.3/NND No. 785019

1783

20 JUN Rec'd

Econ. Sec v 1837

24

HEADQUARTERS 20 JUN 1944 A. C. C.

ALLIED CONTROL COMMISSION
SICILY REGION HQ.
APO 394.

VSR/op

In reply refer to: RTC 412.42

17 June 1944.

Subject: Electricity - Sicily, Condenser Tubes for Catania Generating Station.

To : Director, Public Works and Utilities Sub-Commission, Attention Lieut. Col. W.M.Lapper.

202

1. Reference is made to the letter from the Requisition Division, Headquarters, Allied Control Commission, to the Director of Public Works and Utilities Sub-Commission, dated 26 May 1944, File Regn Div - 400,12, Subject: Power Equipment for Region I A.C.C.

2. This letter dealt with requisition ENGR-IV. Reg. 1/17 dated 24 January, 1944, and stated that AFHQ contemplated reporting on or about 20 May concerning the availability of the condenser tubes ordered on this requisition. Since these tubes are urgently needed at the Catania Generating Station, any action which can be taken to expedite their arrival here will be appreciated. It is pointed out that the Catania Station is the best source of steam generated electricity on the Island, and the installation of the new condenser tubes will result in the addition of 3,000 kilowatts of firm generating capacity.

Capt. Lamplen. To Messrs

Lt. Col. Lapper.

SHR

25/6.

C.P. Bolick.

C.P. BOLICK
Lt. Col ; F. A.
Regional Engeneer.

735.

20 June 32

Declassified E.O. 12356 Section 3.3/NND No. 785019

To P.W.D. for information.

Eqn.Div./[illegible]

241

HEADQUARTERS
ALLIED CONTROL COMMISSION
Economic Section
APO 394

In reply
refer to:
EC-400/162

22 June 44

SUBJECT: Electrolytic Condenser - [illegible]-63-ENG.

TO : Asst. C/S, G-5, AFHQ, APO 512.
Attention: Economic & Supply Division.

1. Reference is made to your radiogram FX8061 of 11 June 44 relative to electrolytic condensers on requisition [illegible]-63-ENG.

2. No additional information is available on the electrolytic condensers requested. Due to the inability of Allied supply authorities to identify this item, it is recommended that the following action be taken:

a. Delete request for six (6) electrolytic condensers, 1,500 m.f. capacity, test voltage 70.

b. Substitute eighteen (18) of the following units:

[illegible], dry electrolytic, U.S. Army Signal Corps Catalog No. [illegible], 500 m.f. capacity, RCA P-301-117 (fixed; 35-volt; aluminum can; 3-inch length by 1-inch diameter; positive lug 3/16-inch width by 1/2-inch length brought out near center; 1-7/64-inch by 1/4-inch flange; clamp mounting; RCA part No. 18450), or equal.

For Lieutenant General MASON MACFARLANE:

/s/ D. B. ADAMS,
Colonel, C.E.,
Executive, Econ. Section.

cc: F.W.D. ✓

Lt Col Cooper
735 Pde

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Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394.

AGO/1SG/PWU 24 June 1944.

SUBJECT: Electricity - Sicily.
TO : Major V. S. Benton
Lt.Col. C. P. Nelick, Regional Engineer, Region I.

1. For your information, I shall be leaving Naples for Rome on 28th instant. This will be a permanent change of station and, in fact, all the office with the exception of Lt. Col. Rhodes and Lt. Atkins will be moved to Rome by the end of the present month. It is expected that Lt. Col. Rhodes will remain here for approximately two weeks and as I am not quite certain as to whether you will be back before he leaves for Rome, I am arranging to take all your belongings from your office and will have them placed in your new office in Rome.

2. As I write this, the ship with the Sicilian plant is lying in the harbor and it is expected to be unloaded tomorrow or the next day. I shall give Lt. Galvino 7 days leave, after which he will return here for his belongings and proceed direct to Rome.

3. With regard to the taper piece and bend and the blank flange which you require before you can remove this, I have put this job in the hands of Major Barry and he will be checking it with the S.A.C. arranging for manufacture and shipment to Palermo. Major Barry will communicate with you immediately the material is shipped.

4. I am asking Lt. Col. Rhodes to see that your mail is forwarded each day.

5. When you have completed your work in Sicily you should report to Lt. Col. Rhodes at this office and, if he has moved to Rome by that time, there will be a Rear-Headquarters left in Naples. I wish you to proceed at once to Rome after your work is completed in Sicily.

6. I have today written to Lt. Col. Nelick in connection with electricity supplies to sulphur mines in Sicily. I have mentioned to him that as sulphur carries a high priority, he should see to it that electricity is made available and I have suggested that he may wish to have your help in considering term rationing scheme if he foresees any difficulties.

W. M. LARNER,
Lt. Col.,
Chief, Util. & Adm. Div.

CC: Lt.Col. Rhodes
Major Barry.

7349

Declassified E.O. 12356 Section 3.3/NND No. 785019

Feb 239

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394.

APW/A50/pvm 24 June 1944.

SUBJECT: Electricity - Sicily.
TO : Regional Engineer, Region I.

1. A meeting has been held at this office at which Lt. Pollard of the Mining Division was present, when the question of sulphur mining was discussed.

2. Sulphur mining, as you are aware, now carries a high priority which you will, of course, observe in the allocation of electric power to the consumers in Sicily.

3. My understanding is that subject to adequate fuel supplies there will be ample power available to meet the needs of sulphur mining throughout the year.

4. If you have the slightest difficulty in meeting this requirement, please inform Major Hunter who is at present in Sicily commanding the electrical position for me, and request that he work out a complete switching scheme to take care of the situation.

W. K. LAWSON,
Lt. Col.,
Chief, Util. & Adm. Div.

cc: Economic Section
Industry & Resources Mining Div.

734

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Transportation Sub-Commission
Coal Division
APO 394

RAR/gfn

Our Reference : ACC Tn/CD/48/3

Date : 23 June '44

TO : Public Works & Utilities Sub-Commission,
HQ., ACC.

SUBJECT : Report of Tests on Riley Grate Boiler Palermo using Sardinian Coal.

1. Yours of 20th June '44, reference ACC/099/PW is acknowledged.

2. We have found the enclosures thereto of very definite interest. The photographs Nos. 139 and 140 are returned herewith.

C.W. OXLEY,
Lieut-Colonel,
Coal Division.

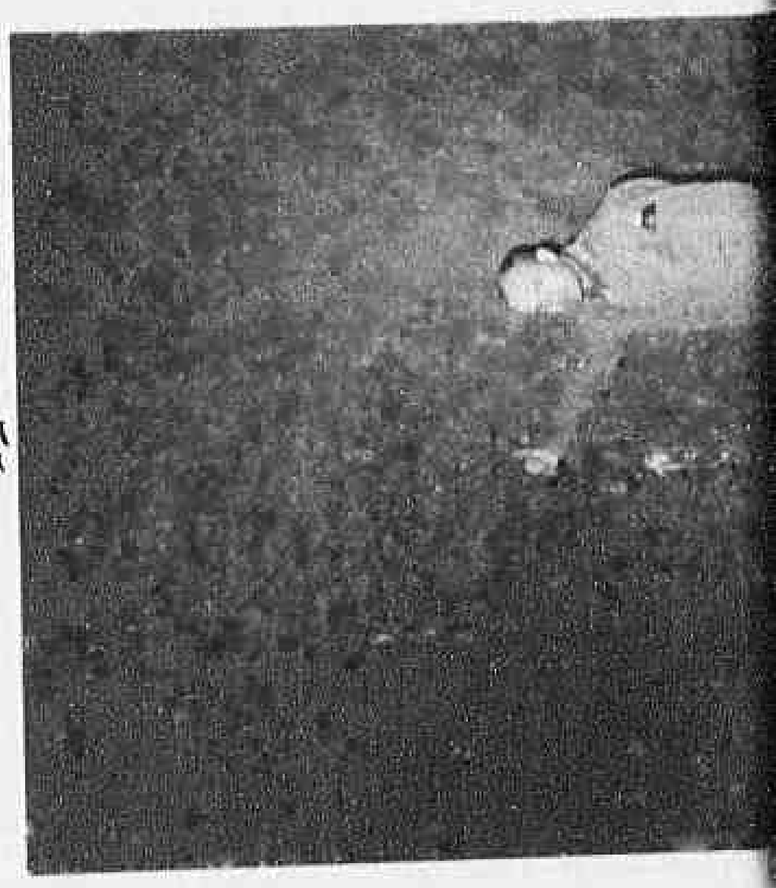
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Declassified E.O. 12356 Section 3.3/NND No. 785019

1341





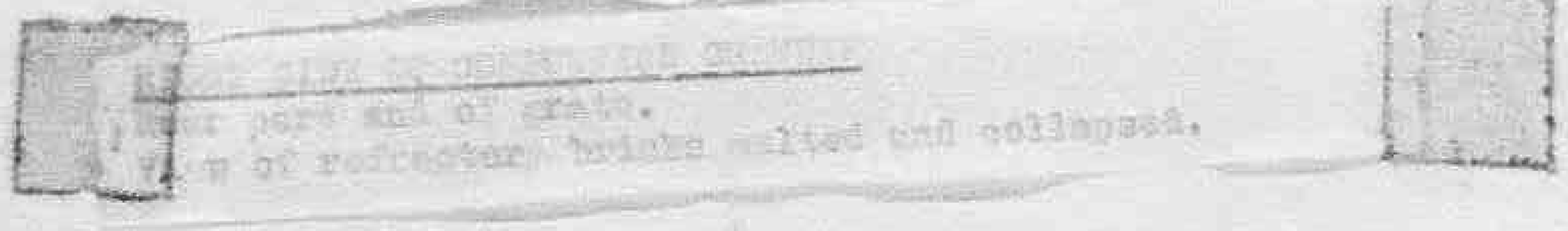
Approved For Release 2004/05/13 : CIA-RDP80-00473A000200010001-4



Inspector at converter plate.
Rear part.
View of refractory bricks salted, fetched and collapsed.



734

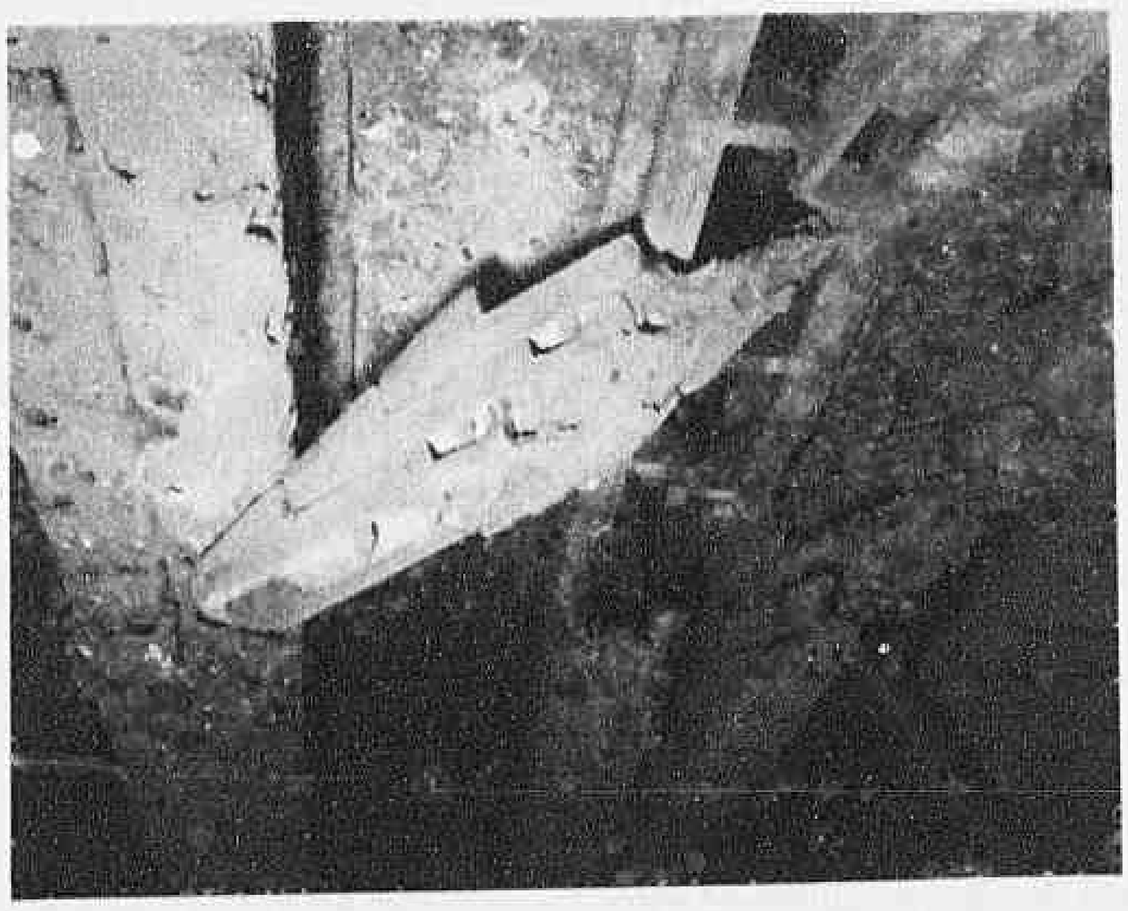


Inspector at converter plate.
Rear part end of crab.
View of refractory bricks salted and collapsed.

Declassified E.O. 12356 Section 3.3/NND No. 781049

0 4 1 81

Declassified E.O. 12356 Section 3.3/NND No. 783019



7315

Plate element assembly blocked and cut of operation.
View of welded parts





GRATE ELEMENTS ASSEMBLY
View of melted elements blocked and out of operation.

7345



FLOOR RAIL OF COMBUSTION CHAMBER AND GRATE ELEMENTS
View of melted refractories and damaged grate elements.

0 4 1 91

Declassified E.O. 12356 Section 3.3/NND No. 785019

Declassified E.O. 12356 Section 3.3/NND No. 785019

Copy Ready 051 tin 22 JUN Recd 150 Rab

To: Public Works & Utilities Subcommission.

From: Requisition Division

1. Reference is made to Ltr RTC 412.42 of 15 June 44 from Region I.

2. It is considered that information submitted will not completely answer query Ltr C-5, ATSA.

3. Inasmuch as sufficient identifying data is not available, it is requested that you indicate number and characteristics of smaller condensers which might possible serves as substitute

Sig C Cat # 3DB500-8 Capt. Langham

Capacitor dry electrolytic, 500 MF capacity

35 V DC WV

RCA part # 1845

Diam 3" length X 1" dia

GHR
7/4/44

Declassified E.O. 12356 Section 3.3/NND No. 785019

0 0 234

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

LWL/in

ACC/150/PWU

June 20, 1944

Subject : Electricity, Sicily,
Electrolytic condenser characteristics.

To : Requisition Sub-Commission. ✓

1. Attached is data on condensers requested by A.F.H.Q. on requisition Engineer 4, Region 1/17 Miscellaneous dated 24 January their M&S 63.

2. We are unable to find the catalogue number but trust that the inclosures will provide sufficient information to locate the Item or select a substitute.

for W.M. LAFFER
Lieut-Colonel,
Chief, Utilities and Adm.Div.

7343

Declassified E.O. 12356 Section 3.3/NND No. 785019

CONFIDENTIAL

ALLIED CONTROL COMMISSION
SICILY REGION HQ.
APO 394

VSR/hf

15 June 1944

In reply
refer to: RTC 412.42

Subject: Electricity, Sicily. Electrolytic Condenser Characteristics.

To : Director, Public Works and Utilities Sub-Commission.
Att: Lieut.Col. W.M. Lapper.

1. Reference is made to your letter dated 13 June 1944, File A.C.C./142/PWU, Subject: Condensers Region I, which transmitted a message requesting particulars of electrolytic condensers ordered for use in Region I.

2. Inquiries have been made of the Societa Generale Elettrica della Sicilia for additional information concerning this equipment. They reaffirm that the electrical characteristics of the condensers are 1500 microfarad capacity, that the test voltage should be 60, but have added the information that the normal operating voltage is 30. It is believed that this information covers the electrical characteristics.

3. The condenser is about 6 inches high, 4 inches wide, and 2 inches thick. It is of Italian make, and bears the initials L.C.E.A. on the outside. The manufacturer is not known. The device serves as a filter condenser, as shown on the attached sketch, submitted in duplicate.

4. The condensers are used in the Company's carrier current system and are really needed, and any help which can be given will be appreciated. It is recalled that a letter received here several weeks ago, suggested that this particular item had been ordered and would be shipped by parcel post about 20 May.

5. The classified message sent with your letter is returned herewith.

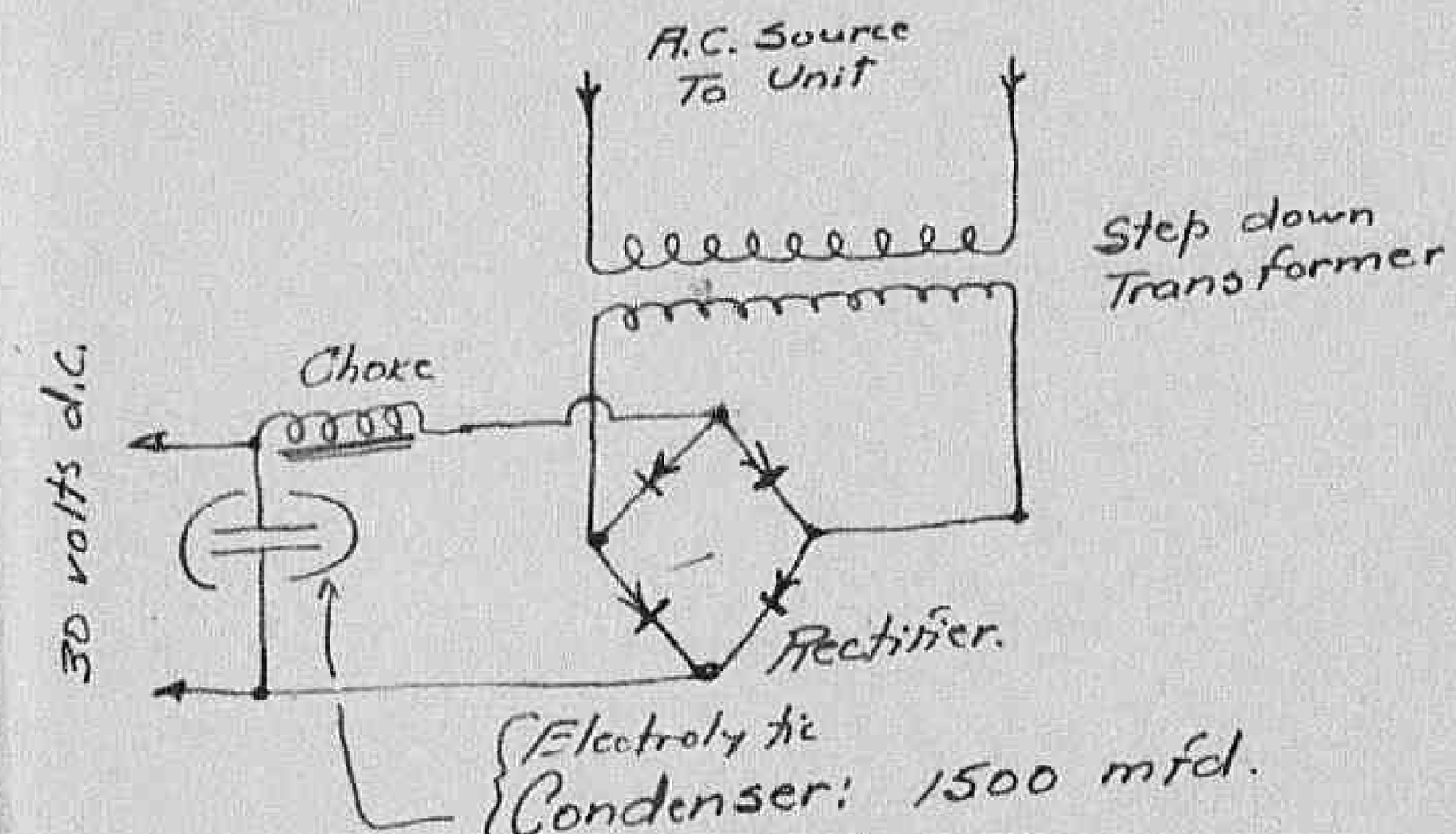
2 Incl. 1-Sketch in dup.
2-Classified Message
F 58061

C.P. BOLICK
Lt. Col. F.A.
Regional Engineer

P.S. In the event that a condenser of this size can not be obtained, perhaps sufficient smaller condensers can be secured to make the necessary capacity of 1500 mfd. They should be small however physically.

CONFIDENTIAL

Declassified E.O. 12356 Section 3.3/NND No. 785019



HEADQUARTERS ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION.
Societa Generale Elettrica della Sicilia.
Connections to 1500 mfd. Condenser
15 June 1944

7341

VBR.

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

LWL/mo

ACC/190/PWU

23 June 1944

Subject: Matese No. 2 Alto Bolice Turbine from Sicily, operating Procedure and Electric Control.

To : No. 3 District Eng.
Attention Major Howe.

1. Attached is copy of letter and enclosures which were sent to Major Page through error.

2. We are assuming that he has already furnished you with the photographs referred to which had been previously furnished him by this office.

3. If not let us know.

W.M. LAPPER,
Lieut-Colonel,
Chief, Utilities & Adm.Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

File 230

LML/in

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

ACC/150/PWU

20 June, 1944

Subject : Mateese No 2. Alto Belice Turbine from Sicily, operating Procedure and Electric Control.

To : II CT Works Eight Army
Attention: Major Page.

1. Attached is information which will be of value in connection with the installation and testing of the Hydro generating unit being moved from Sicily to Mateese No 2.

2. The attached consists of two parts:
(a) Information treating with the initial operation of the machine, dated 12 June 44.
(b) Electrical and switchboard connections, dated 13 June 44.

3. The photographs referred to in the attached have already been sent to you.

for W.H. LAPPER
Lieut-Colonel,
Chief, Utilities, and Admin. Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

19 JUN Recd
ISD
R.A.C.

VSR/cp

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394.

15 June 1944.

In reply
refer to: RTC 412.42

Subject : Electricity - Sicily. Alto Belice
Turbine - Electrical Control.

To : Director, Public Works and Utilities
Sub-Commission, Attention, Lieut. Colonel W.M.Lapper.

1. Transmitted herewith are two copies of a paper entitled "Alto Belice Turbine, Photograph No. 10, Explanation," describing some of the aspects of the electrical control of the Alto Belice unit, as shown on photograph No. 10, previously sent your office, and entitled "Alto Belice, Machine Control Panel, 13 May 1944.

2. Sketches of the electrical connections are being prepared on tracing cloth, and will be sent within the next few days.

VINAL S. RENTON
Major, Infantry.

Incl.- 2 copies
Explanation.

Capt Langston
733rd
GSC
9/6

1/50

Declassified E.O. 12356 Section 3.3/NND No. 785019

VSR

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394

13 June 1944

ALTO BELICE TURBINE
PHOTOGRAPH No. 10
EXPLANATION

Benchboard: From left to right, top row of instruments: Phase ammeter, wattmeter showing generator output, voltmeter showing generator voltage.

Below wattmeter and voltmeter, and half way between them are the push buttons controlling the governor spring motor.

From left to right, bottom row: Generator field ammeter, control for generator oil circuit breaker (in open position), synchronizing plug connection, generator field voltmeter.

Vertical Panel: From left to right :

Manual Generator Field Resistance Short Circuiting Switch. The two ends of the field are connected to the two top jaws of the switch. The two bottom jaws are not used .

Governor Spring Motor Field Switch: This switch is normally left open, except when the motor is operated .

Exciter Field Rheostat.

Terrill Regulator Rheostat

Manual Control, Generator Field Switch.

Main Field Resistance Short Circuit, Switch Relay:

~~Switch Relays~~ This relay operated in the event of high generator voltage. Operation of this relay deenergizes solenoid ~~s~~ operated

Declassified E.O. 12356 Section 3.3/NND No. 785019

on field resistance frame, permitting contacts on solenoid to open, and removing the short circuit on the main field resistance. The main field resistance is normally short circuited, either by ~~those~~ this set of contacts, or by the manual generator field resistance short circuiting switch on the front of the vertical panel. Cutting this resistance into the circuit reduces the generator voltage. The solenoid mounted on the field resistance frame and mentioned above is shown on photograph 9, two inches to the left of right edge, and three inches above bottom.

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19 JUN Recd
150
R.A.

226

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394.

In reply
refer to: RTC 412.42

16 June 1944

Subject: Electricity - Sicily. Alto Belice Turbine Operating Procedure.

To : Director, Public Works and Utilities Sub-Commission, Attention Lieut. Col. W. M. Lapper.

1. Transmitted herewith are two copies of a paper entitled "Alto Belice Turbine, Operating Procedure".

2. This paper is intended to describe what seem to the writer to be the unusual points in starting the Alto Belice machine. Obvious instructions such as to check the bearing oil rings and to match the voltage and frequency of the incoming machine with the system have been omitted.

VINAL S. PENTON
Major, Infantry.

Incl. - 2 Copies "Alto Belice Turbine, oper. proc."

Capt. Langdon

7335 GSC 19/6.

1777

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394.

VSR/cp

12 June 1944.

ALTO BELICE TURBINE
OPERATING PROCEDURE

(Reference photograph numbered 4, 9, and 18.)

1. Equalize pressure on both sides of stop valve by opening bypass valve (Reference photograph No. 4. Bypass valve wheel shown 3/4 inch to left of right edge of picture; 3 inches above bottom edge.)

2. Open stop valve by admitting water under stop valve piston. Stem of stop valve rises. Water is admitted by means of three - way valve mounted on stop valve. (Reference photograph No.18, which shows three way valve 5 inches to left of right edge of picture; 2 1/4 inches below top).

3. Start turbine by admitting water by means of opening hand wheel controlling needle valve (Reference photograph No.4, which shows hand wheel 2 1/2 inches to right of left side of picture; 3 1/2 inches below top edge.

4. Put governor in service by means of control handle when turbine speed reaches 400 rpm.(Reference photograph No.4 which shows control handle 2 1/2 inches to left of right edge of picture; 4 3/4 inches below top edge.

5. Synchwonize, either by means of governor adjusting hand wheel, or by means of governor motor controlled from switch board. (Reference photograph No. 4 which shows governor hand wheel 1 7/8 inches to left of right edge of picture, 2 1/4 inches below top edge).

6. Put voltage regulator in service by closing the two single blade switches below the regulator. (Reference photograph No.9 which shows the corresponding two switches on the regulator for another machine, 1 3/8 and 1 3/4 inches to of left edge of picture and 4 inches above bottom edge.

(See Next Sheet).

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Note: The governor motor will not adjust the governor for loads above 2,000 Kw. (Alto Belice head characteristics). For greater loads, the governor spring tension must be adjusted by hand.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Fin

Lt/1n

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

ACC/150/PWU

June 20, 1944

Subject : Electricity, Sicily.
Electrolytic condensor characteristics.

To : Requisition Sub-Commission.

1. Attached is data on condensers requested by A.F.H.Q. on requisition Engineer 4, Region 1/17 Miscellaneous dated 24 January their MAS 63.

2. We are unable to find the catalogue number but trust that the information will provide sufficient information to locate the Item or select a substitute.

for W.M. LATTER
Lieut-Colonel,
Chief, Utilities and Adm.Div.

Capt

Declassified E.O. 12356 Section 3.3/NND No. 785019

CONFIDENTIAL

Ecn dec. 22 U-1706

VSR/mm

ALLIED CONTROL COMMISSION
SICILY REGION HQ.
APO 394

HEADQUARTERS 15 JUN 1944 A.C.C.

15 June 1944

In reply refer to: RTC 412.42

Subject: Electricity, Sicily. Electrolytic Condenser Characteristics.

To : Director, Public Works and Utilities Sub - Commission.
Att. Lieut. Col. W. M. Lapper.

1. Reference is made to your letter dated 13 June 1944, File A.C.C./142/PWU, Subject: Condensers Region I, which transmitted a message requesting particulars of electrolytic condensers ordered for use in Region I.

2. Inquiries have been made of the Società Generale Elettrica della Sicilia for additional information concerning this equipment. They reaffirm that the electrical characteristics of the condensers are 1500 microfarad capacity, that the test voltage should be 60, but have added the information that the normal operating voltage is 30. It is believed that this information covers the electrical characteristics.

3. The condenser is about 6 inches high, 4 inches wide, and 2 inches thick. It is of Italian make, and bears the initials L.C.E.A. on the outside. The manufacturer is not known. The device serves as a filter condenser, as shown on the attached sketch, submitted in duplicate.

4. The condensers are used in the company's carrier current system and are really needed, and any help which can be given will be appreciated. It is recalled that a letter received here several weeks ago, suggested that this particular item had been ordered and would be shipped by parcel post about 20 May.

5. The classified message sent with your letter is returned herewith.

C.P. Bolick.

C.P. BOLICK
Lt. Col. F.A.
Regional Engineer

2 Incl. 1-Sketch in dup.
2-Classified Message
F 58061

19 June 44

CONFIDENTIAL

P.S. In the event that a condenser of this size can not be obtained, perhaps sufficient smaller condensers can be secured to make the necessary capacity of 1500 mfd. They should be small, however, physically

Declassified E.O. 12356 Section 3.3/NND No. 785019

CONFIDENTIAL

1350

ACC HAIR FOR HARTING

AFHQ SIGNED SACMED

F58061

JUNE 111924

71/11

CONFIDENTIAL

ROUTINE

CITE..FHGEG

ELECTRICAL POWER EQUIPMENT. REFER REQUISITION ENGINEER 4 REGION 1/ 17 MISCELLANEOUS DATED 24 JANUARY OUR NGS 63 SUPPLY AUTHORITIES CANNOT IDENTIFY ITEM 4, ELECTROLYTIC CONDENSERS, 1500 MICROFARAD CAPACITY, TEST VOLTAGE 60. SEND CATALOG REFERENCE AND ELECTRICAL CHARACTERISTICS URGENTLY.

ACC DISTN

Action - Encodec 3
Info PCC
File
Fleet

HEADQUARTERS
12 JUN 1944
A C C

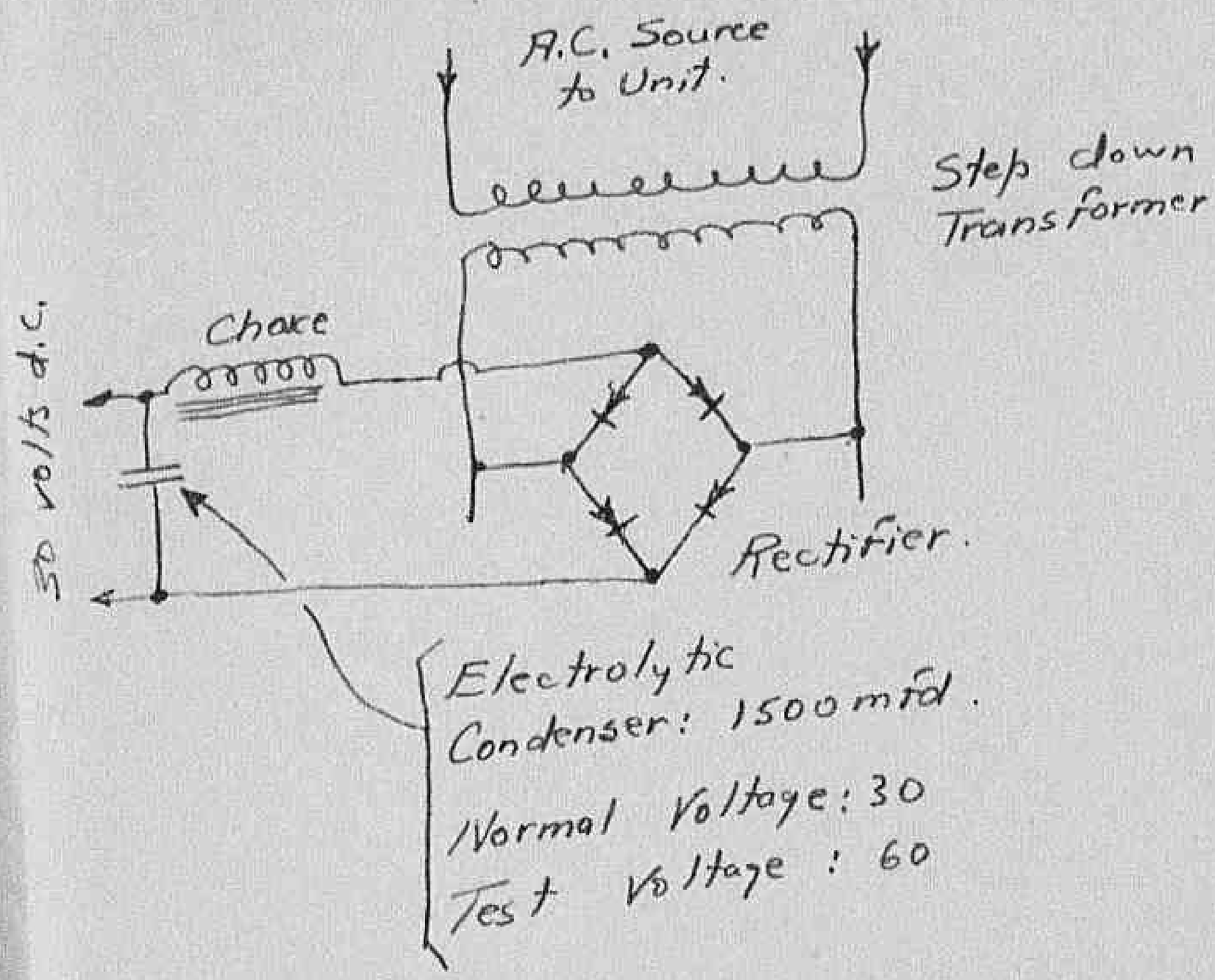
JUNE 122314

7330

CONFIDENTIAL

Declassified E.O. 12356 Section 3.3/NND No. 785019

220



HEADQUARTERS, ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
Societa Generale Elettrica della Sicilia.
Connections to 1500 mfd Condenser
15 June 1944.

VSR.

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

/ccb

CC/150/FWU

13 Jun 44.

Subject: Alto Belice Turbine Unit.

To : Lt-Col. Smith,
E. & M. Officer.
HQ., A.A.I.

The attached table of weights and dimensions is forwarded for your information.

L.A. JENNY,
Lt.-Col., C.E.,
Director.

Encl: Table of weights and dimensions.

7328

Declassified E.O. 12356 Section 3.3/NND No. 785019

Vir Gov PW&U Econ Affs

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394.

VSR/cp
560

9 June, 1944.

JUN Recd
051
Rec.

In reply
refer to: RTC 412.42

HEADQUARTERS
11 GIU 1944
A. C. C.

Subject: Electricity - Sicily. Shipment of Alto Belice Turbine. Generator Unit.

To : Director, Public Works and Utilities
Sub-Commission. Attention Lieut. Col. W.M. Lapper.

1. Indications are that the Alto Belice turbine - generator unit will be shipped very soon. Further information concerning the shipping date will be forwarded as soon as learned. It is suggested that, in the meantime, arrangements be made to obtain transportation on short notice for use on the mainland, and that sufficient lashing material be available.

2. Transmitted herewith is a preliminary list of pieces being shipped. The material is being consigned to Lieut. Col. W.M. Lapper, Headquarters, Allied Control Commission APO 394 from Major V. S. Renton Allied Control Commission, Region 1, APO 394.

3. At the request of the electric company, a receipt has been signed for each piece as it was removed from the plant. To relieve Technical Sergeant A. Anzivino and myself from responsibility, it is requested that receipts be obtained from whoever receives this equipment, and that copies be furnished both Sergeant Anzivino and myself. I will prepare these receipts and will send them to you.

4. It is planned for Sergeant Anzivino to accompany the shipment if permission can be obtained from here. It is believed advantageous that he do this since he will know the location of the material and will communicate with you immediately upon his arrival.

5. I have one other reason in having him report to Headquarters. I understand that he had planned a furlough in order to visit relatives, prior to his being assigned to this duty, and further that there is a strong possibility that he will soon depart

Declassified E.O. 12356 Section 3.3/NND No. 785019

from this theater under the rotation progam. It is respectively recommended therefore that, upon arrival at Headquarters, he be granted a furlough, and that he subsequently be reassigned here, provided that such assignment does not interfere with his rotation schedule. It is believed that, in the meantime, most of the interpretation can be done with available personnel.

6. It is believed appropriate at this time to bring to your attention the high quality of work which Sergeant Anzivino has accomplished here. While he has done the necessary interpreting very well, that has been only a small portion of his duties and he has carried out many other jobs, and relieved me of many things which would have been difficult for me to have accomplished. Much of his work has been of a supervisory and responsible nature.

VINAL S. RENTON
Major, Infantry.

Declassified E.O. 12356 Section 3.3/NND No. 785019

210

ALTO BELICE TURBINE UNIT
PIECES IN SHIPMENT
y June 1944.

Note: The weights and dimensions given are approximate, and are submitted as a basis upon which to plan highway transportation.

Piece	lbs. Weight	Shipping Dimensions-Feet
23 ~ Generator Stator	40,000	10'- 10" high 4'- 7" along shaft 15'- 8" wide
13 ~ Field	20,000	6' high 7' wide 13' along shaft.
20 ~ Turbine Casing bottom half	3,000	4'- 0" high 8'- 2" along shaft 8'- 6" wide.
21 ~ Turbine Casing Top half	1,500	3'- 5" high 4'- 1" along shaft 7'- 3" wide.
30 31 2 Pieces - Generator bedplate (Split under bearing pedestals).	3,000 (total)	Each: 1'- high 6'- wide 12'- long
14 Servomotor	4,000	6'- 0" high 4'- 9" wide 4'- 5" long.
Throttle Valve	500	2'- 3" high 3'- 0" wide 6'- 3" long.
15 Turbine Wheel and shaft	4,000	4'- 7" high 5'- 3" wide 9'- 1" long

Original from material in Col. Dunn's room 5th floor
by Comm. & Comm. 12/4/44

Declassified E.O. 12356 Section 3.3/NND No. 785019

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Piece		lbs. Weight	Shipping Dimensions Feet
18	Needle Valve	4,000	3'- 9"high 4'- 1"wide 8'- 2"long.
16 17	2 Pieces - Generator Bearing Pedestals.	3,000 (Total)	3'-6" high 4'-0" wide 2'-0" long.
10	Exciter Stator	4,000 45 ms	4'- 5"high 3'- 7"wide 2'- 3"long
9	Bolts, Nuts, Small Parts	400	1'- 4"high 1'- 7"wide 3'- 3"long
4	O.C.B. Mechanism	500	2'- 3"high 2'- 6"wide 3'- 0"long.
1 2 3	3 Pieces - OCB Tanks	Total wt 1500 lbs 3'-6" high - 2'-3" wide 3'-10" long.	
11	Field Resistance	600	2'- 0"high 2'- 0"wide 3'- 7"long.
5	Instrument Transformer	200	2'- 0"high 1'-3 " wide 2'- 0"long
6	Instrument Transformer	200	1'- 1"high 1'- 4"wide 1'- 10"long.
7	Pontential Transformers	200	1'- 3"high 1'- 6"wide 2'- 3"long
8	Potential Transformer Fuses.	150	1'- 2"high 1'- 2"wide 2'- 5"long.

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Declassified E.O. 12356 Section 3.3/NND No. 785019

214

	Piece	lbs. Weight	Shipping Dimensions
24	Vertical Panel Board with centrals.	400	2'- high 4'- wide 4'- long
22	Bench Board.	400	2'- high 4'- wide 4'- long.
25	Voltage Regulator	150	2'- high 2'- wide 3'- long
27	Regulator Resistence	150	2'- 6"high 2'- 6"wide 2'- 6"long
19	Needle Valve Support.	150	1'- high 3'- wide 3'- long

Totals: 28 Pieces.

90,000 lbs.

2,800 Cubic Feet.

7323

Declassified E.O. 12356 Section 3.3/NND No. 785019

MINISTERO DEI LAVORI PUBBLICI
ISPETTORATO SUPERIORE DELL'ARMA GENIO
CON SEDE IN NAPOLI

Mod. CP. 4

N. 20 N.I

Napoli, addì 4 GIU 1944 ANNO

Risposta al foglio del

Div. N.°

Allegati N.°

Al

OGGETTO RIMOZIONE DELL'IMPIANTO ELETTRICO BELICE.

SPETT/ SOCIETA' GENERALE ELETTRICA
DELLA SICILIA .

P A L E R M O

e per conoscenza :

ALLA COMMISSIONE ALLEATA DI CONTROLLO
SUB-COMMISSIONE ELETTRICITA'

attenzione : Col. LAPPER

N A P O L I

Palazzo Provincia

Questo Ministero è stato informato dalla locale Sub-Commissione Alleata di Controllo per i Lavori e Servizi pubblici, della apprezzata collaborazione data da codesta Società per la rimozione del turbo alternatoro dell'impianto del Belice.

Come risulta dalla nota 15/5/1944 inviata a codesta Società dal Commissario Regionale per la Sicilia Col.Hancok, il provvedimento è stato determinato dalla impellente necessità di aumentare, negli impianti [illegible]

7321

Si prega citare per ogni lettera un solo argomento e indicare nella risposta il N. di Protocollo a cui si risponde.

Cuneata - Tip. Fariss - 10000-6 943 XXI

Declassified E.O. 12356 Section 3.3/NND No. 785019

stinabili, la produzione idroelettrica dell'Italia continentale liberata in connessione con le esigenze di guerra e la impossibilità di avere macchinario importato in questo momento.

Il provvedimento adottato in via di urgenza di accordo con questo R. Governo dal Comando Militare Alleato, attraverso la Commissione Alleata di Controllo, dovrà avere rapida attuazione secondo quanto è stato stabilito nella riunione tenuta nell'Ufficio di codesto L. t Col. Bolik il 10 Maggio u/s/ dal Col. Lapper con i rappresentanti di codesta Società Ing. Calajanni ed Ing. Modica.

I rapporti finanziari tra codesta Società e la Società Meridionale di Elettricità rilevataria, saranno ulteriormente regolarizzati e questo Ministero sarà ben lieto di interporre la propria azione qualora ne sorgesse il bisogno, per la soluzione bonaria delle liquidazioni, da ispirarsi ai criteri dell'equa conciliazione dei reciproci interessi.

Sono lieto infine di confermare anche da parte di questo Ministero la soddisfazione ed apprezzamento manifestato dalla A.C.C. per la cooperazione ed assistenza che ha trovato, in questa occasione, da parte di codesta Società.

IL MINISTRO

A. Tarchiani

Declassified E.O. 12356 Section 3.3/NND No. 785019

MINISTRY OF PUBLIC WORKS 4 June 1944

212

TO: Società Generale Elettrica Della Sicilia, Palermo
AND FOR INFORMATION: ACC, Electric Sub-Commission
ATTENTION: Col. Lapper; Provincia Bldg. Naples

SUBJECT: Removal of Belice Electric Plant.

This Ministry has been informed by the local Allied Control Sub-commission for Public Works and Services of the appreciated cooperation given this Company for the removal of the alternating turbine of the Belice plant.

As is evident in the letter 15/5/1944 sent to this Company by Col. Hancock, Regional Commissioner for Sicily, the provision has been determined by the impelling necessity to increase, in the reparable plants, the hydro-electric production of continental liberated Italy in connection with the exigencies of war and the impossibility of having machinery imported at this time.

The provision adopted urgently in agreement with this R. Government by the Allied Military Command, through the ACC, must be put into force immediately according to what was established at the meeting held in the office of Lt. Col. Holik on the 10th of May last with Col. Lapper and the representatives of this Company, Engineer Calajanni and Engineer Modica.

The financial agreements between this Company and the Società Meridionale di Elettricità successor, will be eventually arranged and this Ministry will be glad to undertake its own action, if the necessity should arise, to effect a satisfactory solution of the liquidation which should be inspired by measures of equal conciliation of reciprocal interests.

Finally, I am glad to confirm also on the part of this Ministry the satisfaction and appreciation shown by the ACC for its cooperation and assistance, upon this occasion, to this Company.

The Minister

/S/ A. Tarchiari

7121

Declassified E.O. 12356 Section 3.3/NND No. 785019

7 JUN Recd 1st Rdy Napoli addl

Mod. CP. 4

MINISTERO DEI LAVORI PUBBLICI
ISPETTORATO GENERALE DEL GENIO CIVILE
CON SEDE IN NAPOLI

- 4 GIU 1944 ANNO

N. 20 HA

Risposta al foglio del

Div. N.°

Allegati N.°

Al Col Lapper
Per note x fare.
Ing. [illegible]

OGGETTO RIMOZIONE DELL'IMPIANTO ELETTRICO DELLA SICILIA

SPETT/ SOCIETA' MERIDIONALE DI ELETTRICITA'
N A P O L I
Via Paolo Emilio Imbriani

e per conoscenza :

ALLA SUB-COMMISSIONE ELETTRICITA' DELL'A.C.C.
attenzione : del Col. LAPPER
N A P O L I
Palazzo della Provincia

Questo Ministero è stato informato dalla locale Com= missione Alleata di Controllo che, a compendio degli stu= di intercorsi d'accordo con questo R. Governo e su richie= sta del Comando Militare Alleato, nella conferenza avuta dal Col. Lapper in Sicilia coi rappresentanti della S.G.E. della Sicilia sono stati concretati i provvedimenti per il trasferimento al Matese (II° salto) del turbo-alter= nato dell'impianto del Belice.

Il trasferimento avverrà di urgenza secondo gli ac= cordi tecnico-pratici intervenuti, con riserva dell'esito

7339

Si prega inviare per ogni lettera un solo argomento, e indicare nella risposta il N. di Protocollo e d

Caserta - Tip. Farina - 10000-6 943-XXI

Declassified E.O. 12356 Section 3.3/NND No. 785019

stemazione dal lato finanziario fra codesta Società e la S.G.E. della Sicilia, e questo Ministero sarà ben lieto di interporre la propria azione, qualora ne sorgesse la necessità, per la soluzione bonaria della liquidazione che dovrà inspirarsi ai criteri della equa conciliazione dei reciproci interessi.

IL MINISTRO

A. Tarchiani

Declassified E.O. 12356 Section 3.3/NND No. 785019

MINISTRY FOR PUBLIC WORKS

4June 1944

210

TO: Societa Meridionale di Elettricita
Naples, via Paolo Emilio Imbrian
And for Information
To the Electric Sub-Commission of ACC
Attention: Col. Lapper
Naples, provincia building.

SUBJECT: Removal of the electric plant of Sicily

This Ministry has been informed by the Local ACC that, upon conclusion of the examinations made in agreement with this R: Government and upon request of the Allied Military Command at the conference held with Col. Lapper in Sicily with the representatives of the S.G.E. of Sicily, the provisions for the transfer to Matese (II° salto) of the alternating turbine of the Belice plant have materialized.

The transfer will be treated as urgent according to the technical-analysis agreements made, with reservation as far as the financial arrangements are concerned between this Company and the S.G.E. of Sicily; this Ministry shall be glad to undertake its own action, if the necessity should arise, in order to effect a satisfactory solution of the liquidation which must be inspired by measures of equal conciliation of the reciprocal interests:

The Minister
/s/ A. Tarchiari

7319

Declassified E.O. 12356 Section 3.3/NND No. 785019

O Econ. Sec

VSR/cp

AILLIED CONTROL COMMISSION
SICILY REGION HEADQUARTERS
APO 394

9581

31 May 1944.

PW & — 5 JUN Rec'd
Roy Division Encl. 150 Rels
from above Turn to Rec
Gen Corrig
Ec Section

In reply refer to: RTC 412.42

Subject: Electrical Equipment Ordered for Region I.A.C.C.

To : Public Works and Utilities Sub-COmmission, Attention Lieut. Col. W.M.Lapper.

1. Returned herewith for files is letter dated 26 May 1944. Subject: Power Equipment for Region I. A.C.C., from the Requision Division to the Director Public Works and Utilities Sub-Commission. Sending this letter to Region I. for information is appreciated since the knowledge of when to expect the equipment will be most useful. The letter has been copied for our use.

2. In connection with the reference letter, it is noted that paragraph 2 a therein, mentioning the first four items is appearently in error, since the first four items include the condenser tubes, which according to paragraph 2 c are not yet known to be available. Also, it is not believed that the intention was to speak of the last four items since one of those includes 10 tons of transformer oil and it is believed that this quantity is a little large to be sent by parcel post. It is not the intention of this office to quibble over details, but it is respectively suggested that the Requisition Department is one place where attention to details should be maintained; otherwise there will be many errors in ordering necessary materials.

Lt Col Lapper
Req. 5/c

C. P. Bolick.

C. P. BOLICK
Lt. Col. F. A. 7111
Regional Engineering
Officer

1 Incl.
Incl. 1 - Letter Div.-400.12

981

5 Jun 25

Declassified E.O. 12356 Section 3.3/NND No. 785019

Req'n. Div./RED/adv

904.312

HEADQUARTERS
ALLIED CONTROL COMMISSION
Requisition Division
APO 394

In reply
refer to:
Reqn.Div.-400.12

26 May 1944

SUBJECT: Power Equipment for Region I; ACC.

TO : Director, Public Works & Utilities Sub-Commission.
Attention: Lt. Colonel Lapper.

1. Reference is made to requisition ENGR-IV Reg. I.17 of 24 Jan 44 for shipment of following materials to Catania.

	Item	Unit	Amount
1	Condenser Tubes, Admiralty Brass 25 mm OD x 23 MM I.D x 4655 MM Long	each	4,000
2	Condenser Tubes, Admiralty Brass 19 MM O.D. x 17 MM I.D. x 4577 MM long	"	5,000
3	Electronic Vacuum Tubes similar to Telefunken RGN 1404	"	6
4	Electrolytic Condensers- 1500 microfarad capacity. Test voltage 60	"	6
5	Paper condensers, 3.5 microfared capacity. Test voltage 3,000	"	4
6	Paper condensers 4 microfared capacity. Test voltage 3,000	"	7317
7	Transformer, oil suitable for 70 kv. operating voltage	metric ton	10

2606

Declassified E.O. 12356 Section 3.3/NND No. 785019

Req'n. Div./RED/adv

HEADQUARTERS
ALLIED CONTROL COMMISSION
Requisition Division
APO 394

In reply
refer to:
Reqn.Div.-400.12

26 May 1944

SUBJECT: Power Equipment for Region I, ACC.

TO : Director, Public Works & Utilities Sub-Commission.
Attention: Lt. Colonel Lapper.

1. Reference is made to requisition ENGR-IV Reg. I.17 of 24 Jan 44 for shipment of following materials to Catania.

	Item	Unit	Amount
1	Condenser Tubes, Admiralty Brass 25 mm OD x 23 MM I.D x 4655 MM Long	each	4,000
2	Condenser Tubes, Admiralty Brass 19 MM O.D. x 17 MM I.D. x 4577 MM long	"	5,000
3	Electronic Vacuum Tubes similar to Telefunken RGN 1404	"	6
4	Electrolytic Condensers- 1500 microfarad capacity. Test voltage 60	"	6
5	Paper condensers, 3.5 microfared capacity. Test voltage 3,000	"	4
6	Paper condensers 4 microfared capacity. Test voltage 3,000	"	7317
7	Transformer, oil suitable for 70 kv. operating voltage	metric ton	10

26061

Declassified E.O. 12356 Section 3.3/NND No. 785019

207

2. The following information has been received from G-5, AFHQ:

a. First four items scheduled to be shipped parcel post approximately second week in May consigned to RCAO, Region I, ACC, AFO 550, marked Engn TOG 13, D 432.

b. Electronic vacuum tubes similar to telefunken RGN 1404 on fourth item not available in US, but supplying nearest possible substitute. Dimensions will be slightly smaller. Tube will have 1.5 filament amperers and filament, voltage of 5 volts. It will be a full wave rectifier, and, therefore, it will be necessary to connect both plates together to make a half wave rectifier similar to telefunken. Tubes will be supplied with bases, and these bases must be substituted for those in present circuits and wired accordingly. Except instruction sheets to accompany the tubes.

c. Availability condenser tubes last two items not known as yet. Except to advise by 20 May. It is hoped to procure some from stocks. Manufacturing time these tubes is approximately one month.

ROBERT P. KOENIG,
Colonel, C.E.
Chief, Reqn. Division.

7316

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394.

LAJ/ef 206

ACC/130/PWU

3 June 1944.

SUBJECT: Execution of Document "D" of Transfer of Territory
TO : Vice President, Economic Section.

Public Works and Utilities Sub-Commission Comments
on Para.3 a (1) Article 1.

1. The only Decree issued affecting the use of any facility is the Decree for Rationing Electricity throughout Italian Government Territory and which we have asked be also made to apply to Military Government Territory. No other regulations were issued.

2. It should be stated that no difficulty has been experienced and the Italian Government has cooperated in every way possible. Not only have we had to make use of certain facilities, but it has been necessary to remove electrical machinery from Sicily for the purpose of transporting it and setting it up in Military Government Territory. In this case the Ministry of Public Works has assisted, and Italian arbitration laws will be followed in a settlement with the original owner of this machinery.

L. A. JENKS,
Lt. Col. C.E.,
Director.

7315

Declassified E.O. 12356 Section 3.3/NND No. 785019

SECRET

WMEW/gf

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394.

30 May 1944.

AG/051/1WD

SUBJECT: Electricity - Sicily.
TO : Major V. S. Renton & Col. Bolick, Region I.

1. For your information, a meeting of the Central Electrical Board was held this morning and the agenda included the following:-

a) The rehabilitation of the Lete Hydro-Electric Power Plant

b) The repair of the No. 2 unit from the Calore Hydro-Electric Plant.

Col. Crowdon proposed the removal of one of the hydro-electric sets from Matese One to be installed at Lete. The electrical rotor of this machine is at present in the naval workshops for straightening of shaft. As we had not sufficient technical data before us and also it was thought that the work in connection with the installation of the Sicilian unit at Matese 2 should first be completed, it was agreed that this proposal would be left in abeyance.

2. I was asked regarding the progress of the removal of the unit from Sicily and replied that I was of the opinion that the unit would be in Naples by about the middle of June.

3. With regard to the Calore set, this is at present being dismantled and taken to the Naval Yard for extensive repairs. When the repairs are completed it is proposed to have this set installed at a hydro station farther north, possibly in the Rome area.

4. There were no other matters of special interest except that I was asked by Major General Cornwall-Rogers for A.C.C. to supply trucks, tyres, boots, flashlamps, etc. for the SIE Company, to which I replied that suitable arrangements would be made. I was also asked what we are doing about the provision of transport and establishment for the C.R.B. I promised to look into this matter.

W. M. LAPPER,
Lt. Col.,
Chief, Util. & Adm. Dev.

7314

SECRET

Declassified E.O. 12356 Section 3.3/NND No. 785019

WNL/aab

704

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

ACC/150/PWU

29 May 44

Subject: Removal of Electrical Plant from Sicily.

To : Ministry of Public Works,
att: Sig. Tizzano, Director General.

1. In order to augment the electrical generating plant facilities in Italy it has become necessary to arrange for the removal of hydro electric generating plant from the island of Sicily.

2. Attached is a copy of a letter which has been sent to the Societa Generale Elettrica della Sicilia which sets out details regarding the removal of this plant.

3. The plant is being removed from the Alto Belice Generating Station near Palermo, Sicily, and will be installed at the Natese II Generating Station in Italy.

4. The transfer of the plant is therefore from the Societa Generale Elettrica della Sicilia to the Societa Meridionale di Elettricita in Italy.

5. It will be observed that in para.2 of the attached letter reference is made to the company receiving a communication from the Italian Government and in this connection it is desirable that the companies concerned should now receive a letter which they may refer to at a later date when the necessary financial adjustments will have to be made.

W.M. LAPER,
Lieut-Colonel,
Chief, Utilities & Adm. Div.

Encl; Copy of ACC (PF) dated 15 May 44.

7313

Declassified E.O. 12356 Section 3.3/NND No. 785019

Station	Location	No of Boilers	Steam Pressure Atmospheres	Steam Temperature Degrees C	Each Boiler Surface Sq Metres	Turbine KWS	Generator KVAs	Volts	Phase	Frequency	Cy
Forte Empedocle	Sicily	2	37	425	425	2 x 5,000	2 x 7,500	10,000	3	50	
Cagliari	Sardinia	5 2 2	13 30 30	350 375 375	250 500 650	1 x 3,000 1 x 6,000 1 x 10,000	1 x 3,750 1 x 7,500 1 x11,500	5,000	3	50	
Fortovesmo	Sardinia (Fortoscuro)	4	13	350	250	1 x 3,000	1 x 3,750	5,000	3	50	
San Caterina	Sardinia	4	40	420	422	2 x12,500 1 x 8,800 1 x 1,500	2 x12,500 1 x11,000 1 x 1,900	5,000	3	50	

Declassified E.O. 12356 Section 3.3/NND No. 785019

	Steam Temperature Degrees C	Each Boiler Surface Sq Metres	Turbine KWS	Generator KVAs	Volts	Phase	Frequency	Date in Operation	Reference
	425	425	2 x 5,000	2 x 7,500	10,000	3	50	1931	CR 436
	350 375 375	250 500 650	1 x 3,000 1 x 6,000 1 x 10,000	1 x 3,750 1 x 7,500 1 x11,500	5,000	3	50	1925	CR 436
	350	250	1 x 3,000	1 x 3,750	5,000	3	50	1916	CR 436
	420	422	2 x12,500 1 x 8,800 1 x 1,500	2 x12,500 1 x11,000 1 x 1,900	5,000	3	50	1939	"La Centrale Termica di S. Caterina". Publication by Societa Editrice Riviste Elettriche. 1939.

Declassified E.O. 12356 Section 3.3/NND No. 785019

RESTRICTED

5179

200

ACC MAIL (REGISTRATION DIVISION)

25 MAY 1944

RESTRICTED

40

ROUTINE

FROM

ELECTRICAL EQUIPMENT REQUISITIONS IN REFERENCE CAN SEE REQUISITIONS DOS SIX THREE CHA EIGHT THREE CHA EIGHT FIVE AND EIGHT EIGHT FOR ONE ZERO ZERO PERCENT EARLY DELIVERY AND REQUISITION CTS ZERO FOUR ZERO FOR FIVE ZERO PERCENT EARLY DELIVERY PARIS TO APHQ FOR NOS FOR DEPARTMENTS FROM ACC MAIL FOR ADMIN SIGNED MACFARLANE PARIS CRITICAL WEEKLY SUPPLY OF POWER FOR MILITARY AND CIVILIAN REQUIREMENTS IS CONTINGENT UPON EARLY RECEIPT OF THESE MATERIALS FD ADVISE PRESENT POSITION

7311

Public Works & Utilities Subcom.

RESTRICTED

LOUIS T. MORTANT,
1st Lt, AGD,
Adjutant.

Declassified E.O. 12356 Section 3.3/NND No. 785019

19C

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works & Utilities Sub-Commission
APO 394

WML/ln

ACC/150/PWU

27 May 1944

Subject : Power Demand.

To : Mining Division
Att.: Lt-Col. Carroll S. Carter C.E.

Reference your letter of 8 May 44. attached is a copy of a letter received from the P.W. Officer, Region I, which gives the information which you require.

You will see that it is contingent upon the supply of Sardinian coal which I presume will have your attention.

W.M. LAPPER
Lieut-Colonel,
Chief, Pub. Util.&Adm.Div.

Enclo : Copy of RTC dated 22 May 44.

7319

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394

18 May 1944.

Subject: Electricity - Sicily. Removal of Penstock Sections, Alto Belice Plant.

To : Public Works and Utilities Sub-Commission,
Attention Lieut. Colonel W.M.LAPPER.

1. The Società Generale Elettricità della Sicilia, through Ing. Modica has inquired as to the feasibility of leaving the Alto Belice penstock intact, and obtaining the necessary pipe from other sources.

2. In connection with the disassembly of the penstock, the following factors are involved:

a. During the time that the joints of the penstock are being opened and closed, the Alto Belice plant will, of necessity, be shut down.

b. The joint to be broken and blanked off (Reference, photograph No.7), is made up with 24 studs, 2 1/2 inches in diameter. This joint has not been broken since the installation was originally made, and a considerable time may elapse before all of the studs can be removed.

c. There is no information available as to the facing on the tee which will mate with the blind flange. It is possible that a plain face may suffice, but if not, it will be necessary to keep the penstock out of service until the proper size groove can be cut into the face of the flange. The size and location of this groove will not be known until the connection is opened.

d. The pieces considered for movement to Sicily installation in Italy will not fit it exactly. Contrawise, the pieces do fit at Alto Belice.

Declassified E.O. 12356 Section 3.3/NND No. 785019

3. In view of the foregoing, and in view of the reluctance of the electric company to disturb the penstock, it is strongly recommended that this part of the plant remain undisturbed. The following two alternatives are suggested:

a. A foundry has been found in Palermo, capable of pouring steel castings of the size needed. The castings can be made there. Also they can be made to the exact size needed in Italy instead of moving pieces of pipe from here which will probably have to be cut later.

b. Because the writer has become a little tired of being referred to other places to get something concrete done, he is somewhat reluctent to suggest that perhaps the pieces of pipe in question can be fabricated in Naples.

4. Another consideration is that the electric company has so far cooperated completely in this work, and the writer would like to be in position to grant their one request which is believed to be thoroughly reasonable. Permission is therefore requested to leave the penstock undisturbed. If it is desired to have the pieces cast here to the exact size needed in Italy, work can be started upon receipt of dimensioned sketches.

VIVAL S. HENTON
Major, Infantry.

Declassified E.O. 12356 Section 3.3/NND No. 785019

192

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394

May 16 1944

Subject: Electricity - Sicily. Photographs and Correspondence Relating to Alto Relice Equipment.

To : Public Works and Utilities Sub-Commision
(Attention Lieut. Col. W.M. LAPPER)

1. Transmitted herewith are two sets of photographs showing equipment involved in the transfer from the Alto Relice generating station to Italy. One set of pictures is intended for your information; the other is for transmittal to Major Page.

2. Also sent herewith is one copy of a letter to the Societh Generale Elettrica della Sicilia, signed yesterday by the Regional Commissioner, and one copy of the transmittal letter to the Regional Commissioner.

3. Disassembly of the unit has started, it is intended to obtain rigging materials this afternoon.

VINAL S. KENTON
Major, Infantry

4 Incls.
1. Transmittal letter undated.
2. Letter to S.G.E.S. dated 15/5/44
3. Two sets photographs

7307

Declassified E.O. 12356 Section 3.3/NND No. 785019

Col. Lapper.

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC WORKS AND UTILITIES SUB-COMMISSION
APO 394

VGR

Subject: Removal of Electrical Equipment from Alto Belice Plant.

To : Regional Commissioner, Region I.

1. Transmittal is recommended of the attached letter to the Societa Generale Elettrica della Sicilia, relating to the removal of an electric generating unit from the Alto Belice generating station.

W. M. LAPPER
Lieutenant Colonel
Chief, Electrical and
Administration Div.

7306

Declassified E.O. 12356 Section 3.3/NND No. 785019

ALLIED CONTROL COMMISSION
SICILY REGION HQ.
APO 394

15 May 1944

In reply refer to: RTC 675(PP)

Subject: Electricity - Sicily.

To : Società Generale Elettrica Della Sicilia.

1. In order to augment the electric generating facilities of the Società Meridionale di elettricità system in Italy, the Allied Control Commission has received an order, from the Allied Armies in Italy, to remove and prepare for shipment to Italy, one turbine generator unit, associated control equipment, and switch gear, from the Alto Belice generating station of the Società Generale Elettrica della Sicilia.

2. The removal of the Alto Belice machine has already been the subject of discussion between the Allied Control Commission and the Italian Government and you will in due course receive a communication from the Minister of Public Works regarding this matter.

3. Owing however to the urgency of the situation, it is necessary to proceed at once with the removal and this was explained to Ing. Colajanni and Ing. Modica by Lieutenant Colonel Lapper at a meeting held in the office of Lieutenant Colonel Bolick on 10th May 1944.

4. Your representatives agreed to furnish suitable labour for the removal of the machine and also a complete set of drawings of the plant and equipment.

5. your representatives were informed that any additional costs incurred due to the removal of this plant should be shown as a separate item in the operations expenses statement and would therefore be recoverable under the rate surcharge arrangement.

7305

Declassified E.O. 12356 Section 3.3/NND No. 785019

6. The cooperation and assistance which you have already given in this matter is appreciated.

A.N. HANCOCK
Colonel
Regional Commissioner.

Declassified E.O. 12356 Section 3.3/NND No. 785019

14 MAY Head PWrV 9512 15C

6 Espies

Econdec (3) 15C Plus

HEADQUARTERS
14 MAY 1944
A. C. C.

ACTION COPY 52/13

Hec Dist

(Act) Econ Sec 3
(Inf) DCC 1
FILE 1
FLOAT 1

Sent 14/5/44

FROM WAR 131940Z
TO NJDT
22X 0143 01

C-10461 RESTRICTED SULPHUR MINES ENCLOSURE NOT RECEIVED (PARIS
DISPATCH NO 1 ENCLOSURE FORWARDED BY AIR POUCH DATED MAY 8)
ENCLOSURE FROM HANCOCK TO PATTEN FOR PW AND U-CITE REF DASH
THREE SEVEN FOUR) THIS HEADQUARTERS REFERENCE YOUR ADLK CHARLIE
CHARLIE DASH ONE FIVE ZERO DASH FOR DATED ONE ZERO MAY 44 PACKAGE
FORWARD

(1.H-7303

SECRET NIACT 131623Z MAY 44 K

[illegible] 42

Declassified E.O. 12356 Section 3.3/NND No. 785019

RESTRICTED

9512 187

ALLIED CONTROL COMMISSION
INCOMING MESSAGE

MSG Center No : N 52/13
Classification : RESTRICTED
Precedence : NONE
From : STUBBLEBINE FROM HANCOCK
To : FAIRMA FOR PW AND U

Date Time Rec'd : MAY 13/1623
Date Time Sent : MAY 13/1540
Reference NR : S-10461
Cite : RTC-37

SULPHUR MINES INCLOSURE NOT RECEIVED THIS HEADQUARTERS REFERENCE YOUR ACC-150-PWU DATED 10 MAY. PLEASE FORWARD.

HEADQUARTERS
ALLIED CONTROL COMMISSION
14 MAY 1944
A.C.C.

ACC DIST

ACT ECON SEC (3)
INF DOC
FILE
FLOAT

RESTRICTED

7302

Declassified E.O. 12356 Section 3.3/NND No. 785019

189
AWL/in

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works & Utilities Sub-Commission
APO 394

ACC/150/PWU 10 May 1944

Subject : Power Demand - Region I Sulphur Mines.

To : H.Q. RegionI.
Attention of Lieut.Col. C.P.Bolick.

1. Enclosed is copy of letter from Mining Division ACC. dated 8 May 44. pertaining to electric power requirements for Sulphur Mining operations to begin July I 1944.

2. Please let us know whether this request can be met particularly with respect to paragraph 4.

For and in the absence of Chief, Electrical & Admin.Div.

for W.H. Laughlin Capt
W.H. LAPPER
Lt.Colonel
Chief El. & Admin.Div.

7307

Declassified E.O. 12356 Section 3.3/NND No. 785019

186

AWL/in

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works & Utilities Sub-Commission
APO 394

ACC/150/PWU

10 May 1944

Subject : Power Demand - Region I Sulphur Mines.

To : H.Q. RegionI.
Attention of Lieut.Col. C.P.Bolick.

1. Enclosed is copy of letter from Mining Division ACC. dated 8 May 44. pertaining to electric power requirements for Sulphur Mining operations to begin July I 1944.

2. Please let us know whether this request can be met particularly with respect to paragraph 4.

For and in the absence of Chief, Electrical & Admin.Div.

for W.K. LAPPER
Lt.Colonel
Chief El. & Admin.Div.

7301

Declassified E.O. 12356 Section 3.3/NND No. 785019

REH/ab

150
Rab
185

10 MAY Recd

HEADQUARTERS
ALLIED CONTROL COMMISSION
Mining Division

In reply
refer to:
Mines-412.4

8 May 1944

SUBJECT: Power Demand - Region I Sulphur Mines.

TO : Director, Public Works & Utilities Subcommission.

1. Information available to this Division indicates that for estimating purposes sulphur production in Region I would normally require approximately:

a. Power demand of 500 KW for pumping load, plus 1/4 KW per ton per month production.

b. Power consumption of 200,000 KWH per month for pumping, plus 40 KWH per ton produced.

2. Due to flooded condition of mines now and extra work required for rehabilitating mines, it is estimated that the pumping load will be greater by about 25 per cent during the next twelve months and the total demand greater by approximately 10 per cent.

3. It is therefore anticipated that sulphur program requirements on the basis of 5,000 metric tons production per month will be:

a. For peak demand on 30 minute basis, 1,925 KW.

b. For power consumption, 450,000 KWH per month.

4. Information is requested whether these power requirements can be met starting 1 July 44 on the basis of 5,000 tons production per month.

For and in the absence of the Chief, Mining Division.

CAROLL S. CARTER,
Lt. Colonel, C.E.,
Executive, Mining Division.

7306

Capt. Langdon

& Capt Prueter

Send copy to
Lt Col Rachick (Palermo)
& a copy letter ack; thanks to
let us know - particularly as to prem. by.

GER
10/5

Subject:-Hydro-electric Unit, PALERMO - Transfer to Naples.

H.Q.,A.A.F.
C.M.F.

2101/1/Q2

HQ Allied Control Commission (2)
HQ, No 1 District
CG, Island Base Section

22 Apr 44

1. At a meeting on 12 Mar 44, the AAI Central Electrical Board allotted the following work to the Allied Control Commission for execution:

Removal, marking for re-assembly, packing for shipment and shipping from PALERMO to NAPLES, one 3500 KVA hydro-electric generating unit complete with control valves and switch gear, but excluding transformers, from the ALTO FULICI hydro-electric generating plant belonging to the General Electric Company of SICILY and located near PALERMO.

2. It is intended to install this unit at the site of a demolished plant on the mainland and to operate it at this site until approximately one year after the end of the war in ITALY. It would thereafter be available for re-installation in its present location.

3. HQ, Allied Control Commission, will please take the nececessary steps to acquire this plant and carry out the work scheduled above, calling on HQ, No 1 District for additional transport required.

4. CG, Island Base Section, is requested to assist No 1 District with transport in the PALERMO as far as his resources allow.

5. Local Italian resources and Labour should be utilised to the fullest extent, and technical assistance will be provided by AAI Central Electricity Board on demand.

6. All charges other than for transport will be met by the Italian Government.

7. As soon as the necessary shipping data is available for component parts of the plant, HQ, Allied Control Commission, should make the necessary bids for shipping space to Movements, No 1 District,

8. HQ, Allied Control Commission, will send detailed drawings of the entire unit to AAI Central Electricity Board as soon as possible.

7299

Major General,
Chief Administrative Officer.

Copy to:- CG

Declassified E.O. 12356 Section 3.3/NND No. 785019

from the ALTO BELICE hydro-electric generating plant belonging to the General Electric Company of SICILY and located near PALERMO.

2. It is intended to install this unit at the site of a demolished plant on the mainland and to operate it at this site until approximately one year after the end of the war in ITALY. It would thereafter be available for re-installation in its present location.

3. HQ, Allied Control Commission, will please take the necessary steps to acquire this plant and carry out the work scheduled above, calling on HQ, No 1 District for additional transport required.

4. CG, Island Base Section, is requested to assist No 1 District with transport in the PALERMO as far as his resources allow.

5. Local Italian resources and Labour should be utilised to the fullest extent, and technical assistance will be provided by AAI Central Electricity Board on demand.

6. All charges other than for transport will be met by the Italian Government.

7. As soon as the necessary shipping data is available for component parts of the plant, HQ, Allied Control Commission, should make the necessary bids for shipping space to Movements, No 1 District,

8. HQ, Allied Control Commission, will send detailed drawings of the entire unit to AAI Central Electricity Board as soon as possible.

7259

Major General,
Chief Administrative Officer.

Copy to:- G-4
Q1
Mov (2)
Works (2) 2550/IRE dated 25 Apr 44 refers.
Local Resources Section.
Vice-Chairman, AAI Central Electricity Board.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
AFO 394.

ACC/15C/270. 1 May 1944.

SUBJECT: Acknowledgement of report covering Sicilian Electric System.

TO : A.C.C. Sicily Region Hq., AFO 394.
Att: Chief, TCUPS Liv.

1. Acknowledgement is made of your letter dated 27 April 1944, file MTC 463.1 (EL), subject: Report of Electric Utilities. It is appreciatively noted that much of the material needed to repair the electric power facilities of Sicily has been located.

2. Major V. S. Fenton of the Electrical Division of this Sub-Commission expects to visit Sicily on or about 4 May 1944 for the purpose of checking up on the electric power situation. Any assistance which you are able to give him will be deeply appreciated.

W. M. JAFFEE,
Lt. Col.,
Chief, El. & Adm. Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

WML/st.

ACC/150/PWU. 4 May, 1944.

Subject : Electricity Sicily.

To : Regional Commissioner, Region I.
(Att. Lt.-Col. Bolick)

1. Arrangements have been completed whereby A.C.C. are requested to make arrangements for the removal of generating plant from the Alto Belice Generating Stations Sicily to Matesi, Italy.

2. This plant is most urgently required in Italy and Lt.-Col. Lapper and Major Renton of this Sub-Commission will come to Sicily on Monday next the 8th May to make the necessary arrangements for the removal.

3. Lt.-Col. Lapper will contact you on arrival and it will be necessary for a meeting to be held with all interested parties, before the actual work of dismantling is commenced.

4. Lt.-Col. Lapper will telephone Lt.-Col. Bolick on arrival at the airport at Palermo and it will be appreciated if transport can be provided.

5. Attached for your information is a copy of the instructions which we have received for the removal of the plant.

6. Will you please arrange to have accommodation reserved for Lt.-Col. Lapper and Major Renton.

L.A. JENNY,
Lt.-Col., C.E.
Director.

7297

Subject:- Hydro-electric Unit, PALERMO - Transfer to NAPLES.

H.Q., A.A.I.
C.M.F.

2131/1/Q2

29 Apr 44

HQ Allied Control Commission (2)
HQ, No 1 District
CG, Island Base Section.

1. At a meeting on 12 Mar 44, the AAI Central Electrical Board allotted the following work to the Allied Control Commission for execution :-

> Removal, marking for re-assembly, packing for shipment and shipping from PALERMO to NAPLES, one 3500 KVA hydro-electric generating unit complete with control valves and switch gear, but excluding transformers, from the ALTO BELICE hydro-electric generating plant belonging to the General Electric Company of SICILY and located near PALERMO.

2. It is intended to install this unit at the site of a demolished plant on the mainland and to operate it at this site until approximately one year after the end of the war in ITALY. It would thereafter be available for re-installation in its present location.

3. HQ, Allied Control Commission, will please take the necessary steps to acquire this plant and carry out the work scheduled above, calling on HQ, No 1 District for additional transport required.

4. CG, Island Base Section, is requested to assist No 1 District with transport in the PALERMO Area as far as his resources allow.

5. Local Itelian resources and Labour should be utilised to the fullest extent, and technical assistance will be provided by AAI Central Electricity Board on demand.

6. All charges other than for transport will be met by the Italian Government.

7. As soon as the necessary shipping data is available for component parts of the plant, HQ, Allied Control Commission, should make the necessary bids for shipping space to Movements, No 1 District.

8. HQ, Allied Control Commission, will send detailed drawings of the entire unit to AAI Central Electricity Board as soon as possible.

Regan Read Colonel.
for Major-General,
Chief Administrative Officer.

Copy to:- G-4
Q1
Mov (2)
Works (2) 2550/IRE dated 25 Apr 44 refers.
Local Resources Section.
Vice-Chairman, AAI Central Electricity Board.

HEADQUARTERS
2 MAY 1944

Declassified E.O. 12356 Section 3.3/NND No. 785019

2. It is intended to install this unit at the site of a demolished plant on the mainland and to operate it at this site until approximately one year after the end of the war in ITALY. It would thereafter be available for re-installation in its present location.

3. HQ, Allied Control Commission, will please take the necessary steps to acquire this plant and carry out the work scheduled above, calling on HQ, No 1 District for additional transport required.

4. CG, Island Base Section, is requested to assist No 1 District with transport in the PALERMO Area as far as his resources allow.

5. Local Italian resources and Labour should be utilised to the fullest extent, and technical assistance will be provided by AAI Central Electricity Board on demand.

6. All charges other than for transport will be met by the Italian Government.

7. As soon as the necessary shipping data is available for component parts of the plant, HQ, Allied Control Commission, should make the necessary bids for shipping space to Movements, No 1 District.

8. HQ, Allied Control Commission, will send detailed drawings of the entire unit to AAI Central Electricity Board as soon as possible.

for Major-General,
Chief Administrative Officer.

Copy to:- G-4
Q1
Mov (2)
Works (2) 2550/IRE dated 25 Apr 44 refers.
Local Resources Section.
Vice-Chairman, AAI Central Electricity Board.

HEADQUARTERS
- 2 MAG 1944
A. C. C.

Lt Col Capps 7295

Here is the order you have been waiting for for several weeks now.

Maj. 3/5/44

Sam
Write today —
Mtg on 12/3
This received on 3/5 GHR 3/5

Declassified E.O. 12356 Section 3.3/NND No. 785019

Declassified E.O. 12356 Section 3.3/NND No. 785019

Refer Electricity Plant Isolation of Sicily

A.A.I.
CENTRAL ELECTRICAL BOARD
A.P.O. 400

REF: CEB/1/2

6 April 1944

SUBJECT:- Removal of Hydroelectic Generating Unit from SICILY to ITALY.

TO:- P.W. & U. Sub-Commission,
HQ Allied Control Commission, APO 394.
(For attention of Lt-Col. W.H. LAPPER.)

1. This letter confirms information given to you verbally to the effect that a directive will be issued by the CAO, HQ AAI (Adm Echelon) ordering the removal of this unit from the Hydroelectric plant in SICILY.

2. You should have this directive before beginning any active work in connexion with the removal of this unit.

JAMES F. CROWDON,
COLONEL CE,
Vice Chairman, AAI - C.E.B.

At the rate of time taken to get the reply to your request may I suggest that you should not wait for it but proceed with the work.

7295

Declassified E.O. 12356 Section 3.3/NND No. 785019

PW + U ✓ 179

Ea/6
ECONOMIC SECTION HQ. ACC. 6 April 1944 1st Ind. WAMW/ml.

TO: Public Works & Utilities Sub-Commission

Approved, travel orders submitted.

D. G. ADAMS
Colonel, C.E.
Executive Officer
Economic Section

729

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works & Utilities Sub-Commission
APO 394

AEP/in

ACC/051/PWU

5 April 1944

Subject : Request for Air travel for Italian Engineer

To : V. P. Economic Section

We have received a request from Eng.Placido Ruggiero, the Chief Engineer of the Hydrographic Service of the Italian Government for Eng.Francesco Abbadessa Director of the Hydrographic Service at Palermo to be allowed to travel by Military Aircraft to Naples and return, for important consultations on Electricity matters which will be of the utmost importance to this Sub-Commission.

May permission be given please?

W.M. LAPPER
Lt.Colonel
Chief El.& Adm.Div.

ES/6 1st Ind. WMW/ml.
ECONOMIC SECTION HQ. ACC. 6 April 1944

TO: Public Works & Utilities Sub-Commission

Approved, travel orders submitted.

for D. S. ADAMS
Colonel, C.E.
Executive Officer
Economic Section

MINISTERO DEI LAVORI PUBBLICI
SERVIZIO IDROGRAFICO
SEZIONE AUTONOMA DEL GENIO CIVILE
CON SEDE IN NAPOLI

Napoli, 4 Aprile 1944

N. di protocollo 396 *Allegati* ____

Risposta alla nota N. ____ *del* ____

OGGETTO: **Permesso di viaggio in aereo da Palermo a Napoli del Direttore del Servizio Idrografico di Palermo.**

ALLA SUB COMMISSIONE LL.PP.
ED UTILITA' C.A.C.
N A P O L I
Palazzo Pavina

Per la riorganizzazione del Servizio Idrografico in Sicilia è necessario che il Capo dell'Ufficio Idrografico del G.C. di Palermo venga a conferire con me.

Data la urgenza anzichè per via ordinaria sarebbe utile consentirgli di usufruire dell' aereo Palermo Napoli e viceversa.

Il detto Funzionario, in questa occasione potrà fornire numerosi ed interessanti notizie utili a questa Sub Commissione per l'elettricità sia riguardo lo stato attuale degli impianti sia pel programma di riorga=

O B J E C T : **Permission to travel by plane from Palermo to Naples for the Director employed of Hydrographic Service of Palermo.**

AT THE SUB-COMMISSION PUBLIC WORKS AND UTILITY ALLIED CONTROL COMMISSION
N A P L E S
Province Palace

In order to reorganize the Hydrographic Service in Sicily it is necessary that the Chief of the Civil Engineering Hydrographic Office of Palermo come to confer with me.

For the urgenly it should turn useful to allow to avail himself of the airline Palermo-Naples and return instead of the usual way.

The said employed, in this opportunity, shall give noumerous and material news, useful for this sub-Commission of Electricity about either the

Declassified E.O. 12356 Section 3.3/NND No. 785019

OGGETTO: Permesso di viaggio in aereo da Palermo a Napoli del Direttore del Servizio Idrografico di Palermo.

ALLA SUB COMMISSIONE LL.PP.
ED UTILITA' C.A.C.

N A P O L I

Palazzo Pavina

Per la riorganizzazione del Servizio Idrografico in Sicilia è necessario che il Capo dell'Ufficio Idrografico del G.C. di Palermo venga a conferire con me.

Data la urgenza anzichè per via ordinaria sarebbe utile consentirgli di usufruire dell[illegible] aereo Palermo Napoli e viceversa.

Il detto Funzionario, in questa occasione potrà fornire numerosi ed interessanti notizie utili a questa Sub Commissione per l'elettricità sia riguardo lo stato attuale degli impianti sia pel programma di riorganizzazione della produzione.

O B J E C T : Permission to travel by plane from Palermo to Naples for the Director employed of Hydrographic Service of Palermo.

AT THE SUB-COMMISSION PUBLIC WORKS AND UTILITY ALLIED CONTROL COMMISSION

N A P L E S

Province Palace

In order to reorganize the Hydrographic Service in Sicily it is necessary that the Chief of the Civil Engineering Hydrographic Office of Palermo come to confer with me.

For the urgenly it should turn useful to allow to avail himself of the airline Palermo-Naples and return instead of the usual way.

The said employed, in this opportunity, shall give noumerous and material news, useful for this sub-Commission of Electricity about either the

729?

Pregasi trattare per ogni lettera un solo argomento e indicare nella risposta data e numero della presente

Declassified E.O. 12356 Section 3.3/NND No. 785019

Vi prego pertanto volergli autorizzare le vostre Autorità di Palermo a consentire il viaggio in aereo sia per l'andata che per il ritorno all'Ing. Cav. Uff. Francesco Abbadessa.

Ringrazio.

L'INGEGNERE CAPO

(Placido Ruggiero)

actual conditions of the installations, and the production reorganization programme.

I pray you, consequently, to authorize the Allied Authority at Palermo, to allow this travel out and in, at the Eng. Francesco Abbadessa.

Thank very much.

THE CHIEF ENGINEER OF THE
HYDROGRAPHIC SERVICE

(Placido Ruggiero)

Declassified E.O. 12356 Section 3.3/NND No. 785019

Declassified E.O. 12356 Section 3.3/NND No. 785019

File 176

WMJ/ccb

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

ACC/150/PWU

1 Apr. 44.

Subject: Transmittal of Manuscript Relating to Electric Power in Sicily.

To : Allied Press Censorship Officer,
c/o Civil Censorship Section,
APO 530, U.S. Army.

Transmitted herewith is a manuscript prepared by Dott. Ing. E.S. Tricomi, entitled L'Energia Elettrica Nell' Economia Siciliana Della Guerra E Del Lopo Guerra. This manuscript was received here as the result of our request to the Near Headquarters, Allied Control Commission. In transmitting it the Near Headquarters stated that the book had been earmarked for dispatch for A.F.H.Q. and asked that it be forwarded to your office as soon as possible.

W.K. LAPPIN,
Lieut.-Colonel,
Chief, Ml. & Adm. Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

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REAR HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394

JWC/mar

29 March 1944

SUBJECT : Electric Power in Sicilian Economy during and after the War

TO : Lieut. Colonel W. M. Lepper, Chief Electric & Administrative Division, Allied Control Commission.

1. Ref. your AC/150/PWU of 13 March.

2. Herewith M.S. of Tricomi book for your perusal. The book was already earmarked for dispatch to AFHQ and it was with some difficulty that prior loan was arranged for ACC. Permission appears to have been granted on condition that it be kept a few days only as P.W.B., Sicily, is committed to send it on to AFHQ shortly.

3. It is, therefore, requested that the book be returned, as soon as possible, to Allied Press Censorship Officer, c/o Civil Censorship Section, APO 550 U. S. Army.

J. W. COLVILLE
Major, G. S.

1 Incl- as above para 2

7291

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

TML/cw

ACC/ISC/PWU

16 Mar 44

Subject: Report on Utilities Sec. Region I

To : Chief, P.C.P.W. & U. Div. Region I

1. Your report for the month of Feb. covering the Electrical position of Sicily is acknowledged.

2. The information given is most useful and as Lt. Col. Lapper will be visiting Sicily shortly, the opportunity will be taken to discuss with you any outstanding matters arising therefrom.

T.M.LAPPER
Lieut. Colonel.
Chief, Ad. & Adm Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Alto Commissario per la
Sicilia :
H.E. FRANCESCO MUSOTTO
(High Commissioner His
Excellency F. Musotto)
former Prefetto of Palermo

office : Prefettura, Palermo

Engr. TRICOMI, Managing
Director

" SCIMENI, Chieg Engin.

of Società Generale Elettrica della Sicilia
" SESO"

Declassified E.O. 12356 Section 3.3/NND No. 785019

ACC/180/F 7U
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Alto Commissario per la Sicily

H.E. FRANCESCO MUSOTTO .

(High Commissioner, His Excellency

F.Musotto) former Prefetto of Palermo

Office : Prefettura, Palermo.

Engr. TRICOMI, Managing Director.

Engr.SCIMENI, Chief Engin. of Societa

Generale Elettrica della Sicilia " SELSO"

1/3/44

Colonel Lapper:

Studying the attached letter leads to the following conclusions:

a. The average hourly load during February 1944 was 2/3 of the average hourly load for the year 1939.

b. Electric energy requirements can be met during March and April. Prospects of meeting subsequent requirements appear doubtful, and depend upon the rainfall during the dry season, and the amount of useable steam plant equipment. The increase in the estimated steam plant output is based partly on the success of repairing the Porto Empedocle plant in a bad condition for a long time. Increased output from Catania will depend largly upon whether the condenser tubes, on order for some time, are received.

c. The Alto Belice plant carried a peak of 8700 kw, necessitating the use of all 3 machines. The

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b. Electric energy requirements can be met during March and April. Prospects of meeting subsequent requirements appear doubtful and depend upon the rain fall during the dry season, and the amount of useable steam plant equipment. The increase in the estimated steam plant output is based partly on the success of repairing the Porto Empedocle plant in a bad condition for a long time. Increased output from Catania will depend largly upon whether the condenser tubes, on order for some time, are received.

c. The Alto Belice plant carried a peak of 8700 kw, necessitating the use of all 3 machines. The averoge load was 1305 kw, sufficient to be carried on one machine. This plant has a storage reservoir, and should be operated as little as possible now, in order that the maximum storage may be used later.

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c Continued. It may be that there was adequate water to carry the loads reported without affecting the storage.

d. Completion of repairs to the 70 kv Caltanesetta-Catania transmission line by March 20 will enable the system to be operated more efficiently, and should make the loss of the 3500 KVA unit at Alto Belice less important.

e. It is noted that consideration is being given to moving a Palermo turbine to Porto Empedocle, or a Porto Empedocle pulverized coal equipment to Palermo. All facts are not available here; however, the Palermo turbines operate at approximately 200 lb/in² pressure; the Porto Empedocle boilers operate at 600 #. To reduce the pressure on the Empedocle boilers would reduce their output by a considerable (but not exactly known margin). The pulverized coal boiler at Empedocle can produce 50,000 kg/hr steam at rated conditions — if were halved because of the lowered

Declassified E.O. 12356 Section 3.3/NND No. 785019

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VBR.

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V-1574 Econ Sec PWD 170

ALLIED CONTROL COMMISSION
SICILY REGION HQ.
APO 394

TD/sb

6 March 1944

HEADQUARTERS 10 MAR 1944 A.C.C.

File: RTC 400.1924

SUBJECT: Report on Utilities Section, Region I

TO : Lt. Colonel Lapper, El. & Admin. Div. Hq. A.C.C.

1. The following report covers the Electrical situation in Sicily for the month of February and also the information requested by communication ACC/099/PWU Feb. 11, 1944, ACC/150/PWU Feb. 11, 1944, and ACC/150/PWU Feb. 14, 1944.

2. General Electricity Supply:

a. Steam Plants

	Total Kwhrs. Prd.	Peak Demand
Palermo	336,000	2400
Porto Empedocle	809,000	3900
Catania	1,636,800	8500

b. Hydro Plants

Alto Belice I	908,000	8700
Alto Belice II	62,000	300
S. Corlo	2,674,000	6400
Favaro	385,000	1100
Poggiodiano	2,217,000	4100
Scillato	200,000	350
Alcantra I	1,501,850	4600
Acicastello	144,100	4500
Cassibile[1]	681,250	4500

[1]Private plant connected to S.G.E.S. Grid.

3. Estimate of power available for 3 Months:

Month	Hydro	Thermal	Total
March	13,000,000	2,750,000	15,750,000
April	10,000,000	4,200,000	14,200,000
May	8,500,000	6,250,000	14,750,000

4. Consumption:

a. All military and ACC loads were carried without any additional changes in the rationing system and numerous essential civilian consumers were added.

Declassified E.O. 12356 Section 3.3/NND No. 785019

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Favaro	385,000	1100
Poggiodiano	2,217,000	4100
Scillato	200,000	350
Alcantra I	1,501,850	4600
Acicastello	144,100	4500
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March	13,000,000	2,750,000	15,750,000
April	10,000,000	4,200,000	14,200,000
May	8,500,000	6,250,000	14,750,000

4. Consumption:

a. All military and ACC loads were carried without any additional changes in the rationing system and numerous essential civilian consumers were added.

b. S.G.E.S. officials report that service had been resumed to all large industrial consumers as of February 10, 1944 on which date power was furnished to the Panzara Foundry at Palermo.

5. Attached you will find typical daily load curve and coal schedules showing maximum use of Sardinian Coal and most effeciant use of Sardinian Coal.

6. Coal Consumption:

10 Aug 55

5,951

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a. December	Imported	Sardinian
Palermo	1475 Tons	None
Porto Empedocle	None	None
Catania	2150 Tons	None
b. January		
Palermo	932 Tons	322 Tons
Porto Empedocle	None	186 Tons
Catania	2000 (?) Tons	None
c. February		
Palermo	596 Tons	64 Tons
Porto Empedocle	None	186 Tons
Catança	1754 Tons	

7. Progress on 70Kv. Line:-

Work on the 70 Kv. line from Catania to Agrigento is progressing satisfactorily. The crew working from the Gerbini end have now reached the Catania Airport section approximately 6 Km. from the transformer at Plaia. A second crew working from the Plaia transformer have repaired 1 Km. of the line. All repairs made to date are permanent. Expected date of completeion of 70 Kv. line March 20, 1944.

8. Progress on 40 Kv. Line:-

a. 40 Kv. line - Catania - Primosole - Sortino.

Two-thirds of this line requires re-tensioning. All insulation placed in the line by military units during the early days of the occupation must be replaced and all points made by them during the same period must be repaired. This work is well under way at present, together with the repair and renewal of the line and switch gear at Primosole.

b. 40 Kv. line - Sortino - Buccheri - Vizzini.

A few spans of this line require re-tensioning.

c. 40 Kv. line - Alcantara - Viagrande.

Repair of all joints made by military units, together with the re-tensioning of the whole line, is well under way.

d. 40 Kv. line - Viagrande - Catania.

Rigid isnulators are being replaced with suspended ones on this line between Ziahisa and Plaia and the transformer.

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9. Substations and Transformers:-

a. Plaia Transformer:-

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Porto Empedocle	None	
Catança	1754 Tons	

7. Progress on 70Kv. Line:-

Work on the 70 Kv. line from Catania to Agrigento is progressing satisfactorily. The crew working from the Gerbini end have now reached the Catania Airport section approximately 6 Km. from the transformer at Plaia. A second crew working from the Plaia transformer have repaired 1 Km. of the line. All repairs made to date are permanent. Expected date of completeion of 70 Kv. line March 20, 1944.

8. Progress on 40 Kv. Line:-

a. 40 Kv. line - Catania - Primosole - Sortino.

Two-thirds of this line requires re-tensioning. All insulation placed in the line by military units during the early days of the occupation must be replaced and all points made by them during the same period must be repaired. This work is well under way at present, together with the repair and renewal of the line and switch gear at Primosole.

b. 40 Kv. line - Sortino - Buccheri - Vizzini.

A few spans of this line require re-tensioning.

c. 40 Kv. line - Alcantara - Viagrande.

Repair of all joints made by military units, together with the re-tensioning of the whole line, is well under way.

d. 40 Kv. line - Viagrande - Catania.

Rigid insulators are being replaced with suspended ones on this line between Ziahisa and Plaia and the transformer.

7286

9. Substations and Transformers:-

a. Plaia Transformer:-

Repairs to the transformer in the workshop at the central power station are under way and all efforts are being made to complete the work early in March. However, progress is very slow on transformers let to private contractors due to labor troubles.

b. Ziahisa Transformer:-

Work on this transformer has not yet started.

c. Vivaio Transformer.

Work under way.

d. Transformers - S. Giorgio, Marino, Acamporia, Montacina.

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Repairs to the above mentioned transformers, together with the H.T. line, have been completed. Work on L.T. side is progressing satisfactorily.

e. Transformer on San Giuseppe La Rena Line:-
Pole type (S) transformers No's. 3,4, and 5 are ready, however, copper is needed for the repair of H.T. and L.T. lines.

f. Randazzo Transformer:-
One of the two transformers at Randazzo has been placed in operation, repairs are well under way on the other.

10. Repairs to Catania Central Power Station:-

a. The general overhaul of No. 2 turbine is in progress and will be completed by the middle March.

b. The plant is operating at 66⅔ of full load due to the lack of 14 sets of impeller blades on the H.P. side.

c. All condensers still need attention, especially No. 1 (10,000 K.W.) which can only operate at 50% full load.

11. Repairs to Porto Empedocle Plant.
The turbine at the Porto Empedocle plant was placed in operation on January 18,1944 after the broken rotor shaft had been repaired by the U.S. Navy at Palermo. The plant continued to operate until February 18th when a break developed in the same rotor shaft. S.G.E.S. Engineers think it useless to repair the rotor again. However, they are going to try and replace the broken rotor of No. 1 alternator with the rotor of No. 2 alternator. If they are successful in their efforts the plant will be back in operation by May 1st 1944. Arrangements have been made with the AFHQ coal section to draw enough steam coal to operate the Palermo steam plant steadily. A survey is now under way with a view to moving one of the machines from Palermo to Porto Empedocle or securing sufficient parts from Porto Empedocle to repair the pulverized fuel boilers at Palermo.

12. Fuel and Grates:-

a. Porto Empedocle:-

No.	Type Coal	Type Grate
1.	Imported Steam Coal	Riley underfed fire grate-Babcock and Wilcock.
2.	Imported Steam Coal	Riley underfed fire grate-Babcock and Wilcock.

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a. The general overhaul of No. 2 turbine is in progress and will be completed by the middle March.

b. The plant is operating at 66% of full load due to the lack of 14 sets of impeller blades on the H.P. side.

c. All condensers still need attention, especially No. 1 (10,000 K.W.) which can only operate at 50% full load.

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12. Fuel and Grates:-

a. Porto Empedocle:-

No.	Type Coal	Type Grate
1.	Imported Steam Coal	Riley underfed fire grate-Babcock and Wilcock.
2.	Imported Steam Coal	Riley underfed fire grate-Babcock and Wilcock.
3.	Sardinian Coal	Pulverized fuel boiler.

b. Catania:-

1.	50% Sardinian 50% Imported Steam Coal	Chain-belt wide mesh Babcock and Wilcock.
2.	50% Sardinian 50% Imported Steam Coal	Chain-belt wide mesh Babcock and Wilcock.
3.	Imported Steam Coal	Riley underfed-Babcock and Wilcock.

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12. b. Cont'd.

No.	Type Coal	Type Grate
4.	50% Sardinian 50% Imported Steam Coal	Pulverized Fuel Boiler
5.	Imported Steam Coal	Chain belt fine mesh Babcock and Wilcock.
6.	Imported Steam Coal	Chain belt fine mesh Babcock and Wilcock.

For the Regional Control Commissioner:

C.P. Bolick

C.P. BOLICK
Lt. Colonel, F.A.
Chief, T.C.P.W.
& U. Division.

Incl. 2.

1. Chart - "Typical daily load Curve"
2. Chart - "Maximum use of Sardinian Coal"

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Declassified/Released E.O. 12356 Section 3.3/NND No. 785019

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Declassified E.O. 12356 Section 3.3/NND No. 785019

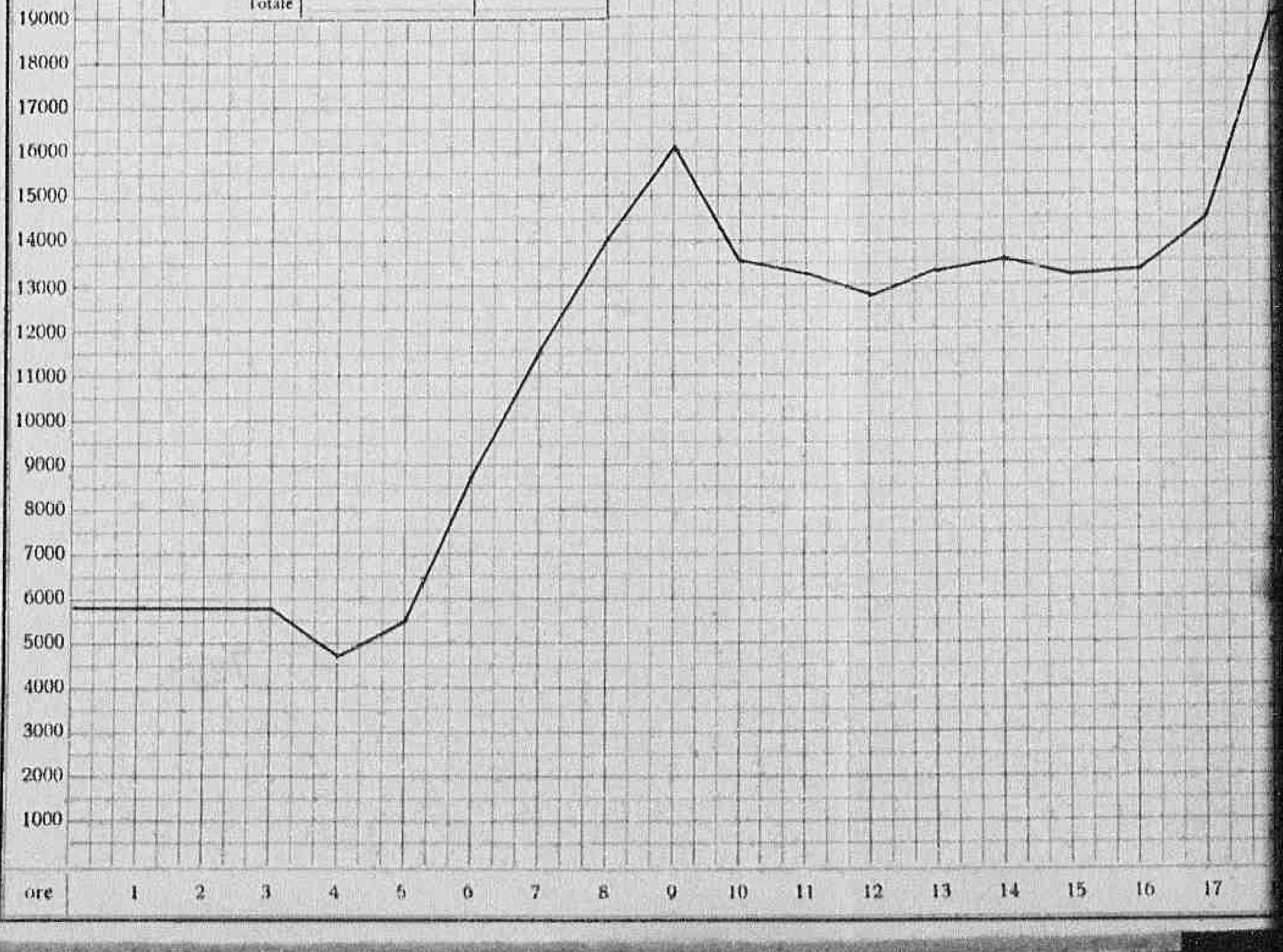
SOCIETÀ GENERALE ELETTRICA DELLA

Diagramma di produzione del 11-2-1944

Centrale	Linea del diagramma	Produzione kWh
Palermo		
P. Empedocle		
Belice I		
Belice II		
Soglo I		
Sosio II		
Scillato		
Totale		

kW. massimi 39280
kWh. 524000

Scala 1:2



Declassified E.O. 12356 Section 3.3/NND No. 785019

GENERALE ELETTRICA DELLA SICILIA

Mod. 5 - Produzione

Diagramma di produzione del 11-2-1944 Palermo, 3-3-1944

Produzione KWh

KW. massimi 39280
KWh. 524000

Scala 1:2



Declassified E.O. 12356 Section 3.3/NND No. 785019

MOST EFFICIENT USE OF SARDINIAN COAL

(SHORT TONS)

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
C. GL.	-	1,300	1,300	3,300	4,300	6,000	6,700	7,500	7,100	6,90
SAND. 3	-	500	500	1,000	1,300	1,750	2,000	2,150	2,200	2,00
SAND. 4	-	-	-	200	300	450	500	550	500	50
M.GL. EQ.	-	350	350	850	1,100	1,500	1,750	1,900	1,800	1,75
C. GL.	-	500	500	700	1,000	1,300	1,900	1,900	1,900	1,90
SAND. 3	-	150	150	150	250	300	300	300	300	30
SAND. 4	-	-	-	-	-	-	-	-	-	-
M.GL. EQ.	-	100	100	100	200	200	200	200	200	20
C. GL.	-	700	700	700	700	700	700	700	700	70
SAND. 3	-	-	-	-	-	-	-	-	-	-
SAND. 4	-	1,350	1,450	1,450	1,550	1,450	1,550	1,550	1,450	1,55
M. GL. EQ.	-	950	1,000	1,000	1,100	1,000	1,100	1,100	1,000	1,10
DIST. BY AIR										
2.00.										
TOTAL EQUIV.										

DATE 4 February 1944

CAPACITY = PALERMO

ANNUAL COAL REQUIREMENTS
ELECTRIC UTILITIES

Declassified E.O. 12356 Section 3.3/NND No. 785019

MOST EFFICIENT USE OF CANADIAN COAL

	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	O.H. J.
	1,300	1,300	3,300	4,300	6,000	6,700	7,500	7,100	6,900	6,500	3,100	
	500	500	1,900	1,300	1,750	2,900	2,150	2,190	1,900	1,900	1,200	
			200	300	450	200	350	500	500	500	200	
	350	350	850	1,100	1,500	1,750	1,900	1,800	1,750	1,700	850	
	500	500	700	1,000	1,300	1,900	1,900	1,900	1,900	1,900	700	
	150	150	150	250	300	300	300	300	300	300	200	
	100	100	100	200	200	200	200	250	200	200	150	
	700	700	700	700	700	700	700	700	700	700	500	
	1,350	1,450	1,450	1,550	1,450	1,550	1,550	1,450	1,550	1,450	1,200	
	950	1,000	1,000	1,100	1,000	1,100	1,100	1,000	1,100	1,000	850	

Declassified E.O. 12356 Section 3.3/NND No. 785019

SECRET 28 January 1944

SECRET/ULTRA EYES ONLY

MAXIMUM USE OF SARDINIAN COAL.

(SHORT TONS)

CATAGORY	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
EXCL.	-	600	700	1,600	2,100	3,000	3,400	3,800	3,500	3,
SARD. 3	-	1,400	1,400	2,720	3,600	5,100	5,700	6,400	6,000	5,
SARD. 4	-	-	-	720	900	1,200	1,400	1,600	1,500	1,
EXCL. EQ.	-	1,000	1,000	2,400	3,150	4,400	5,000	5,600	5,250	5,
EXCL.	-	500	500	700	1,000	1,300	1,350	1,350	1,350	1,
SARD. 3	-	150	150	150	250	300	450	500	450	
SARD. 4	-	-	-	-	-	-	500	200	200	
EXCL. EQ.	-	100	100	100	200	200	650	700	650	
EXCL.	-	300	300	300	300	300	300	300	300	
SARD. 3	-	-	-	-	-	-	-	-	-	
SARD. 4	-	1,900	2,000	2,000	2,100	2,000	2,100	2,100	2,000	2,
EXCL. EQ.	-	1,350	1,400	1,400	1,450	1,400	1,450	1,450	1,400	1,
MISC. BY RIC										
EXCL.										
TOTAL EQUIV.										

SECRET/ULTRA EYES ONLY

Declassified E.O. 12356 Section 3.3/NND No. 785019

MAXIMUM USE OF SARDINIAN COAL.

FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	O.H. J.
600	700	1,600	2,100	3,000	3,400	3,800	3,500	3,400	3,300	1,600	
1,400	1,400	2,700	3,600	5,100	5,700	6,400	6,000	5,300	5,600	2,700	
-	-	700	900	1,200	1,400	1,600	1,500	1,400	1,400	700	
1,000	1,000	2,400	3,150	4,400	5,000	5,600	5,250	5,100	4,900	2,400	
500	500	700	1,000	1,300	1,350	1,350	1,350	1,350	1,350	450	
150	150	150	250	300	450	500	450	450	450	200	
-	-	-	-	-	500	500	200	500	500	200	
100	100	100	200	200	650	700	650	650	650	300	
300	300	300	300	300	300	300	300	200	300	200	
-	-	-	-	-	-	-	-	-	-	-	
1,900	2,000	2,000	2,100	2,000	2,100	2,100	2,000	2,100	2,000	1,700	
1,350	1,400	1,400	1,450	1,400	1,450	1,400	1,400	1,450	1,400	1,200	

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161-164

Note. The sheets originally bearing these numbers are load curves of Sicilian Power Plants, which I prepared, and which were intended as a part of a report I prepared. They were included in this file through error. The report, including the sheets numbered 161-164 has since been completed and on 29 March, was ~~Sept~~ submitted to Colonel Lapsley.

Renton

30/3/44

	Dec	Jan	Feb 160
Alcantara I	1526200 ✓	1,830,950	1,501,850
do II	1958600 ✓	2,330,000	
Cassibile	1286700 ✓	1,118,500	681,250
Alc Belice I	752520 ✓	753,960	908,000
do II	56276 ✓	55,686	62,000
San Carlo	2475000 ✓	3,324,000	2,674,000
Favara	319900 ✓	473,200	385,000
Poggiodiana	1851000 ✓	2,175,000	2,277,000
Scillato	226732 ✓	234,835	2[illegible],000
ACI Castello	299300 ✓	253,100	144,100
Catania	1866000	2,212,800	1,636,800
Palermo	781,560	524,000	336,000
Porto Empedocle		99,940	807,000
Total Dec	10,747,228 (HYDRO 7279)	13,549,241	8,773,200
"	2,651,279 (Steam)	2,832,940	2,781,200

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San Carlo	2475000 ~	3,324,000	2,674,000
Favara	319900 ~	473,200	385,000
Poggioreale	1851000 ~	2,175,000	2,217,000
Scillato	226732 ~	234,835	200,000
ACI Castello	299300 ~	253,100	144,100
Catania	1866000	2,212,800	1,634,800
Palermo	281,560	524,200	336,000
Pants Emplyd -	—	99,970	80 7,000
Total Dsl -	10,747,228 (HYDRO 7279	549,241	8,773,200
"	2,651,279 (Steam)	2,832,440	2,781,800
	3,719 (Diesel)	15,386,681	11,555,000
TOTAL	13,398,507		

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ALTO BELICE I

PRODUCTION FIGURES -

159

YEAR	Load x 10^6	Avg Kw Load
1935	175.2	2000
1936	126.7	1495
1937	139.7	1590
1938	143.6	1639
1939	176.1	2010
1940	151.6	2070
1941	278.8	3180
1942	295.1	2800
1943	99.5	1135

The two biggest years

MONTH	1941 Total kwhr	1941 Avg. kw	1942 Total kwhr	1942 Avg. kw	1944 Avg. kw
JAN	1.15×10^6	1550	1.12×10^6	1506	1015
FEB	1.38×10^6	2050	1.91×10^6	2890	1305
MAR	1.91×10^6	2570	1.03×10^6	1385	
APR	2.40×10^6	3390	1.72×10^6	2390	
MAY	2.92×10^6	3930	2.88×10^6	3870	
JUNE	3.65×10^6	5060	2.79×10^6	3900	
JULY	3.11×10^6	4120	3.16×10^6	4250	
AUG.	3.75×10^6	5310	2.71×10^6	3650	
SEPT.	2.10×10^6	2915	2.83×10^6	3930	
OCT.	2.99×10^6	3350	1.69×10^6	2260	
NOV.	1.19×10^6	1585	1.55×10^6	2155	
DEC.	1.68×10^6	2260	1.21×10^6	1680	

TWO MACHINE OPERATION

Declassified E.O. 12356 Section 3.3/NND No. 785019

SICILIAN POWER
FEBRUARY 1944

STEAM

Station	Energy kw hr	Avg. Load	Peak	Load Factor	Capacity.
Catania	1,636,800	1865	8500	21.9	25000 kw.
Porto Empedocle	809,000	923	3900	23.5	10,000 kw
Palermo	336,000	483	2900	20.1	12,500 kw.

HYDRO

~~Poggio Diano~~					
San Carlo	2,679,000	3890	6400	60	9150 kw
Poggio Diano	2,217,000	3180	4100	78	5350 kva.
Alcantra I	1,501,850 (Snow fed; No Storage)	2155	9600	97	6540 kva ~~7000 kva~~.
Alto Belice I	906,000	1305	8700	15	10,500 kva.
~~Alto Belice II~~	~~62,000~~	~~89~~	~~300~~	~~29.7~~	
Cassibile	681,250 (No storage)	976	9500	22	8350 kva.
Favara	385,000	559	1100	50	(1500 kva) ?
Scillato	200,000	287	350	82	———
Acicastello.	149,100	207	(9500 ?	5 ?	1710 kva)
Alto Belice II.	62,000	89	300	29.7	———

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(2) SICILIAN POWER 151
FEBRUARY 1942.

Energy Generated by Steam : 2,781,800 Kw.
by Hydro . 8,773,200 Kw
Total. 11,555,000 Kw

Average hourly load: 16,600 KW

This compares with
average hourly loads
for years 1937, 38 & 39
of 21,200 KW (1937)
23,900 KW (1938)
24,000 KW (1939)

If estimates are correct- average loads for months
be carried for next Previous estimate
which can made 15 Feb.
are - March 21,200 KW. 20,500 KW March
April 19,700 KW 19,250 KW April.
May 19,500 KW.

Food Production

JAN	6.05	-9.4	: 3.35
FEB	5.4	-8.8	: 3.4
MAR	5.15	-7.3	: 2.15
APRIL	4.35	-8.05	: 3.30
JULY	4.75	-9.00	: 4.25
JUNE	4.75	-10.00	: 5.25
JULY	5.1	-11.3	: 6.2
AUG	4.9	-11.5	: 6.6
SEPT	4.8	-10.25	: 5.45
OCT.	5.25	-10.25	: 5.00
NOV.	4.75	-8.25	: 3.50
DEC.	4.75	-8.20	: 3.45

VITAL INDUSTRY

JAN	1.8	-5.8	: 4.0
FEB	1.8	-5.15	: 3.35
MAR	1.6	-4.85	: 3.25
APR	1.0	-4.40	: 3.40
MAY	1.0	4.40	: 3.40
JUNE	0.9	4.40	: 3.50
JULY	0.9	-4.85	: 3.95
AUG	1.0	-4.6	: 3.6
SEPT.	1.0	-4.5	: 3.5
OCT.	1.6	-5.05	: 3.45
NOV.	1.8	-4.45	: 2.65
DEC.	1.8	-4.45	: 2.65

MILITARY INDUSTRY

JAN	5.8	5.05	: .25
FEB	5.15	5.40	.25
MAR	4.85	5.15	: .25
APR	4.90	4.75	: .35
MAY	4.40	4.75	: .35
JUNE	4.90	4.75	: .35
JULY	4.85	5.10	: .25
AUG	4.6	4.90	: .30
SEPT	4.5	4.80	: .30
OCT	5.05	5.25	: .20
NOV	4.75	4.75	: .30
DEC.	4.95	4.95	: .30

ESSENTIAL INDUSTRY

JAN	9.9	7.6	: .2
FEB	8.8	8.95	: .15
		8.55	: .35
JULY			: .15
AUG			: .20
SEPT			: .35
OCT			: .30
			: .35

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Declassified E.O. 12356 Section 3.3/NND No. 785019

Declassified E.O. 12356 Section 3.3/NND No. 785019

FINAL INDUSTRY

JAN	1.6	5.6	4.0
FEB	1.8	5.15	3.35
MAR	1.6	4.85	3.25
APR	1.0	4.40	3.40
MAY	1.0	4.40	3.40
JUNE	0.9	4.40	3.50
JULY	0.9	4.85	3.95
AUG	1.0	4.6	3.6
SEPT	1.0	4.5	3.5
OCT.	1.6	5.05	3.45
NOV.	1.8	4.45	2.65
DEC.	1.8	4.45	2.65

MILITARY INDUSTRY

JAN	5.8	6.05	.25
FEB	5.15	5.40	.25
MAR	4.85	5.15	.25
APR	4.40	4.75	.35
MAY	4.40	4.75	.35
JUNE	4.40	4.75	.35
JULY	4.85	5.10	.25
AUG	4.6	4.90	.30
SEPT	4.5	4.80	.30
OCT	5.05	5.25	.20
NOV.	4.45	4.75	.30
DEC.	4.45	4.75	.30

ESSENTIAL INDUSTRY

JAN	9.0	9.2	.2
FEB	8.8	8.95	.15
MAR	8.3	8.55	.25
APR	8.05	8.2	.15
MAY	9.00	9.20	.20
JUNE	10.00	10.20	.20
JULY	10.45	10.60	.15
AUG	10.5	10.70	.20
SEPT	10.5	10.85	.35
OCT	10.65	10.85	.20
NOV	8.75	8.90	.15
DEC	9.20	9.60	.40

DOMESTIC HOUSING

JAN	9.6	10.8	1.2
FEB	8.95	10.0	1.05
MAR	8.55	9.35	.80
APR	8.2	8.95	.75
MAY	9.20	9.75	.55
JUNE	9.20	9.60	.40
JULY	10.45	11.85	1.40
AUG	10.70	12.2	1.50
SEPT	10.70	11.4	.70
OCT	10.85	11.3	.85
NOV	8.90	10.85	2.35
DEC	9.60	10.3	1.90

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Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

E. & Adm. Div.
WEL/eob

ACO/150/PWU

13 Mar. 44

Subject: Electricity, Sicily.

To : Regional Commissioner, Region I.

1. The Central Electrical Board will shortly be requesting Allied Control Commission to arrange for the removal of certain electrical generating plant from the Island of Sicily, for installation in a hydro electrical generating station in Italy.

2. The plant which is to be moved is as follows:-
1. 3,500 K.V.A. Hydro Electric generating set. The unit complete with all auxiliary equipment, cabling, switchgear and metering panels.

This plant is at present installed at Alto Belice I, Hydro Electric Generating Station, Piani dei Greci, and is owned by the Societa Generale Elettrica Della Sicilia (S.G.E.S.C.), Palermo.

3. The unit to be moved will not affect in any way the electrical position on the island of Sicily, as there is normally only sufficient water available at this station to supply two of the three generating units installed.

4. As soon as the request is received from the Central Electrical Board for A.C.C. to remove the plant, Lt.-Col. W.E. Lapper, Chief of the Electrical and Adm. Division of this Sub-Commission, will proceed by air to Sicily and discuss further with you the general scheme which will be put into effect for the carrying out of this work.

5. In order to obtain a smooth working arrangement with the Sicilian Company it is suggested that a meeting be held with all parties concerned so as to clear up all questions such as transport, labour and financial arrangements, and any matters relating to the removal of the plant which the company may have to raise.

6. Lt.-Col. Lapper will call at your office immediately on arrival in Sicily when the matter can be discussed with you and arrangements made for the meeting.

7274

W.E. LAPPER,
Lieut-Colonel,
Chief, El.& Adm.Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works & Utilities Sub-Commission
APO 394

AEP/in

AC/150/PWU

13 March, 1944

Subject : Electric Power in Sicilian Economy during and after the War

TO : Major J.W.Colville INC (Censorship) A.F.H.Q.
Attached Rear Hq, ACC

1. Ref. your letter c/6/2 dated 10 March 44.

2. The M.S. of subject book would be of interest to this Sub-Commission and I shall be pleased to receive it in due course.

7273

W.M. LAPPER
Lt.Colonel
Chief,Elec,& Adm.Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

REAR HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394

JWC/hft

10 March 1944

In reply refer to:
C/6/2

SUBJECT: Electric Power in Sicilian Economy during and after the War.

TO : Lieut. Colonel L. A. Jenny, Public Works and Utilities
Sub-Commission, ACC

1. Ref copy of attached letter from Allied local Press Censor at Palermo.

2. Would M.S. of subject book be of interest to your Section?

J. W. COLVILLE
Major, G.S.
INC (Censorship) AFHQ
Atchd Rear Hq. ACC

1 Incl.

Declassified E.O. 12356 Section 3.3/NND No. 785019

COPY

Office of the Press Censor
Western Zone Sicily

6 March 1944

jbc/ps/59.7

Subject: "L'Energia Elettrica nell' Economia Siciliana Dalla Guerra e del Dopo Guerra" by B.S. Tricomi.

To : Press Officer, PWB Unit No. 6.

1. Above-mentioned book, submitted to me by your office for opinion, was referred to Intelligence Officer, IBS for review by technicians of his staff.

2. After further reference to Engineer Officer, the Intelligence Officer IBS considers that approval to publish should be withheld until after war, as book contains material of value to the enemy.

3. For your information and guidance.

/s/ Joseph B. Costenzo
/t/ JOSEPH B. COSTANZO
1st Lt. MIS
Allied Press Censor

Copy to:
Intelligence Officer, IBS
Allied Press Censor, Catania
Chief, Censorship Branch, INC
Censorship Liaison Officer, A.G.C.
Civil Censorship Officer

7271

Declassified E.O. 12356 Section 3.3/NND No. 785019

memo
Lt. Col. Tapp

Power production Statistics

(21c)

S/C/L Y (Month Jan 1944)

	Estimated	Actual
KWH Hydro Production	13,200,000	12,549,241
KWH Steam Production	2,000,000	2,837,440
total KWH	15,200,000	15,731,680

The ~~Estimate~~ production compares very well with the forecast as shown above.

However in Paragraph 3 of the attached letter it is estimated that the production for Feb, March and April will be higher than originally forecast as follows.

	Col. Bolicks forecast.	Original forecast
Feb.	14,650,000	14,000,000
March	15,270,000	13,200,000
April	13,860,000	12,800,000

(over)

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For the month of April the variation is about 10% which can be reasonably expected.

When one takes into consideration the fact that the original forecast for 1944 amounted to a cut in KWH below 1942 of about 30%, they may not be so far out of line.

When consideration is given to expected sources of the energy for the 3 months there is considerable variation from the original forecast as follows:-

	Feb		Mar		April	
	Col. Police forecast.	1944 forecast	Col. Police forecast.	1944 forecast	Col. Police forecast.	1944 forecast.
Hydro	12,500,000	13,200,000	12,000,000	13,100,000	8,500,000	12,900,000
Steam	3,150,000	800,000	3,270,000	100,000	5,360,000	0
Total	15,650,000	14,000,000	15,270,000	13,200,000	13,860,000	12,900,000

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The lower production from hydro may be their judgment in light of present rainfall conditions. The 1944 forecast was based on the average conditions that actually existed in 1941 and 1942 and Col. Bolick is estimating a lower hydro production than the 1941 and 1942 averages.

The critical period of course will begin with the first of May. when hydro production will begin to fall.

As to the new industries added and listed under paragraph 3 They all appear to be essential.

The peak demand for January on the steam plants was 14,700 KW and on the hydro plants 24,400 KW on a load of 69,100 KW. The typical daily load curve shows a peak of 38,610 KW this represents a diversity between plants of $\frac{38,610}{69,100} \times 100 = 56\%$

Mtc

7279

Econ Sect.
Jpn. 156 (48)

ALLIED CONTROL COMMISSION
SICILY REGION HQ.
APO 394

TD/el
3995

File : RTC 141.8

15 February 1944

SUBJECT : Report on Utilities Section, Region 1.

TO : Lt. Col. Lapper, El. & Adm. Div., ACC HQ.

1 . The following report is submitted for your information in compliance with communication (ACC/150/PWM) received from your office, dated 9 January 1944.

2 . GENERAL ELECTRICITY SUPPLY.

a . Steam Plants.

	Total Kwhrs. Produced	Peak Demand.
Palermo	524,700	3,200
Porto Empedocle	99,940	3,250
Catania	2,212,800	8,250
	2,871,440	14,700

b . Hydro Plants.

Alto Belice I	733,960	7,300
Alto Belice II	55,686	300
S. Carlo	3,324,000	6,300
Favara	473,200	1,100
Poggiodiana	2,175,000	4,200
Scollato	234,845	350
Alcantara I	1,830,950	2,600
Alcantara II	2,330,000	4,000
Acicastello	253,100	4,500
Cassibile (Private plant connected to SGES grid)	1,118,500	4,750
	12,544,241	Total 54,400

3 . Approximate estimate of power available for 3 month period.

		Hydro	Steam	Total
February	Kwhrs.	12,500,000	3,150,000	15,650,000
March	"	12,000,000	3,270,000	15,270,000

Declassified E.O. 12356 Section 3.3/NND No. 785019

1 . The following report is submitted for your information in compliance with communication (ACC/150/PWR) received from your office, dated 9 January 1944.

2 . GENERAL ELECTRICITY SUPPLY.

a . Steam Plants.

	Total Kwhrs. Produced	Peak Demand.
Palermo	524,700	3,200
Porto Empedocle	99,940	3,250
Catania	2,212,800	8,250
	2,837,440	14,700

b . Hydro Plants.

Alto Belice I	753,960	7,300
Alto Belice II	55,666	300
S. Carlo	3,324,000	6,300
Favara	473,200	1,100
Poggiodiana	2,175,000	4,200
Scollato	234,845	350
Alcantara I	1,830,950	2,600
Alcantara II	2,330,000	4,000
Acicastello	253,100	4,500
Cassibile (Private plant connected to SGRS grid)	1,118,500	4,750
	12,549,241	

3 . Approximate estimate of power available for 3 month period.

		Hydro	Steam	Total
February	Kwhrs.	12,500,000	3,150,000	15,650,000
March	"	12,000,000	3,270,000	15,270,000
April	"	8,500,000	5,360,000	13,860,000

4 . Attached for your information you will find a typical daily load curve.

5 . The new industrial consumers furnished with power during the month of January are as follows:

a . Cement yard - Conigliaro & Ghilardi, Palermo - maximum load 545 Kw. Consumption in January 123,000 Kwhrs.

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b . Soc. Chimica Arenella, Palermo - maximum load 140 Kw. Consumption in January 69,910 Kwh.

c . Tobacco mfg., Palermo - maximum load 80 Kw. Consumption in January 7,920 Kwh.

d . Catalano firm, rag manipulation, Palermo - maximum load 40 Kw. Consumption in January 380 Kwh.

e . Venezia firm, marble works, Palermo - maximum load 30 Kw. Consumption in January 1,880 Kwh.

f . The SGES has been furnishing the Panzera Foundry with electrical current since 10 February 1944.

For the R.C.A.C.,

C.P. Bolick
C.P. Bolick
Lt. Col., F.A.,
Chief, T.C.U.P.W.
& Mining Division

INCL. (1):
1. Graph.

7268

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7267

Declassified E.O. 12356 Section 3.3/NND No. 785019

SOCIETÀ GENERALE ELETTRICA DELLA

Diagramma di produzione del 18 - I - 1944

Centrale	Linea del diagramma	Produzione kWh
Palermo . .		
P. Empedocle .		
Belice I . .		
Belice II .		
Sosio I . . .		
Sosio II . .		
Scillato . . .		
Totale		

kW massimi 38610

kWh. 506975

Scala 1:2



L' Ingegnere Capo

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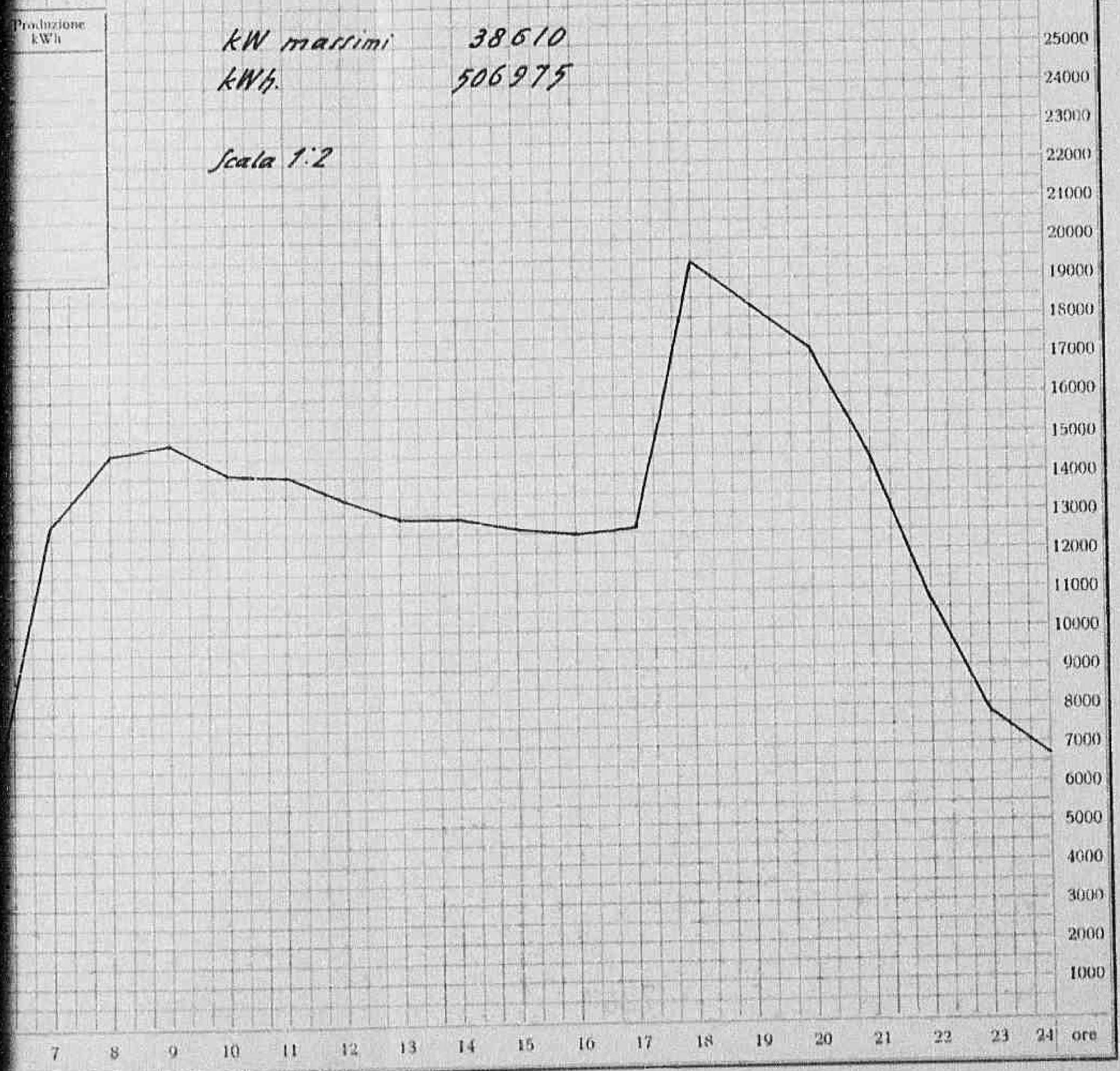
GENERALE ELETTRICA DELLA SICILIA

Mod. 5 - Produzione

Diagramma di produzione del 18 - I - 1944 *Palermo* , 2 - II - 1944

kW massimi 38610
kWh. 506975

Scala 1:2



L' Ingegnere Capo _____

Declassified E.O. 12356 Section 3.3/NND No. 785019

14 b

ALLIED CONTROL COMMISSION
SICILY REGION HQ.
APO 394

SD/el

File : RSC 141.6

25 February 1944

SUBJECT : Report on Utilities Section, Region 1.

TO : Lt. Col. Hopper, Sl. & Adm. Div., AOD HQ.

1. The following report is submitted for your information in compliance with communication (AOD/150/PWE) received from your office, dated 9 January 1944.

2. GENERAL ELECTRICITY SICILY.

a. Steam Plants.

	Total Kwhrs. Produced	Peak Demand.
Palermo	824,700	1,200
Porto Empedocle	99,940	3,250
Catania	2,210,000	6,250

b. Hydro Plants.

Alto Belice I	723,000	7,300
Alto Belice II	55,686	300
S. Carlo	3,324,000	6,300
Favara	473,200	1,100
Poggiodiana	1,175,000	4,000
Scalleto	134,245	350
Alcantara I	1,830,950	5,600
Alcantara II	2,330,000	4,000
Acicastello	253,100	4,500
Cassibile (Private plant connected to AGES grid)	1,115,500	4,750

3. Approximate estimate of power available for 1 month period.

Hydro	Steam	Total

72%

Information in compliance with communication (illegible) received from your office, dated 9 January 1944.

1. GENERAL ELECTRICITY SUPPLY.

2. Steam Plants.

	Total Kwhrs. Produced	Peak Demand.
Palermo	574,700	3,000
Porto Empedocle	88,340	3,750
Catania	2,212,000	8,250

3. Hydro Plants.

Alto Belice I	753,960	7,300
Alto Belice II	55,686	300
S. Carlo	3,334,000	6,300
Favara	473,800	1,100
Poggiodiana	2,175,000	4,200
Scollato	214,845	350
Alcantara I	1,830,950	2,600
Alcantara II	2,330,000	4,000
Acicastello	751,100	4,500
Carsibile (Private plant connected to STEG grid)	1,11[illegible],500	4,750

4. Approximate estimate of power available for 1 month period.

		Hydro	Steam	Total
February	Kwhrs.	12,500,000	3,150,000	15,650,000
March	"	17,000,000	3,270,000	15,270,000
April	"	8,500,000	5,360,000	13,860,000

7255

5. Attached for your information you will find a typical daily load curve.

6. The new industrial consumers furnished with power during the month of January are as follows:

a. Cement yard - Cantiliere & Ghilardi, Palermo - maximum load 545 Kw. Consumption in January 123,000 Kwhrs.

20 Feb 44

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b. Soc. Chimica Arenella, Palermo - maximum load 140 Kw. Consumption in January 69,910 Kwh.

c. Tobacco mfg., Palermo - maximum load 80 Kw. Consumption in January 7,920 Kwh.

d. Catalano fire, rag manipulation, Palermo - maximum load 40 Kw. Consumption in January 356 Kwh.

e. Venosia fire, marble works, Palermo - maximum load 30 Kw. Consumption in January 1,880 Kwh.

f. The SESE has been furnishing the Panzera foundry with electrical current since 10 February 1944.

For the N.C.A.O.,

C.P. Bollok
Lt. Col., F.A.,
Chief, P.O.W. & T.
& Mining Division

INCL. (1):
1. Graph.

7265

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 394

El & Adm Div.
LWL/ccb

143

7264

ACC/150/PWU

14 Feb 44

Subject: Tests of Riley Grate boiler using Sardinian Coal, your letter 5 Feb 44, File RTC 412.3.

To : Chief, T.C.U.P.W.A Mining Div. Region I.
Attention: Lt.Col.Bolick.

1. Thank you for the comprehensive report on the Sardinian Coal test at the Palermo Plant. This report will be very useful to us in determining future policy with respect to the fuel to be used.

2. Please give us, briefly, the situation with respect to the type of fuel that can be burnt at the Porto Empedocle Plant and the Catania Plant. What type of grates are in each plant?

3. What, briefly, is the status of the repairs of the turbine at the Empedocle plant? We have reference to the machine whose shaft was repaired at Palermo.

4. Give us, briefly, the status of the repairs to the 70 kv electric transmission line between Catania and Agrigento. Also the sub-station serving this line at Catania.

5. We lack definite information on the exact situation with respect to the 40 kv line from Ragusa to Sortino to Siracusa, and the 40 kv line from Sortino to Catania. Please give us briefly the status of these lines at the present time. Also the status of the sub-stations in connection with these lines at Ragusa, Siracusa, and Catania.

W.M. LAPPER,
Lieut-Colonel,
Chief, El & Adm Div.

Copy to: File ACC/092/PWU.

7264

059
142

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 394

CPB/el

File : RTC 412.3

5 February 1944

SUBJECT : Tests on Riley Grate Boiler using Sardinian coal.

TO : Public Works & Mines Sub-Commission, AMG HQ. (Attention : Lt. Col. Lapper).

Lt. Col. Lapper
To see
& discuss
Col.
Mr Jenny
GER.
12/2.

1 . In view of pressure being brought to bear to compel the use of Sardinian coal in all power plants, a test was run on one Riley grate boiler at Palermo. Two grades of Sardinian coal were used - the first was from an old stock, 2 years old, badly leached and having little volatile left. The second was with fresh coal.

2 . During the first test very little difficulty was met except that the boiler could only maintain a load of about 800 Kw. instead of the usual 2,000 circa. The excessive ash produced no insuperable difficulty.

3 . Following this test, fresh coal was burned for 30 hours and 45 minutes; being stopped by my orders because personal observations indicated obvious and excessive damage to the firebrick. This damage resulted from the high temperature of the combustion in a chamber not designed for long flames.

Mines should also see this report later
GER.

4 . The damage may be briefly described as follows:

a . Molten slag seeped into the draft louvers of the grate castings, where it solidified. The castings then began to melt; and molten iron and slag stuck castings together as well as closed the draft passages.

b . The firebrick fused, and considerable areas fell from the side walls into the fire or ash pit. Around the side walls was formed a mass of slag and brick, blocking a portion of the fuel bed.

5 . This test was followed carefully and in as much detail as possible with available equipment, by engineers of the Associazione Nazionale per il Controllo delle Combustioni (A.N.C.C.), an independent organization under our

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1 . In view of pressure being brought to bear to compel the use of Sardinian coal in all power plants, a test was run on one Riley grate boiler at Palermo. Two grades of Sardinian coal were used - the first was from an old stock, 2 years old, badly leached and having little volatile left. The second was with fresh coal.

2 . During the first test very little difficulty was met except that the boiler could only maintain a load of about 800 Kw. instead of the usual 2,000 circa. The excessive ash produced no insuperable difficulty.

3 . Following this test, fresh coal was burned for 30 hours and 45 minutes; being stopped by my orders because personal observations indicated obvious and excessive damage to the firebrick. This damage resulted from the high temperature of the combustion in a chamber not designed for long flames.

4 . The damage may be briefly described as follows:

a . Molten slag seeped into the draft louvers of the grate castings, where it solidified. The castings then began to melt; and molten iron and slag stuck castings together as well as closed the draft passages.

b . The firebrick fused, and considerable areas fell from the side walls into the fire or ash pit. Around the side walls was formed a mass of slag and brick, blocking a portion of the fuel bed.

5 . This test was followed carefully and in as much detail as possible with available equipment, by engineers of the Associazione Nazionale per il Controllo della Combustione (A.N.C.C.), an independent organization under our control; Società Generale Elettrica della Sicilia (S.G.E.S.) engineers; Major Bowman, Utilities Officer; and Lt. Col. C.P. Bolick. Photographs were taken by the Photo Assignment unit, Seventh Army, and are attached.

6 . a . Estimates of the time necessary to repair damaged boiler as a result of this test vary from one to three weeks.

b . The load was shifted to the other boiler to permit repairs. Due to the poor conditions of these two

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boilers it is difficult to keep even one in operation. After this test a steam pipe failed and it was necessary to operate for a time on the damaged boiler. With both of these boilers out the Palermo plant must shut down, thereby leaving the damaged Porto Empedocle plant as the only available steam power for Western Sicily.

c . As for hydro power, there have been only light rains for the past month above San Carlo, and we are being forced to use next summer's irrigation water.

7 . It is recommended that not to exceed 30% Sardinian coal be burned on any Riley grate boiler.

a . This figure is taken from recommendations of ANCC based on previous tests run for the Italian Government, and our observations as a result of the recent test.

8 . Modifications to the boilers to permit burning 100% Sardinian coal would be so extensive as to be equivalent to building new boilers. It would include increasing the height of the boilers, installing water pipes in the walls, and replacing the grates with a different design.

9 . Reference paragraph 3, letter 28 January 1944, El. & Adm. Division. The results of tests are forwarded; however, instruments and equipment were not available to secure complete data.

10 . Conclusions: It is essential that the Palermo plant be continued in operation. Every effort has been made, to secure certain essential electrical equipment, even to requisitioning. The island has been searched and much-needed euipment has been secured - in fact to date this has been the only equipment available to SCES.

If we are to continue the operation of the Palermo plant under present conditions, 100% Sardinian coal cannot be utilized. A maximum of 30% can be used, but even this is unsatisfactory and will rapidly decrease the life of the already worn-out boilers.

For the R.C.A.O.,

7262

L. P. Bolich

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For the R.C.A.O.,

7262

C.P. Bolick

C.P. BOLICK
Lt. Col., F.A.,
Chief, T.C.U.P.W.
& Mining Div.

INCL. (3):
1. Photographs.
2. Report Eng. Zonghi.
3. " SGES.

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Declassified E.O. 12356 Section 3.3/NND No. 785019

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ACC 150/PWU (2 OF 2) 10000/150/452
(VOL. 1)

Declassified E.O. 12356 Section 3.3/NND No. 785019

10000/150/452
(VOL. 1)

ELECTRICITY, SICILY
NOV. 1943 - FEB. 1945
(2 OF 2)

ASSOCIAZIONE NAZIONALE per il CONTROLLO della COMBUSTIONE

Sezione della Sicilia

138

R E L A Z I O N E

sulle esperienze termiche di combustione, eseguite con carbone Sulcis, bruciato nel focolare di una caldaia a vapore, tipo multitubolare, C.T.M. (Semimarino), fabbrica Babcock-Wilcox, installata nella centrale termoelettrica della Spett. "Soc. Generale Elettrica della Sicilia" in Palermo.-

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Palermo 21 Gennaio 1944

7260

Declassified E.O. 12356 Section 3.3/NND No. 785019

137

Relazione sulle esperienze termiche di combustione, eseguite con carbone Sulcis, bruciato nel focolare di una caldaia a vapore, tipo multitubolare, C.T.M. (semimarino), fabbrica Babcock & Wilcox, installata nella Centrale termo-elettrica della Spett. "Soc. Gen. Elettrica della Sicilia" in Palermo.-

PREMESSA

In seguito a superiore disposizione degli Organi tecnici del Governo Militare Alleato, l'Ufficio dirigente della Centrale termo-elettrica di Palermo ha predisposto ed orga = nizzato varie prove di combustione, da eseguire con l'impie= go di carbone Sulcis in uno dei tre generatori di vapore, attualmente installati presso la predetta centrale, onde potere accertare il comportamento della caldaia, tanto nei riguardi dell'andamento dell'insieme focolare-caldaia, quan= to in relazione al carico di produzione, che la caldaia puo' sostenere.-

BREVE DESCRIZIONE DELL'IMPIANTO

La Centrale termo-elettrica di Palermo della Spett. "Soc. Gen. Elettrica della Sicilia" è dotata di tre generatori di vapore, dei quali due identici, e più precisamente il N° 112-PA ed il N° 136-PA di matricola dell'Associazione Nazionale per il Controllo della Combustione, del tipo multitubolare, C.T.M. (semimarino), costruzione Babcock-Wilcox, funzionanti alla pressione massima di esercizio di 15 atmosfere, provvisti di surriscaldatore di vapore e di economizzatore (preriscalda= tore dell'acqua di alimentazione) a tubi lisci, sub-verticali, in acciaio Mannesmann, suddiviso in due gruppi, sistemati alla parte posteriore di ciascuna caldaia.-

Le predette caldaie, costruite fin dall'anno 1923, hanno ciascuna una superficie di riscaldamento di 762 m^2; mentre il surriscaldatore è della superficie di 230 m^2 e l'economizzatore

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Le predette caldaie, costruite fin dall'anno 1928, hanno ciascuna una superficie di riscaldamento di 762 m^2, mentre il surriscaldatore è della superficie di 230 m^2 e l'economizzatore della superficie complessiva di m^2 320.-

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Ciascuna di queste due caldaie ha un focolare provvisto di griglia meccanica, inclinata, a sottoalimentazione, del tipo Riley, costruito dalla Casa F.A.M.A.-

Tanto la griglia come la camera di combustione erano state progettate fin dalla loro installazione, per bruciare del buon carbone estero di pezzatura nocetta, contenente una determinata percentuale di materie volatili.-

La terza caldaia è pure del tipo multitubolare, C.T.M. (semimarino), Babcok & Wilcox, funzionante alla pressione massima di esercizio di 16,3 Atmosfere, ma è dotata di un focolare a carbone polverizzato, sistema Lo Pulco. Questa caldaia, portante il N° 590-PA di matricola della A.I.C.C., il cui focolare è schermato con tubi d'acqua vaporizzatori, è della superficie di riscaldamento di 947 m^2 ed è provviste di un economizzatore della superficie di 579 m^2 e di un surriscaldatore di 229 m^2.-

La potenza elettrica, installata in sala macchine della centrale, è costituita da due turbine : una del tipo ad azione a salti di pressione, sistema Toelly, della potenza normale a cos = 0,7 di 5.000 kw ed a 3000 giri al 1', la altra del tipo a reazione, sistema Ljungstroem, della potenza normale a cos = 0,7 di 7.500 kW ed a 3000 giri al 1' .-

La prima turbina è accoppiata direttamente ad un alternatore trifase, Ganz, da 5000 kW, mentre ciascuna delle due giranti, a reazione, della seconda turbina è accoppiata per proprio conto ad un alternatore trifase.-

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IMPIEGO DEL CARBONE SULCIS

Per le due prime caldaie a griglia inclinata, (la 112-PA e la 136-PA) le previsioni in merito a combustione, riportate nel " Piano di distribuzione ed impiego dei combustibili ", studiato dell'Associazione Nazionale per il Controllo della Combustione dopo anni di esperienza, erano di bruciare nelle predette griglie meccaniche, a sottoalimentazione, una miscela di carboni formata dal 30% circa di carbone Sulcis e dalla rimanente percentuale di buon carbone estero e carbone " Arsa.-

Per la terza caldaia a combustibile polverizzato la proporzione di carbone Sulcis nella miscela era stata portata al solo 50%, mentre la rimanente parte doveva essere rappresentata da buon litantrace estero.-

E' da tenere presente che il carbone Nazionale Arsa, ricevuto dalle miniere della penisola Istriana, è ancora un buon carbone, contenendo esso un non eccessivo quantitativo di ceneri e scorie, e sopratutto per essere queste scorie meno fusibili e meno aggressive di quelle del Sulcis nei riguardi della griglia e delle murature refrattarie della camera di combustione.-

Queste considerazioni e quella non meno importante del potere calorifico dei varii carboni avevano giustamente indotto l'A.N.C.C. a ridurre appunto a non più del 30% circa l'impiego del carbone Sulcis, nelle caldaie 112-PA e 136-PA, in vista anche del particolare carico termico, a cui dovevano venire ad essere sottoposte le non molto ampie camere di combustione.-

7259

D'altra parte questo criterio prudenziale, consigliato dalla duplice necessità di ridurre al minimo le avarie in camera di combustione e di fare sviluppare a

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ni formate del 30% circa di carbone Sulcis e della rimanente percentuale di buon carbone estero e carbone " Arsa.-

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7258

D'altra parte questo criterio prudenziale, consigliato dalla duplice necessità di ridurre al minimo le avarie in camera di combustione e di fare sviluppare a ciascuna caldaia il carico richiesto alle macchine, era

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anche imposto dallo stato generale, in cui si trova l'impianto, specie nei riguardi del tiraggio esistente e delle precarie condizioni, in cui si trova il complesso dei tubi dei due economizzatori, già riparati ripetute volte.-

Per la terza caldaia a carbone polverizzato, invece le preoccupazioni non erano così forti come per le due prime caldaie, trattandosi di sistema di combustione con caratteristiche diverse da quelle sulle griglie ed anche per la presenza della schermatura refrigerante delle pareti della camera di combustione.-

ANDAMENTO DELLE ESPERIENZE

Preparazione delle esperienze

Appena assunto il comando della Sicilia, il Governo militare alleato provvide, fra l'altro, a rimettere - con sorprendente prontezza - in efficienza le installazioni, macchinari ed impianti della Centrale termoelettrica di Palermo, che aveva subito lievi danni in conseguenza delle azioni di guerra, al fine di riattivare il servizio di fornitura della energia elettrica.-

All'inizio della ripresa del lavoro venne disposto di fare bruciare sulle griglie delle caldaie 112-PA e 136-PA il carbone estero residuo esistente, la cui ridotta quantità venne successivamente integrata da altro carbone, messo tempestivamente a disposizione del Governo Alleato.-

7257

In considerazione delle difficoltà dei trasporti per il rifornimento delle partite di carbone estero, gli Organi tecnici del Comando Alleato disposero di cominciare a bruciare anche un modesto quantitativo di carbone Sulcis, già esistente da qualche anno nei piazzali della Centrale Elettrica di Palermo, e, quindi

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per la presenza delle schermature refrigerante delle pareti della camera di combustione.-

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stato esposto così lungo tempo agli agenti atmosferici.-

Infatti, una analisi immediata, fatta sul campione, prelevato recentemente dalla massa di questo combustibile, ha fornito i seguenti dati:

Umidità:	7,6 %
Materie volatili:	27,10 %
Ceneri:	40,30 %
Potere calorifico(Mahler):	circa 4.000 calorie/Kg.

Come si puo' notare, la partita del carbone in esame aveva subito un sensibile processo di distillazione ed ossidazione, che ha influito, in particolare, a diminuire notevolmente il quantitativo delle materie volatili, ed elevare il quantitativo percentuale delle ceneri e, di contro, a ridurre sensibilmente il potere calorifico originario.-

L'analisi di un discreto carbone Sulcis Nazionale ha, invece fornito alla stessa Centrale per una partita di carbone, acquistata nel febbraio 1943, i seguenti dati:

Materie volatili (sul secco):		35,40 %
Ceneri	" "	31,6 %
Carbonio fisso	" "	33,- %
Potere calorifico (Mahler)	circa 5.570	calorie

Il Comando Militare Alleato dispose, inoltre, di procedere ad una successiva prova di combustione con carbone Nazionale Sulcis fresco nella produzione del 100 %, mettendo immediatamente a disposizione della Centrale termica, predetta, i quantitativi necessari.-

L'analisi immediata di questa partita di carbone ha fornito i seguenti dati :

Umidità:	4,50 %
Materie volatili	40,10 %
Ceneri	30,00 %
Potere calorifico (Mahler):	circa 4900 calorie

7256

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7258

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Onorata della fiducia del Governo Militare Alleato, l'Associazione Nazionale per il controllo della Combustione-Sezione della Sicilia, è stata invitata dagli Organi tecnici del predetto Comando a seguire tutte le prove di combustione e di redigere, alla fine degli esperimenti, una relazione tecnica.-

Esecuzione delle esperienze

Alle ore 6 del giorno 17 Gennaio 1944 venne accesa la caldaia 112-PA, immettendo nelle tramogge di carico del combustibile i primi quantitativi di Sulcis vecchio, i quali, pero', non poterono evidentemente iniziare subito la loro combustione sulla griglia, per il fatto che nelle tramogge esisteva, già caricato, un buon quantitativo (tonnellate 25,270) di carbone estero.-

In quel giorno si sono consumate, fino alle ore 22, ore in cui la caldaia è stata fermata, tonnellate 21,530 di carbone vecchio Sulcis, portando così il consumo effettivo di carbone, incluse tonnellate 1,404 di sfrido, a tonnellate complessive 48,204.-

In totale, vennero prodotti 18.360 kW in 15 ore di funzionamento della turbina con una media oraria di 1.224 kW/h, mentre la punta di carico massimo alle ore 16,50 è stata di 2.000 kW/h ed il carico minimo di circa 1.200 kW/h.-

La pressione massima in caldaia scase in quel giorno e circa 8 atmosfere con una media nelle 15 ore di effettivo funzionamento di circa 11 - 12 atmosfere.-

Il consumo specifico di carbone per kW/h risulto' così di 2,625 Kg e la temperatura in camera di combustione di appena 1000° C verso le ultime ore del pomeriggio.-

7255

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7255

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Nulla di veramente importante si è dovuto constatare in quel giorno durante il funzionamento della caldaia, tranne la difficoltà di mantenere da un valore normale la pressione in caldaia, pur tenendo il carico molto ridotto, specie nel pomeriggio, quando incominciarono ad essere notati, verso la parte posteriore della griglia, grossi blocchi di scorie, che difficilmente si lasciavano rompere e sganciare dal resto del carbone di combustione.-

In questo senso, il funzionamento della caldaia continuo' regolarmente fino alle ore 22, ora in cui venne fermata il turbo-alternatore in servizio.-

L'indomani, giorno 18 Gennaio 1944, i fuochi della caldaia in prova vennero riattivati alle ore 6 sempre con carbone Sulcis vecchio ed il turbo-alternatore rientro' in servizio alle ore 7, per essere fermato alle ore 22 come il giorno precedente.-

In mattinata sono stati anche esaminati i blocchi di scorie estratti dalla griglia, riscontrando nel loro interno quantità sensibili di incombusti solidi, mentre di quà e di là, sparse nella massa, vennero anche constatate alcune zone di fusione delle stesse scorie di trascurabile entità.-

Nessun fenomeno importante è stato segnalato nel proseguimento della prova, tranne sempre la difficoltà di elevare il carico e mantenere la pressione in caldaia.

Alle ore 12 dello stesso giorno il carico di Sulcis vecchio nelle tramogge venne sospeso e sostituito con carico di Sulcis fresco.-

Tuttavia una parte di carbone estero rimasto nelle

7254

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L'indomani, giorno 18 Gennaio 1944, i fuochi della caldaia in prova vennero riattivati alle ore 6 sempre con carbone Sulcis vecchio ed il turbo-alternatore rientro' in servizio alle ore 7, per essere fermato alle ore 22 come il giorno precedente.-

In mattinata sono stati anche esaminati i blocchi di scorie estratti dalla griglia, riscontrando nel loro interno quantità sensibili di incombusti solidi, mentre di quà e di là, sparse nella massa, vennero anche constatate alcune zone di fusione delle stesse scorie di trascurabile entità.-

Nessun fenomeno importante è stato segnalato nel proseguimento della prova, tranne sempre la difficoltà di elevare il carico e mantenere la pressione in caldaia.

7254

Alle ore 12 dello stesso giorno il carico di Sulcis vecchio nelle tramogge venne sospeso e sostituito con carico di Sulcis fresco.-

Tuttavia una parte di carbone estero rimasto nelle tramogge (tonnellate 3,220) si è dovuto consumare ugualmente in quel giorno nella caldaia in prove, co=

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sicchè, tenuto conto che fra Sulcis vecchio e Sulcis fresco, si sono bruciate tonnellate 46,200 e tenuto conto delle 1,632 tonnellate di sfrido, si perviene ad un consumo totale per il giorno 18 Gennaio di tonnellate 56,052 di carbone.-

Nelle ore 15 di effettivo funzionamento del turbo-alternatore in servizio sono stati prodotti kW 23.400 con una punta di massimo carico, rientrata alle ore 11,20, di kW/h 2.300 ed un carico minimo di 1.300 kW/h rilevato dal diagramma alle ore 13,50.-

Di conseguenza il carico medio registrato nel giorno 18 Gennaio è stato di kW/h 1.560 ed il consumo specifico di carbone per kW/h di 2,395 kg.-

La pressione minima in caldaia è risultata di 9 atmosfere e la pressione media, per tutte le ore di funzionamento, attorno le 12-13 atmosfere.-

Durante il giorno nessun inconveniente si è verificato nell'esercizio delle caldaie, solo verso sera.- dato che il carbone Nazionale Sulcis fresco, caricato nelle tramogge alle ore 12 circa, è venuto a trovarsi nella griglia verso le ore 15 - è stato osservato un principio di rammollimento nei blocchi di scorie, che si avanzano verso il fondo della griglia.-

Altro inizio di rammollimento venne constatato dal foro di spia anteriore, in due tracce di colature del refrattario della fiancata sinistra della camera di combustione.-

7253

La temperature medie riscontrate in queste si è aggirata attorno i 1100 - 1.200° C.-

Alle ore 6 del giorno successivo, cioè del 19 Gennaio 1944 i fuochi sono stati puliti [illegible]

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to dal diagramma alle ore 13,50.-

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La pressione minima in caldaia è risultata di 9 atmosfere e la pressione media, per tutte le ore di funzionamento, attorno le 12-13 atmosfere.-

Durante il giorno nessun inconveniente si è verificato nell'esercizio delle caldaie, solo verso sera.- dato che il carbone Nazionale Sulcis fresco, caricato nelle tramogge alle ore 12 circa, è venuto a trovarsi nelle griglie verso le ore 15 - è stato osservato un principio di rammollimento nei blocchi di scorie, che si avanzano verso il fondo della griglia.-

Altro inizio di rammollimento venne constatato dal foro di spia anteriore, in due tracce di colatura del refrattario della fiancata sinistra della camera di combustione.-

7253

La temperatura media riscontrata in questa si è aggirata attorno i 1100 - 1200° C.-

Alle ore 6 del giorno successivo, cioè del 19 Gennaio 1944 i fuochi sono stati nuovamente attivati con carbone Sulcis fresco, che si è continuato a caricare nelle tramogge fino alle ore 22,45, ora della fermata

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della caldaia e della messa fuori esercizio del turboalternatore.-

In questo giorno il consumo del carbone Sulcis fresco, incluse le 1,537 tonnellate dello stesso sfrido accertato, è salito a tonnellate 52,777 con una produzione totale di KW/ 18.720 nelle ore 15 e 45' di effettivo funzionamento delle turbine in servizio e con un consumo specifico per KW/h di 2,819 Kg di carbone.-

Per giustificare quest'ultimo consumo specifico, piuttosto elevato, è necessario subito chiarire che, verso le ore 15 del giorno in esame, si è ritenuto opportuno di provare il gruppo turbo-alternatore Stal al fine di accertare la regolarità di funzionamento di tutti i suoi organi e quindi approntarlo nel caso di una sua tempestiva entrata in esercizio.-

A questo deve essere, inoltre, aggiunto il consumo straordinario di vapore dovuto alla messa in funzione per alimentare l'acqua in caldaia, di una pompa a vapore, in sostituzione di una centrifuga mossa di motore elettrico avariatosi e la perdita d'acqua sensibile verificatosi nel gruppo di sinistra dello economizzatore della caldaia in esame.-

A parte questi chiarimenti, si deve notare che anche in questa prova si sono avute delle difficoltà, per mantenere in caldaia la pressione richiesta, pressione che pur aggirandosi attorno alla media di circa 11 atmosfere per tutte le ore di funzionamento, è scesa invece a circa 7 atmosfere dalle ore 17,20 alle 18.-

La punta del carico massimo, osservata alle ore 17,40, è di kW/h 2.200 ed il carico minimo di 400

7257

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piuttosto elevato, è necessario subito chiarire che, verso le ore 15 del giorno in esame, si è ritenuto opportuno di provare il gruppo turbo-alternatore Stal al fine di accertare la regolarità di funzionamento di tutti i suoi organi e quindi approntarlo nel caso di una sua tempestiva entrata in esercizio.-

A questo deve essere, inoltre, aggiunto il consumo straordinario di vapore dovuto alla messa in funzione per alimentare l'acqua in caldaia, di una pompa a vapore, in sostituzione di una centrifuga mossa da motore elettrico avariatosi e la perdita d'acqua sensibile verificatosi nel gruppo di sinistra dello economizzatore della caldaia in esame.-

7257

A parte questi chiarimenti, si deve notare che anche in questa prova si sono avute delle difficoltà, per mantenere in caldaia la pressione richiesta, pressione che pur aggirandosi attorno alla media di circa 11 atmosfere per tutte le ore di funzionamento, è scesa invece a circa 7 atmosfere dalle ore 17,20 alle 18.-

Le punta del carico massimo, osservata alle ore 17,40, è di kW/h 2.200 ed il carico minimo di 400 kW/h si è registrato verso le ore 14,40.-

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Il carico medio nelle ore 15 e 45' di erogazione è stato di kW/h 1186, mentre le temperature medie osservate in camera di combustione si è mantenuta attorno i 1200°C

RISULTANTE DELLE ESPERIENZE

L'andamento della combustione ed il comportamento del focolare, nell'interno del quale è stato bruciato, per tutta la durata della prova del 19 Gennaio, integralmente carbone Sulcis fresco, sono stati ben diversi dei giorni precedenti.-

Ed infatti fin dalle prime ore antimeridiane di quel giorno - come hanno potuto accertare gli stessi egregi Comandanti Militari del Governo Alleato, che hanno diretto le prove - sono stati osservati i primi sensibili rammollimenti del refrattario, che riveste le pareti della camera di combustione e l'inizio della conseguente lenta fusione della parte superficiale di esso refratterio, il quale alla vista si è rilevato con una particolare tendenza a brillare.-

Tali sintomi - accompagnati anche da un inizio di plasticità accusato dalle scorie, specialmente verso il fondo della griglia, contro la quale minacciavano di rimanere attaccate in parte - hanno indotto gli Esperti tecnici del Comando Alleato di ordinare la sospensione della prova con impiego integrale di carbone Sulcis e la successiva fermata della caldaia per l'esame delle sue varie parti.-

7251

In attesa della messa in funzione della caldaia gemella 136-2A il generatore in prova ha dovuto continuare a funzionare anche il giorno successivo. Dalle ore 6 alle ore 16 del giorno 20 Gennaio 1944 la caldaia è stata

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7251

In attesa della messa in funzione della caldaia gemella 136-PA il generatore in prova ha dovuto continuare a funzionare anche il giorno successivo. Dalle ore 6 alle ore 10 del giorno 20 Gennaio 1944 la caldaia è stata alimentata con solo carbone Sulcis fresco ed alle ore 10 si è iniziato nelle tramogge il carico di una miscela

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le di carboni costituita dal 50% di Sulcis fresco e 50% di carbone estero, fornito in precedenza dallo stesso Comando Alleato.-

Tale miscela è stata così continuata fino alle ore 21,55 del giorno 20 Gennaio, ora in cui la caldaia sotto esperimento venne posta definitivamente fuori servizio, perchè l'indomani giorno 21 Gennaio si è rimessa in funzione la caldaia gemella 136-PA.-

Per il giorno 20 Gennaio, e sempre per la caldaia in prova, sono stati accertati i seguenti consumi : tonnellate 30 di Sulcis fresco, tonnellate 18,600 di carbone estero e tonnellate 1,458 di sfrido.-

In totale si sono consumate tonnellate 50,058 con una produzione globale di kW/h 21,780 in circa 15 ore di funzionamento effettivo ed un consumo specifico di carbone per kW/h di 2,322 Kg.

Qui è da osservare che fin dalle sera del giorno 19 Gennaio era entrata in servizio la turbina Stal la quale è appunto il gruppo che, a parità di potenza erogata, richiede un minore consumo specifico di vapore, nei confronti dell'altre turbine messe fuori esercizio.-

La punta di carico massimo del giorno 20 Gennaio per la sola durata di due minuti circa, è di kW/h 2600 alle ore 17,38 ed il carico minimo registrato è di 800 kW/h, mentre il carico medio per tutto il giorno è salito nei confronti dei giorni precedenti, a kW/h 1.452.-

7250

La pressione minima registrata è di 10 atmosfere e quella media delle 15 ore di funzionamento di 13,5 atmosfere.-

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Per il giorno 20 Gennaio, a scopo [illegible]
in prova, sono stati accertati i seguenti consumi : tonnellate 30 di Sulcis fresco, tonnellate 18,600 di carbone estero e tonnellate 1,458 di sfrido.-

In totale si sono consumate tonnellate 50,058 con una produzione globale di kW/h 21,780 in circa 15 ore di funzionamento effettivo ed un consumo specifico di carbone per kW/h di 2,322 Kg.

Qui è da osservare che fin dalla sera del giorno 19 Gennaio era entrata in servizio la turbina Stal la quale è appunto il gruppo che, a parità di potenza erogata, richiede un minore consumo specifico di vapore, nei confronti dell'altre turbine messe fuori esercizio.-

La punta di carico massimo del giorno 20 Gennaio per la sola durata di due minuti circa, è di kW/h 2600 alle ore 17,38 ed il carico minimo registrato è di 600 kW/h, mentre il carico medio per tutto il giorno è salito nei confronti dei giorni precedenti, a kW/h 1.452.-

7253

La pressione minima registrata è di 10 atmosfere e quella media delle 15 ore di funzionamento di 13,5 atmosfere.-

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Per il calcolo delle ore di marcia della caldaia in prova, alimentata esclusivamente con carbone Sulcis fresco, - tenuto conto dello sfasamento fra l'ora di carico nelle tramogge e l'ora di arrivo del carbone sulla griglia, nonchè dell'ora della cessazione del carico nelle tramogge e la fine dell'alimentazione del carbone sulla griglia stessa, - ci si puo' servire facilmente dei seguenti dati:

Giorno 18 Gennaio ore di fuoco col solo Sulcis fresco dalle 15 alle ore 22 = ore 7.-

" 19 Gennaio ore di fuoco con solo Sulcis fresco dalle 6 alle ore 22,45 = " 16,45

" 20 Gennaio ore di fuoco con solo Sulcis fresco dalle 6 alle ore 13 = " 7.-

Totale ore di fuoco col solo Sulcis bruciato nel focolare della caldaia in prova: 30h,45'.-

L'esame delle scorie, provenienti dalla combustione del carbone Sulcis fresco, ha mostrato che esse sono in gran parte fuse e compatte, che il loro peso specifico è molto più elevato di quello delle scorie ottenute dal carbone Sulcis vecchio e che in fine la quantità di incombusti solidi nascoste in esse è sensibilmente minore di quella avuta nelle scorie del carbone Sulcis vecchio.-

Allo stato attuale la caldaia 112-PA, cioè quella sottoposta ad esperimento è spenta ed in pulizia ed, appena possibile, si procederà ad una accurata visita della camera di combustione e della griglia, onde cercare di individuare il loro comportamento durante la combus-

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Allo stato attuale la caldaia 112-PA, cioè quella sottoposta ad esperimento è spenta ed in pulizia ed, appena possibile, si procederà ad una accurata visita delle camere di combustione e della griglia, onde cercare di individuare il loro comportamento durante la combustione e di accertare nello stesso tempo il loro reale stato di conservazione.-

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L'Associazione Nazionale per il controllo della Combustione, lieta dell'onorevole incarico assegnatole, coglie questa grata occasione, per ringraziare vivamente il Governo Militare Alleato e per esso i suoi egregi Esperti tecnici,- della collaborazione richiesta, assicurando di seguire sempre con appassionato interessamento e con vigile cura il proseguimento degli esperimenti e di rendere immediatamente edotto il predetto Comando del loro esito e del risultato delle visite interne che verranno eseguite a caldaia ferma, con particolare riferimento all'esame degli organi della griglia e della camera di combustione.-

I COLLABORATORI:

Dott. Ing. Antonino
La Mantia

Dott. Ing. Gustavo Ascione

L'Ingegnere
Direttore
(Pietro Zonghi)

Palermo 21 Gennaio 1944.-

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detto Comando del loro esito e del risultato delle vi-
site interne che verranno eseguite a caldaia ferma, con
particolare riferimento all'esame degli organi della
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I COLLABORATORI:

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Lo Mentia

Dott. Ing. Gustavo Ascione

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(Pietro Zonghi)

Palermo 21 Gennaio 1944.-

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ASSOCIAZIONE NAZIONALE per il CONTROLLO della COMBUSTIONE

Sezione della Sicilia

R E L A Z I O N E

sulle esperienze termiche di combustione, eseguite con carbone Sulcis, bruciato nel focolare di una caldaia a vapore, tipo multitubolare, C.T.M. (Semimarino), fabbrica Babcock-Wilcox, installata nella centrale termoelettrica della Spett. "Soc. Generale Elettrica della Sicilia" in Palermo.-

IIa PARTE

Palermo 29 Gennaio 1954.

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R E L A Z I O N E

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IIa PARTE

Palermo 29 Gennaio 1944.

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Relazione sull'esito della ispezione, eseguita alla camera di combustione della caldaia multitubolare, N° 112-PA di matricola dell'A.N.C.C., tipo Babcock & Wilcox C.T.M. (Semimarino), installata nella Centrale termo-elettrica di Palermo della Soc. Gen. Elettrica della Sicilia, dopo l'esperimento di combustione a carbone Sulcis integrale.-

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PREMESSE

Per disposizione degli Organi tecnici del Governo Militare Alleato,- e come risultà dalla prima parte della relazione, già presentata al predetto Comando,- nei giorni 18, 19 e 20 Gennaio 1944, la caldaia a vapore, N° 112-PA di matricola dell'"Associazione Nazionale per il Controllo della Combustione" è stata sottoposta ad un esperimento termico, per accertare il comportamento del complesso focolare-caldaia, quando sulla griglia di questa viene bruciato del carbone Sulcis nella proporzione del 100%.-

Come si è specificato nella prima relazione, la caldaia già sottoposta a prova è del tipo Babcock-Wilcox C.T.M. (Semimarino), a tubi d'acqua, della superficie di riscaldamento di m^2 762, ed è dotata di un surriscaldatore di vapore della superficie di m^2 230 e di un preriscaldatore dell'acqua d'alimentazione.-

La pressione massima di esercizio della caldaia è di 15 Atm.-

Il focolare della predetta unità termica ha una capacità di circa m^3 95 ed è fornito di una griglia

7246

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PREMESSE

Per disposizione degli Organi tecnici del Governo Militare Alleato,- e come risultà dalla prima parte della relazione, già presentata al predetto Comando,- nei giorni 18, 19 e 20 Gennaio 1944, la caldaia a vapore, N° 112-PA di matricola dell'"Associazione Nazionale per il Controllo della Combustione" è stata sottoposta ad un esperimento termico, per accertare il comportamento del complesso focolare-caldaia, quando sulla griglia di questa viene bruciato del carbone Sulcis nella proporzione del 100%.-

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La pressione massima di esercizio della caldaia è di 15 Atm.-

7246

Il focolare della predetta unità termica ha una capacità di circa m^3 98 ed è fornito di una griglia a sottoalimentazione Riley, formata da 11 sezioni intere e da due mezze sezioni laterali, addossate alle due fiancate del focolare, il quale essendo stato previsto per l'impiego di carboni esteri pregiati, venne costruito con semplici murature e rivestito con mattoni refrattari di buona qualità, ma di tipo comune.-

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Il tiraggio è equilibrato, e cioè è soffiato con aria fredda sotto griglia ed aspirato a mezzo di elettro-ventilatori.-

La caldaia è provvista di due separati camini, comunicanti ciascuno per conto proprio con i due rispettivi ultimi condotti del fumo, dentro i quali sono sistemati i due gruppi dell'economizzatore.-

Da qualche tempo il ventilatore del condotto del fumo di destra non è in funzione, perchè il motore ad esso accoppiato è guasto. Cosicchè solo una parte dei prodotti della combustione può essere aspirata dal ventilatore di sinistra in efficienza, mentre la rimanente parte, relativa al condotto del fumo di destra, viene evaquata spontaneamente all'atmosfera con tiraggio naturale.-

Questo tiraggio ridotto costringe necessariamente a regolare l'intensità della combustione entro limiti modesti ed a tenere di conseguenza basso il carico del turbo-alternatore, alimentato dalla caldaia in oggetto.-

Da ciò si deduce l'importante considerazione che le prove di combustione a solo carbone Sulcis, eseguite nei giorni 18-19 e 20 Gennaio 1944, ed i risultati ottenuti debbano intendersi riferiti ad un andamento piuttosto moderato della combustione, che si è svolta nel focolare ad un carico termico specifico più basso di quello, che potrebbe consentire il tiraggio massimo, una volta ripristinata la originaria efficienza di esso.-

Volendoci riferire, infatti, alla sola prova del giorno 19 Gennaio, quando si sono bruciate in 15^h e 45' di fuoco tonnellate 52,777 di solo carbone Sulcis, il cui potere calorifico medio è risultato di 4.900 calorie /Kg., si deduce che ogni m^3 di bagnera di combustione, per data caldaia funzionante a pieno sovrapposto scat-

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ti della combustione può essere aspirata dal ventilatore di sinistra in efficienza, mentre la rimanente parte, relativa al condotto del fumo di destra, viene evacuata spontaneamente all'atmosfera con tiraggio naturale.-

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Volendoci riferire, infatti, alla sola prova del giorno 19 Gennaio, quando si sono bruciate in 15h e 45' di fuoco tonnellate 52,777 di solo carbone Sulcis, il cui potere calorifico medio è risultato di 4.900 calorie /Kg., si deduce che ogni m^3 di camera di combustione, per ogni ora di funzionamento è stato sottoposto esattamente al carico termico medio di circa 170.000 calorie,

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valore notevolmente inferiore a quello ordinario mediamente di circa 350.000 calorie.-

In base al consumo di carbone Sulcis, risultato negli altri giorni, il carico termico, così calcolato per il solo giorno 19 Gennaio 1944, si può assumere,con sufficiente approssimazione, come carico termico medio specifico corrispondente a tutta la durata delle prove, e cioè per tutte le 30^h, 45' di fuoco, alle quali venne sottoposta la camera di combustione in esame.-

ESITO DELLA VISITA, ESEGUITA ALLA CAMERA DI COMBUSTIONE.-

Come risulta dalla prima relazione relativa allo andamento del complesso caldaia-focolare durante gli esperimenti dei giorni 18, 19 e 20 Gennaio 1944, la caldaia, sottoposta alla prova, venne fermata, e quindi spenta, alle ore 21^h,55 del giorno 20 Gennaio, per essere convenientemente raffreddata ed approntata per la visita interna della camera di combustione;-

Scopo di questa visita è stato quello di accertare gli effetti reali, riportati dalla griglia e dalle pareti del focolare dopo la combustione per un periodo di 30^h;45' con carbone Sulcis.-

La visita è stata eseguita nelle ore antimeridiane del giorno 23 Gennaio 1944 dagli ingegneri dell'Associazione Nazionale per il Controllo della Combustione, unitamente al personale dirigente del Servizio Produzione della Soc. Gen. Elettrica, ed in perfetta collaborazione degli Egregi Esperti tecnici del Comando Militare Alleato, appositamente intervenuti.-

State della griglia

72,5 L'esame accurato e particolareggiato è stato ese-

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sottoposta la camera di combustione in esame.-

ESITO DELLA VISITA, ESEGUITA ALLA CAMERA DI COMBUSTIONE.-

Come risulta dalla prima relazione relative allo andamento del complesso caldaia-focolare durante gli esperimenti dei giorni 18, 19 e 20 Gennaio 1944, la caldaia, sottoposta alla prova, venne fermata, e quindi spenta, alle ore $21^{h},55$ del giorno 20 Gennaio, per essere convenientemente raffreddata ed approntata per la visita interna della camera di combustione.-

Scopo di questa visita è stato quello di accertare gli effetti reali, riportati dalla griglia e dalle pareti del focolare dopo la combustione per un periodo di $30^{h};45'$ con carbone Sulcis.-

La visita è stata eseguita nelle ore antimeridiane del giorno 23 Gennaio 1944 dagli ingegneri dell'Associazione Nazionale per il Controllo della Combustione, unitamente al personale dirigente del Servizio Produzione della Soc. Gen. Elettrica, ed in perfetta collaborazione degli Egregi Esperti tecnici del Comando Militare Alleato, appositamente intervenuti.-

Stato della griglia

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L'esame accurato e particolareggiato è stato anzitutto, rivolto con principale attenzione alla griglia, la quale mostra con chiara evidenza gli effetti deleteri dell'attacco chimico delle scorie del Sulcis.-

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Gli elementi di tutte le 12 sezioni per una fascia trasversale larga circa 1 metro si presentano parzialmente fusi, bruciati e corrosi, non più rispondenti al loro scopo, dato che gli ugelli di ogni elemento avariato risultano ostruiti, in corrispondenza dei fori per il passaggio dell'aria soffiata ed in parte anche asportati.-

Appare evidente l'attacco chimico corrosivo caratteristico delle scorie del Sulcis, quando queste si presentano in corrispondenza di zone caldissime della griglia, non sufficientemente raffreddate.-

Da un computo, fatto in un primo esame, risulta che per ogni sezione, dovranno essere sostituiti circa 20 mezzi elementi e, quindi, per tutte le 12 sezioni un totale di circa 240 mezzi elementi.-

La zona, in cui è avvenuto l'attacco, è ubicata in corrispondenza della mezzeria della griglia, e comprende una fascia trasversale parallela al frontale anteriore della caldaia e, come sopra è detto, della larghezza media di circa un metro.-

Stato delle murature

In disastrose condizioni si trova egualmente il muro di sostegno posteriore della fine della griglia, perchè sgretolato e diroccato, per quasi tutta la sua superficie, dell'azione demolitrice, provocata dalla anormale grossezza dei blocchi delle scorie, all'attacco della loro caduta nel pozzetto di raccolta.-

La muratura del fronte anteriore della camera di combustione è rimasta quasi intatta, salvo alcuni piccoli tratti da rifare, perchè sgretolati, in corrispondenza della bocca di caricamento dei canali.-

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presentano in corrispondenza di zone caldissime della griglia, non sufficientemente raffreddate.-

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La muratura del fronte anteriore della camera di combustione è rimasta quasi intatta, salvo alcuni piccoli tratti da rifare, perchè sgretolati, in corrispondenza della bocca di caricamento dei canali.-

I due fianchi, invece, della camera di combustione e più sensibilmente quello di sinistra, si presentano con il refrattario mancante in diversi tratti, perchè crollato, mentre in altre zone il refrattario si pre-

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sente fuso e oclato per una profondità di circa 130 m/m.-

In altre parti di queste fiancate i mattoni del refrattario si presentano con i giunti di unione mancanti, cosicchè i mattoni in parola rimangono ancora incastrati per un breve tratto nello spessore della rimanente muratura.-

Anche in tutte queste zone descritte appare evidente l'azione aggressiva caratteristica delle ceneri del carbone Sulcis, le quali al di là di una certa temperatura (circa 1150°C) agiscono chimicamente con i componenti degli strati più esposti del refrattario, formando con essi un composto, avente un punto di fusione a temperature più basse.-

La muratura dell'altare, cioè del tratto di muro, che limita posteriormente la camera di combustione, appare sensibilmente gonfiata in due ampie zone laterali, con convessità pronunziata verso la griglia.-

Nel complesso, tranne la facciata anteriore ancora in discrete condizioni, tutte le restanti murature sono parzialmente da rifare o da rinforzare del lato interno, in parte perchè il refrattario è corroso o mancante ed in parte per la assenza dei giunti di unione fra mattone e mattone;-

Altra constatazione, da tenere in evidenza, è quella che le prime file anteriori del fascio tubolare, prospicienti sulla griglia sono state trovate rivestite da uno strato minuto e poroso di particelle di scorie, le quali, pur non aderendo fortemente ai tubi, formano, però, su di essi un avvolgimento coibente, che diminuisce la efficacia della trasmissione di calore.-

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CONCLUSIONI

Le caldaie in prova, dopo il precedente rifacimento delle murature interne e la messa a nuovo della griglia, è stata tenuta in esercizio per un totale complessivo di 114 ore di funzionamento.-

Di queste 114 ore di esercizio la maggior parte sono da assegnare alla combustione con carbone estero, circa 15 ore con carbone Sulcis vecchio e le ultime 30^h, 45' con carbone Sulcis fresco.-

Dall'esame fatto risulta evidente che le avarie, riportate dalla griglia e dal focolare, sono state prodotte dalla combustione del carbone Sulcis, appunto perchè le sue ceneri e le sue scorie si dimostrano particolarmente aggressive, quando il predetto carbone viene cruciato in impianti non adatti, e più precisamente in focolari ed in caldaie non attrezzati per la combustione integrale del Sulcis, quali il focolare e la caldaia dell'impianto termico sperimentato.-

Per migliorare le condizioni di conservazione occorrerebbe almeno che il rivestimento del forno nelle zone più calde ed esposte all'azione delle polveri di ceneri e di scorie fosse fatto con mattoni ad alta refrattarietà, vale a dire mattoni ad altissimo tenore di Al_2O_3, aventi punto di fusione ed inizio di rammollimento elevati.-

Per ottenere, poi, perfette condizioni nell'impiego integrale del carbone Sulcis, cioè nella misura del 100%,- come hanno dimostrato le esperienze condotte in molti impianti termici, razionalmente costruiti o modificati, - è assolutamente necessario di ricorrere a camere di combustione più ampie con pareti refrattarie, raffreddate a mezzo di schermi di tubi d'acqua.

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30°, 45° con carbone Sulcis fresco.-

Dall'esame fatto risulta evidente che le avarie, riportate dalla griglia e dal focolare, sono state prodotte dalla combustione del carbone Sulcis, appunto perchè le sue ceneri e le sue scorie si dimostrano particolarmente aggressive, quando il predetto carbone viene bruciato in impianti non adatti, e più precisamente in focolari ed in caldaie non attrezzati per la combustione integrale del Sulcis, quali il focolare e la caldaia dell'impianto termico sperimentato.-

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E' da ritenere fermamente che, nel caso in esame, le avarie descritte si sarebbero appalesate più gravi, se le prove fossero state condotte ad un carico termico più elevato e cioè con un tiraggio in perfetta efficienza, il quale sicuramente avrebbe fatto aumentare le temperature in giuoco, esaltando così l'aggressività delle ceneri e scorie.-

Ed appunto in considerazione di questo l'"Associazione Nazionale per il Controllo della Combustione", nello andare a redigere il "Piano di distribuzione ed impiego dei Combustibili" si era limitata a preventivare, per l'impianto termico in oggetto, l'uso del carbone Sulcis nella proporzione non superiore al 30%.-

La Sezione della Sicilia dell' A. N. C. C., nel rassegnare l'onorevole incarico affidatole, rinnova il ringraziamento agli egregi Esperti tecnici del Governo Militare Alleato, riaffermando il desiderio di prestare la propria fattiva e completa collaborazione in tutte le questioni, che verrà chiamata a studiare dal Superiore predetto Comando.-

I COLLABORATORI
Dott. Ing. Antonino La Mantia
Dott. Ing. Gustavo Ascione

L'Ingegnere Direttore
(Pietro Zonghi)

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(Pietro Zonghi)

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Palermo 29 Gennaio 1944.

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SOCIETA'GENERALE ELETTRICA DELLA SICILIA

Centrale Termica di Palermo

Esperimento sull'uso di carbone Sardo su una caldaia Babcock & Wilcox a griglia Riley

L'esperimento dietro invito dello A.M.G. e sotto il controllo del Sig.Lt.Col.Bolick e Maj. Bowman fu fatto nei giorni 17,18,19,20 gennaio e con l'assistenza della A.M.C.C. per la quale intervennero il Direttore Ing. Zonghi e gli ingegneri La Mantia e Ascione.

La prova ebbe inizio con carbone Sardo esistente da lungo tempo in Centrale che però alla analisi immediata risultò molto alterato, difatti una media di alcune analisi fatte, dette i seguenti risultati:

- Umidità	7,6%
Sostanze volatili	27,1%
Ceneri	40,3%
Carbonio fisso	25,0%

con un potere calorifico corrispondente di poco superiore a 4.000 Cal.

Evidentemente questo carbone aveva subito un lento processo di distillazione e ossidazione cosa che era anche visibile, e nella massa stessa del cumulo si notavano evidenti tracce di autocombustione.

Successivamente venne immesso in caldaia del Sulcis fresco e la prova continuò fino a quando si ebbero segni evidenti che i refrattari delle murature cominciavano a rammollirsi e colare e anche nelle scorie si cominciava ad osservare un inizio di plasticità.

In tali condizioni il Sig.Col. Bolick fece sospendere la prova, la caldaia venne spenta, appena pronta l'altra, per potere effettuare una visita interna alla camera di combustione ed alla griglia.

ANDAMENTO DELLA PROVA, DATI E OSSERVAZIONI

La prova fu fatta su di una caldaia Babcock & Wilcor da 762 mq costruita nel 1923 del tipo a tubi d'acqua semimarino C.T.N. individuata dal numero di matricola della A.N.C.C. n°. 112-PA.

Questa caldaia ha un focolare con griglia meccanica del tipo Riley sottoalimentata.

La prova ebbe inizio il 17 Gennaio 1944 con l'uso del vecchio Sulcis esistente in Centrale; l'immissione del Sulcis vecchio venne sospesa alle ore 12 del 18 Gennaio e da quel momento si continuò la prova col Sulcis fresco prova che continuò per tutto il giorno 19 usando Sulcis al 100 %.

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Nel pomeriggio di questo giorno in seguito alle osservazioni fatte sulle murature e sulle scorie venne sospeso l'uso del Sulcis al 100%.

Anche il giorno 20, non essendo pronta l'altra caldaia, la caldaia sperimentale continuò a funzionare con una miscela al 50 % di Sulcis e 50 % di carbone estero.

Si può ritenere che fino alle ore 10 circa del giorno 20 nella caldaia venne consumato Sulcis al 100 % mentre successivamente arrivò nella griglia la miscela al 50 %.

In sostanza la caldaia ha lavorato con Sulcis vecchio:

giorno 17	dalle	13	circa alle	22	ore 9	
giorno 18	"	6	"	" 15	" 9	18 ore

e con Sulcis fresco:

giorno 18	dalle ore	15	circa alle	22	ore 7	
giorno 19	" "	6	"	" 22,45	" 16,45	
giorno 20	" "	6	"	" 13	" 7	30,45 ore

Durante il funzionamento con Sulcis vecchio non si notarono inconvenienti alle murature e nelle scorie.

Si verificò invece notevole difficoltà a tenere la pressione in caldaia anche con un carico ridotto (circa 1.200 KW in media) mentre alla fine della giornata il consumo specifico risultò di circa 2,6 Kg/kWH.

Furono fatte col pirometro delle misure di temperatura nella camera e si trovarono circa 1.000°C.

Le scorie denunciavano discrete quantità di combustibile incombusto e in qualche punto anche delle parti fuse.

Con l'uso del Sulcis fresco il regime di funzionamento della caldaia si rialzò in modo evidente, la pressione venne tenuta più facilmente ed anche il carico medio si elevò (si raggiunsero anche i 2.000 kw) però in queste condizioni si cominciarono a notare le colature nei mattoni refrattari mentre nelle scorie le parti rammollite e fuse aumentarono notevolmente.

La temperatura del forno misurata col pirometro dette circa 1.200°C.

Molto importante notare che la caldaia ha lavorato con un solo ventilatore aspirante e quindi forzatamente in condizioni di minore efficienza.

E' da tener presente pertanto che col tiraggio pienamente efficiente la caldaia avrebbe potuto dare un carico maggiore ma contemporaneamente sarebbero peggiorate le sue condizioni di funzionamento perchè la temperatura della camera di combustione sarebbe aumentata.

Spenta la caldaia si lasciò raffreddare pereffettuare la visita

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della camera stessa, visita che fu fatta il giorno 23 Gennaio;

Erano presenti il Sig. Col.Bolick, il Maj. Bowman ed il Maj. per l'A.M.G. e per l'A.N.C.C.: i Sigg. ingegneri Zonghi, La Mantia e Ascione; per la S.G.E.S. gli ingegneri Colajanni e Modica.

Nella griglia venne riscontrata una estesa usura degli ugelli che si,presentano bruciati e incrostati di scorie fuse specie nella zona mediana. Saranno da cambiare circa la metà degli ugelli (circa 300).

Nel pozzetto delle scorie quasi tutto il rivestimento refrattario è crollato per effetto delle scorie formatesi in pezzi molto grossi e pesanti.

Alle murature della camera si osservò:

Alla parete anteriore una leggera lavatura ma appena superficiale.

Le due pareti laterali risultarono le più danneggiate ed è evidente che il primo a fondere e colare è stato il cemento refrattario fra mattone e mattone e successivamente anche i mattoni stessi sono in parte fusi e colati e in parte anche caduti.

L'usura media è notevole e supera all'incirca una profondità di mezzo mattone.

E' necessario pertanto rifare una buona parte delle murature refrattarie.

L'effetto è notevolissimo quando si pensi che questa caldaia lavorò con Sulcis all'incirca soltanto 36 ore e a regime ridotto mentre è certo che se la caldaia avesse funzionato coi ventilatori in piena efficienza,e quindi con un carico maggiore i danni riscontrati sarebbero stati molto più seri.

Del resto come abbiamo già detto verbalmente ai Sigg.Tecnici dell'A.M.G. e come abbiamo già scritto nella breve relazione presentata in data 13 gennaio 1943 al Sig. Col. Bolick, la S.G.E.S. fin dal 1936 ha sperimentato l'uso del carbone Sardo sulle proprie caldaie e dalle ripetute e lunghe esperienze, che del resto trovano riscontro in altre analoghe fatte in Sardegna nelle Centrali di Cagliari, si potè stabilire che l'uso del Sardo su caldaie non costruite in modo speciale per l'uso di questo carbone non è possibile.

L'alto tenore di sostanze volatili di questo carbone è tale che in camere non sufficientemente alte e senza l'uso di aria supplementare calda sopra griglie le perdite per incombusti gassosi diventano in genere molto elevate.

Il basso punto di rammollimento delle scorie è molto basso e la loro aggressività chimica è tale che i materiali refrattari anche speciali con alto tenore di Allumina vengono più o meno rapida-

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mente attaccati.

Lo stesso dicasi per le griglie e specialmente per le griglie del tipo Riley nelle quali gli ugelli vengono bruciati.

Le scorie inoltre si formano in pezzi molto grossi e in qualche caso si è dovuto fermare una caldaia per formazione di banchi imponenti di scorie fuse che bloccavano il movimento della griglia stessa e che non si riusciva a scaricare.

Per tutte queste rqgioni la S.G.E.S. installò una nuova caldaia a Porto Empedocle a carbone polverizzato e due caldaie con griglia a catena costruite appositamente per bruciare Sulcis.

Era già stata ordinata e doveva effettuarsi in quest'anno la modifica delle due griglie delle due caldaie Babcock & Wilcox di Porto Empedocle.

Per Palermo si decise di non fare alcuna modifica perchè questa Centrale era destinata a diventare Centrale di riserva.

In queste condizioni a Palermo sulle due caldaie a griglia (quella della prova odierna e la gemella) abbiamo bruciato in passato una miscela di carbone estero con 20 + 25 % di Sulcis.

CONCLUSIONI

Per tutto quanto detto e in base al risultato della prova fatta nei giorni scorsi è da escludere che sulle caldaie a griglia di Palermo si possa bruciare Sulcis nella misura del 100 %.

Si potrà, se è assolutamente necessario, bruciarvi una miscela di estero con circa il 25 % di Sulcis.

Tenuto conto però:

1°) della grave difficoltà che abbiamo di trovare dei mattoni refrattari e del cemento refrattario;
2°) della sempre maggiore difficoltà di avere fusioni di ghisa specialmente per la deficienza di coke;
3°) che, usando una miscela di estero e Sulcis anche in misura ridotta, gli inconvenienti riscontrati non si eliminano ma soltanto si diluiscono nel tempo;
4°) infine che in valore assoluto la quantità di carbone Sulcis che si potrà bruciare nelle caldaie a griglia di Palermo non è rilevante (rappresenta circa il 5% di tutto il Sulcis che si potrà bruciare in totale fra Catania e Porto Empedocle)

a nostro giudizio sarebbe prudente non bruciare Sulcis nelle due caldaie a griglia di Palermo.

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Palermo, 2 Febbraio 1944

SOCIETA' GENERALE ELETTRICA DELLA SICILIA (Servizio Produzione)

AM/Trf

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HEADQUARTERS
ALLIED MILITARY GOVERNMENT
Public Works and Lines Sub-Commission

Lieut. C. Adm. [illegible]
WKL/eab

25
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AMG/150/PWL 9 Jan 44.

Subject: Electricity Supply.

To : F.C.D.E.S. A.M., Region I.

For your information discussions are taking place between this Sub-Commission and the appropriate ministry of the Italian Government regarding matters of Public Works, Highways etc; and in this connection arrangements are being made for regular monthly reports to be returned by the Italian Government to this Sub-Commission so that we may be kept fully informed of the position and progress of all works within the area under the control of the Italian Government.

In the meantime and until proper arrangements can be made I shall be glad if you will furnish to this sub-commission a monthly report dealing with the electricity supply position in Sicily and arrange for this report to be in my hands not later than the 7th of the month following that to which it refers.

1. On the general electricity supply position it will be sufficient if you indicate each month the total number of KW.hrs taken from hydro stations, steam stations and other sources throughout the Island, together with the peak demand from each of these sources.

2. If you can arrange to do so, it will be very helpful in my discussions with the industrial and other sub-commissions if you can also send me each month a typical daily load curve showing the total demand of the hydro, steam and other sources of supply.

3. In order that we may be in a position to discuss the industrial position of Sicily together with the problem on the mainland it is necessary that you should let me have a statement each month of the present position of availability of electrical energy showing the new consumers (leaving out minor consumers) which you have agreed with the power companies to take a supply or in the case of reduction those consumers which have had to shut down.

4. An estimate showing for three months ahead the available power output should also be given so that we may discuss with the appropriate sub-commissions the prospect of connection of further consumers.

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Industrial Plant

5. I understand that the Tanners plant is not yet able to start up owing to lack of electrical energy and I shall be obliged if you will let me have the latest position regarding this plant and also any other important plants which you are aware of and which are awaiting supply.

6. I should be obliged if you will let me have your report for the month of January as early as possible.

W.H. LAPTHAM,
Lieut-Colonel,
Dept. & Adm. Div.

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File through Col Jenny

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission

El & Adm Div.
LWL/ccl

ACC/ 50/PWU

11 Feb 44

Subject: Electricity Supply.

To : T.C.U.F.W.A.M. Region I.

1. Reference is made to your letter 20 Jan 44, file RTC 675 on the above subject.

The information which you submitted will be of great help to us in getting a clearer understanding of the power situation in Sicily. This pertains to the S.G.E. system only.

2. We note the difficulties under which the monthly data is obtained and in order that we will have an idea of the situation as it develops we would appreciate receiving such information as can be obtained from the S.G.E. on the monthly KWH production from the various plants as early as they are able to assemble and furnish it to you.

3. The information given on enclosure 1 attached to your letter of 20 Jan 44 is in satisfactory form. This data covered the month of December 1943.

4. The representative daily load curve will be sufficiently accurate for our purposes if it is prepared from hourly KWH production from each plant, which information can be taken from the log sheets prepared by the plants which should clear to the head office of the S.G.E. Company and be submitted to you in finished form. Please let us know whether this procedure can or cannot be arranged.

5. We are interested, of course, in the returning to service of power plant, generating capacity, substations and transmission lines which are being worked on now, in Sicily. A brief statement of the progress which has been made each month will be sufficient to keep us in touch with the situation.

7234

H.L. TAPPER,
Lieut-Colonel,
Chief, El & Adm Div.

Unclassified E.O. 12356 Section 3.3/NND No. 785019

3/7
109

Notes:-

1- total KWH from plants
total Demand on each plant.

2- typical load curve.

3- New customers

4- 3 months forecast of output.

5- Did not answer question
Panzera plant.

Declassified E.O. 12356 Section 3.3/NND No. 785019

FEDERAL POWER COMMISSION

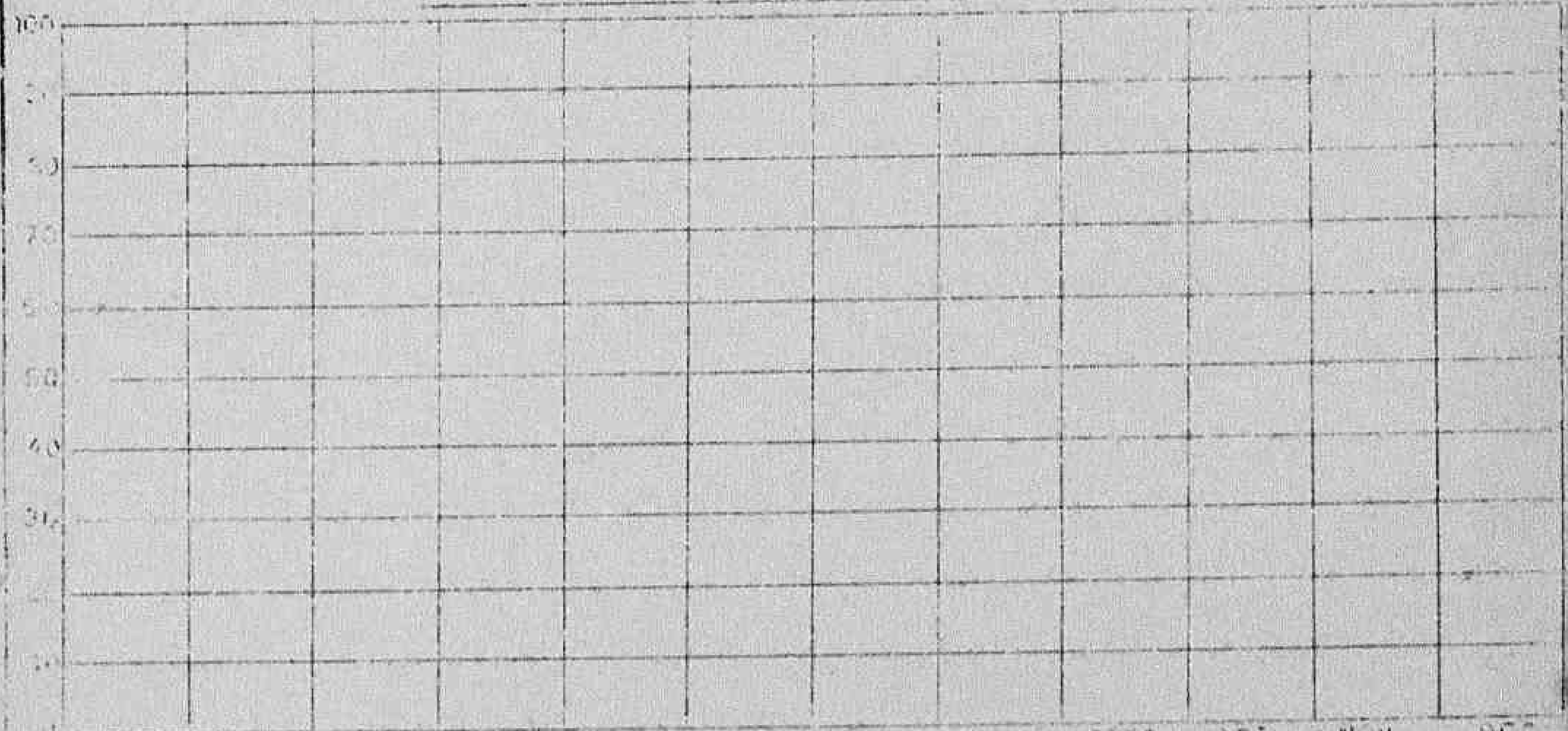
FPC FORM AF/HY-2

BUREAU OF WORK AND MINERALS COMMISSION

CHART SHOWING THE ESTIMATED MONTHLY REQUIREMENT OF BL MATERIAL

REQUIRED FOR REPAIRS TO HIGHWAYS AS GIVEN IN ATTACHED LETTER DATED

MATERIAL



REMARKS.

Declassified E.O. 12356 Section 3.3/NND No. 785019

FORM AC/HY-2

FEDERAL POWER COMMISSION

PUBLIC ROADS ADMINISTRATION

CHART SHOWING THE ESTIMATED MONTHLY REQUIREMENT OF OIL MATERIAL REQUIRED FOR REPAIRS TO HIGHWAYS AS GIVEN IN ATTACHED LETTER DATED

MATERIAL

JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.

REMARKS:

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
Rear Detachment
APO 394

Lieut Sec 1st 10th

SUBJECT: Electricity Supply and Estimates of Fuel Requirements.

To: Director, P.W. & M. Sub-Commission, H.Q., A.M.G.

Attached are copies of reports from Lt Col C.F. Bollick, Chief T.C.U.P.W. & M. Division, Region I.

HEADQUARTERS
31 JAN 1944
AMG.

Major,
(W.Knight)
P.W. & M. Sub-Commission,
H.Q., A.M.G. (Rear)

25 January 1944.

7232

Declassified E.O. 12356 Section 3.3/NND No. 785019

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 394

CFE/ol

20 January 1944

File : RTC 675

SUBJECT : Electricity Supply.

TO : Public Works and Mines Sub-Commission, AMG HQ.
(Attention : Lt. Col. Lapper.)

1 . Reference your ACC/150/PWM.

2 . Because of poor communications and lack of personnel, it will not be possible to comply with the request for data made in your letter. For example, the request was made for tabulation of plant production, by months. There are 17 plants on the SGES grid (though some are not in operation and some are working in groups). The plant production reports reached the Palermo office of the SGES on 19 January for the month of December 1943, and this was made possible by the use of telephones and officer-couriers. This date is inclosed (incl. 1). There is no complete data of station peaks from graphic meters; and no such information is available in Palermo. It would be possible to obtain the meter readings taken at half-hourly intervals. Part of the plants are used solely for "peaking".

3 . A daily load curve for the system as requested in paragreph 2 is a highly academic matter, as until the 70 Kv. line is completed, there are two systems, operating independently. Data is not available for the eastern grid; but the total production for the western grid is inclosed (incl. 2).

4 . Electricity supply is still limited severely. Because of the numerous technical details involved, and inability to police illicit connections, service is limited by rotation of service by days of the week and hours of the day rather than by refusing service. (This in part rests on orders given by IBS and No. 1 District, but is

Declassified E.O. 12356 Section 3.3/NND No. 785019

working out with a reasonable degree of satisfaction to all concerned). The hours of service are adjusted to utilize what water power is currently available. The regulations under which service is being given are inclosed (incl. 3).

Hence the request of paragraphs 3 and 5 are not applicable to the situation. As to "important customers" not connected, this involves a definition of the adjective "important" and will be different for every person passing judgment. The amount of connected load is no measure of the importance of the load in terms of war effort. It may safely be said that every request for power for loads certified as essential by military authorities (including AMG) has eventually been met; although in some cases there have been delays and interruptions.

5. The prospects for additional consumers are very poor.

a. The amount of steam operation specified by the ACC is 75,000,000 Kwhrs.

b. The specification by the fuel control commission that only Sardinian coal is to be furnished eliminates certain boilers - over half in number.

c. Present water storage is below average, due to January being dry.

d. The report of Capt. Laughlin will give an estimate of the capacity available for the year.

6. There is inclosed also a copy of the production record for the various major plants from 1935 to 1943 inclusive. (incl. 4).

For the R.C.A.C.,

Clair F. Bowman
Major CE

for C.P. BOLICK
Lt. Col., F.A.,
Chief, T.C.U.P.W.
& Mining Div.

7230

INCL. (4):
1. Plant production reports.
2. W. grid " "
3. Electric supply regulations.
4. Prduction record - 1935-43.

Declassified E.O. 12356 Section 3.3/NND No. 785019

INCL. 1

ELECTRIC PRODUCTION SICILY

MONTH OF DECEMBER

Hydro

Alcantara I	1526200
" II	1958600
Cassibile	1286700
Alto Belice I	752520
" " II	56276
San Carlo	2475000
Favara	319900
Poggiodiana	1851000
Scillato	228732
Aci Castello	294300

Hydro (Total) 10747226

Thermal

Catania	1866000
Palermo	781560
Porto Empedocle	Nil

Diesel (Total) 3719

Thermal (Total) 2651279

Grand (Total) 13398507

(Date received in Palermo 19 Jan.)

Data for prior years December.

	Hydro	Steam	Diesel	Total
1941	11,146,652	8,570,266	—	19,716,918
1942	7,891,426	11,446,489	—	19,337,915

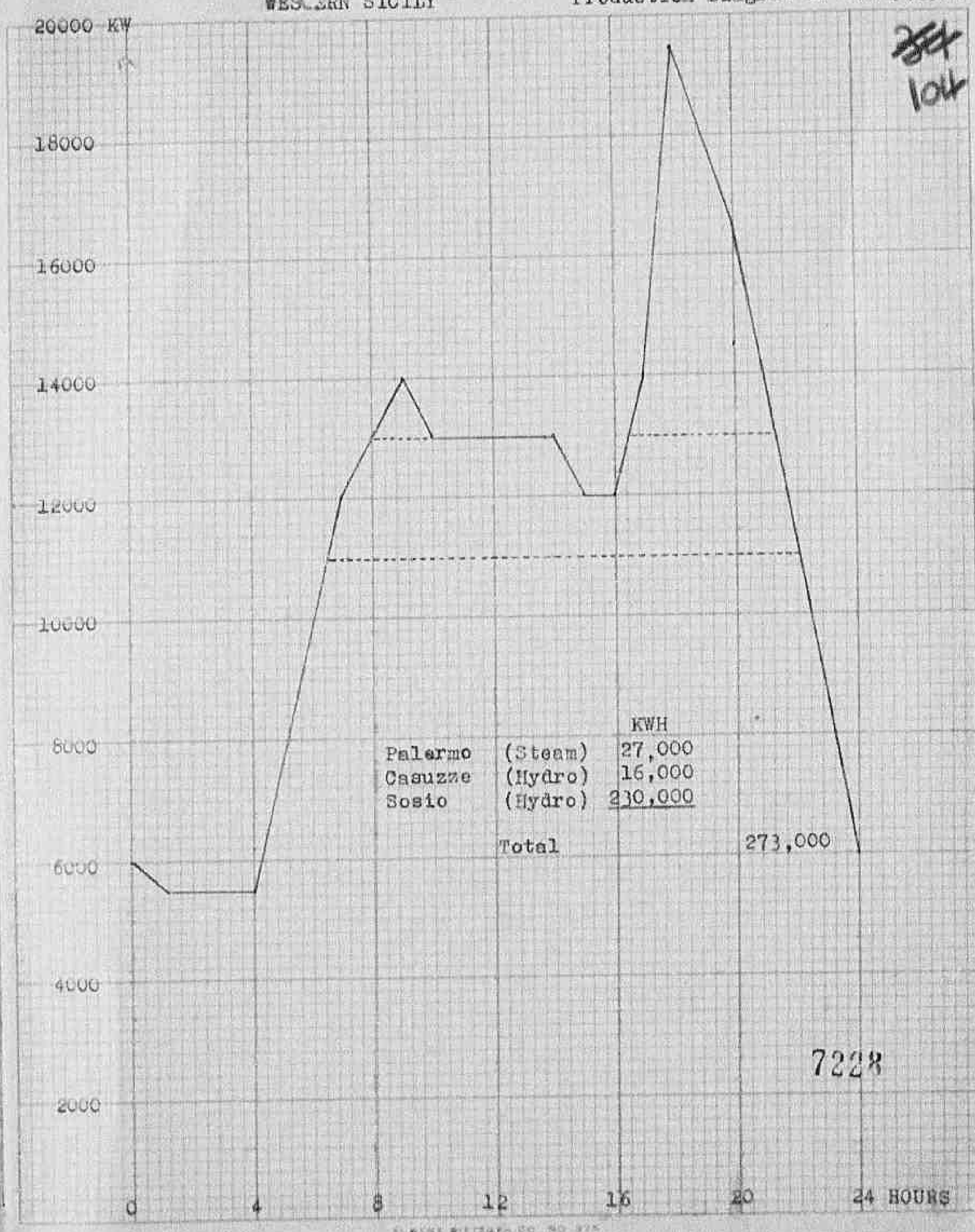
7224

Declassified E.O. 12356 Section 3.3/NND No. 785019

INCL. 2.

SOCIETA GENERALE ELETTRICA DELLA SICILIA
WESTERN SICILY

Production Diagram of Jan. 9, 1944



		KWH
Palermo	(Steam)	27,000
Casuzze	(Hydro)	16,000
Sosio	(Hydro)	230,000
Total		273,000

254
104

7228

Declassified E.O. 12356 Section 3.3/NND No. 785019

PRODUZIONE ANNUALE DEGLI IMPIANTI S G E S

	1935	1936	1937	1938	1939	1940	1941
Alcantara I	24021350	18836900	18827250	17833565	19989050	17733700	1323600
" II	31853500	26127000	24242600	25949725	30685140	27129700	2377180
Cassibile	14457200	10403950	9432900	7978410	8861240	6967500	529740
A. Belice	17525700	12644100	13488960	14355380	17608200	18157680	2787962
" " II	-	-	485264	548262	921283	758564	97946
S. Carlo	-	-	-	7230300	25101000	25542000	2596000
Favara	-	-	-	-	-	-	-
Poggiodiana	-	-	-	-	265500	14622000	1680900
Scillato	-	-	-	-	3316416	3338401	337976
A.C.I.	2817408	3125508	3157835	3607591	560900	1231700	71840
	-	-	-	-	-	-	-
	90675158	71137458	69634809	77503233	107308729	115481245	11803144
Catania	19836690	33469052	47494382	54167780	48637990	45378130	5121525
Porto	15229100	20452372	29764100	33671580	30530770	33339950	2848979
Palermo	34574200	35545860	34070580	29016900	22415880	12639240	1188644
Diverse	104129	220976	395495	45308	35241	10692	482
	69744139	89688263	111724557	116901568	101619881	91368012	9163977
Totale	160419297	160825721	181359366	194404801	208928610	206849257	2096711

Declassified E.O. 12356 Section 3.3/NND No. 785019

INCL. 4

PRODUZIONE ANNUALE DEGLI IMPIANTI S G E S

	1937	1938	1939	1940	1941	1942	1943
	18827250	17833565	19989050	17733700	13236000	14938450	14051800
	24242600	25949725	30685140	27129700	23771800	25359500	22239800
	9432900	7978410	8861240	6967500	5297400	9445000	10005100
	13488960	14355380	17608200	18157680	27879620	24510120	9947280
	485264	548262	921283	758564	979465	590945	185697
	-	7230300	25101000	25542000	25960000	25155000	19495000
	-	-	-	-	-	-	1257600
	-	-	265500	14622000	16809000	16875000	13253006
	-	-	3316416	3338401	3379763	3259319	2498001
8	3157835	3607591	560900	1231700	718400	240800	850600
	-	-					
8	69634809	77503233	107308729	115481245	118031448	120374134	93783878
2	47494382	54167780	48637990	45378130	51215250	64720400	35109900
2	29764100	33671580	30530770	33339950	28489700	28342980	6941570
0	34070580	29016900	22415880	12639240	11886480	19408860	5395680
6	395495	45308	35241	10692	48295	170827	2221130
3	111724557	116901568	101619881	91368012	91639725	112643067	47668780
1	181359366	194404801	208928610	206849257	209671173	233017201	141452168

4227

101

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
Rear Detachment
APO 394

180

SUBJECT: Electricity Supply and Estimates of Fuel Requirements.

To, Director, P.W. & E. Sub-Commission. H.Q., A.M.G.

Attached are copies of reports from Lt Col C.P. Bollick, Chief I.C.U.P.W. & E. Division, Region I.

Major,
(W.Knight)
P.W. & E. Sub-Commission,
H.Q., A.M.G. (Rear)

25 January 1944.

7226

Declassified E.O. 12356 Section 3.3/NND No. 785019

99

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 394

CFB/el

File : RTC 675

20 January 1944

SUBJECT : Electricity Supply.

TO : Public Works and Mines Sub-Commission, AMG HQ.
(Attention : Lt. Col. Lapper.)

1 . Reference your ACC/150/PWM.

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727

Declassified E.O. 12356 Section 3.3/NND No. 785019

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d. The report of Capt. Laughlin will give an estimate of the capacity available for the year.

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For the R.C.A.C.,

C.P. EOLICK
Lt. Col., F.A.,
Chief, T.C.U.[illegible]
& Mining Div.

7227

INCL. (4):
1. Plant production reports.
2. W. grid " "
3. Electric supply regulations.
4. Prduction record - 1935-43.

Declassified E.O. 12356 Section 3.3/NND No. 785019

ELECTRIC PRODUCTION SICILY

MONTH OF DECEMBER

Hydro	
Alcantara I	1526200
" II	1958600
Cassibile	1286700
Alto Belice I	752520
" " II	56276
San Carlo	2475000
Favara	319900
Poggiodiana	1851000
Scillato	226732
Aci Castello	294300
Hydro (Total)	10747228
Thermal	
Catania	1866000
Palermo	781560
Porto Empedocle	Nil
Diesel (Total)	3719
Thermal (Total)	661279
Grand (Total)	13398507

(Data received in PALERMO 19 Jan.)

Declassified E.O. 12356 Section 3.3/NND No. 785019

PRODUZIONE ANNUALE DEGLI IMPIANTI S G S S

	1935	1936	1937	1938	1939	1940	1941
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" II	31853500	26127000	24242600	25949725	30685140	27129700	23771[illegible]
Cassibile	14457200	10403950	9438900	7978410	8861240	6967500	52974
S. Belice	17525700	12644100	13488960	14355380	17608200	18157600	[illegible]796
" " II	-	-	485264	548262	921283	758364	3794
S. Carlo	-	-	-	7230300	25101000	25542000	25[illegible]
Favara	-	-	-	-	-	-	-
Poggiodiana	-	-	-	-	265500	14622000	168090
Scillato	2817408	3125508	3157835	3607591	3316416	3338401	3379[illegible]
A.C.I.	-	-	-	-	560900	1231700	7184
	90675158	71137458	69634809	77503233	107308729	115481[illegible]	1180314
Catania	19836690	33469052	47494382	54167780	48637990	45378130	912152
Porto	15229100	20452372	29764100	33671580	30530770	33339950	284897
Palermo	34574200	35545660	34070580	29016900	22415080	12639240	118864
Diverse	104129	220976	395495	49308	35241	10692	482
	69744139	89688263	111724357	116901568	101619881	91368012	91639[illegible]
Totale	160419297	160825721	181359366	194404801	208928610	206849297	2096711[illegible]

6767

Declassified E.O. 12356 Section 3.3/NND No. 785019

2

PRODUZIONE ANNUALE DEGLI IMPIANTI S G E S

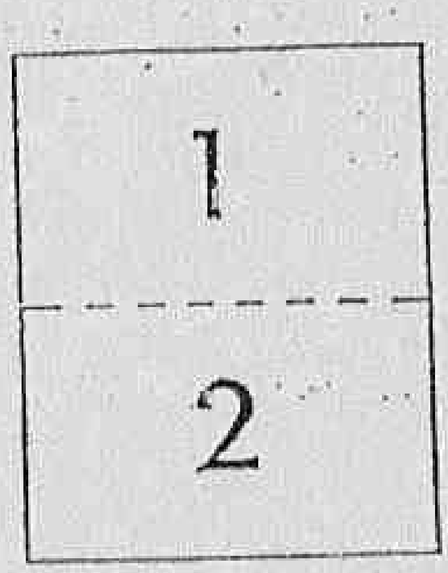
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6127000	24242600	25949725	30685140	27129700	23771880	25359500	22235800
8403950	9432900	7978410	6861240	6967500	5297400	9445000	10005100
2644100	13488960	14359380	17608200	18157680	17879620	24510120	9947280
-	485264	548262	921283	758564	979465	590945	185697
-	-	7230300	25101000	25542060	25960000	25155000	19495000
-	-	-	-	-	-	-	1254600
-	-	-	265500	14622000	16809000	16875000	13253006
3225508	3157835	3607591	3316416	3338401	3379763	3259319	2498001
-	-	-	560900	1231700	718400	240800	850600
1137458	69634609	77503233	107308729	115481245	116031448	120374134	93783678
3469052	47494382	54167780	48637990	45378130	51215250	64720400	35109900
0452372	29764100	33671580	30530770	33339950	28489700	25342980	6941570
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220976	395495	45308	35241	10692	48295	170827	2221130
6686263	111724557	116901568	101629581	91368012	91639725	112643067	47668780
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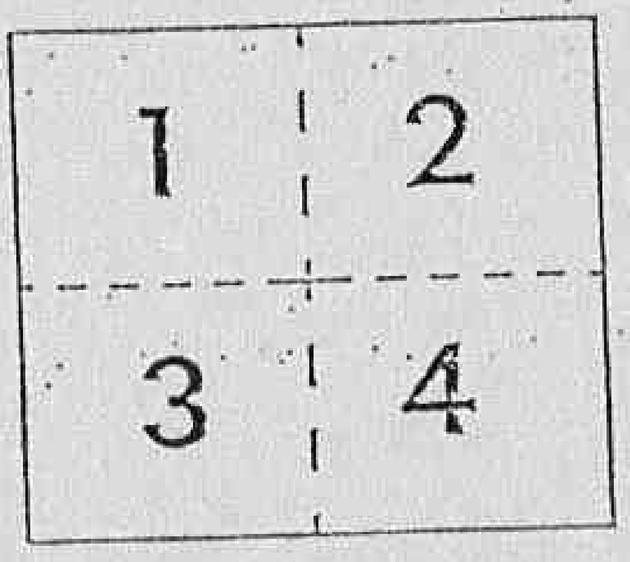
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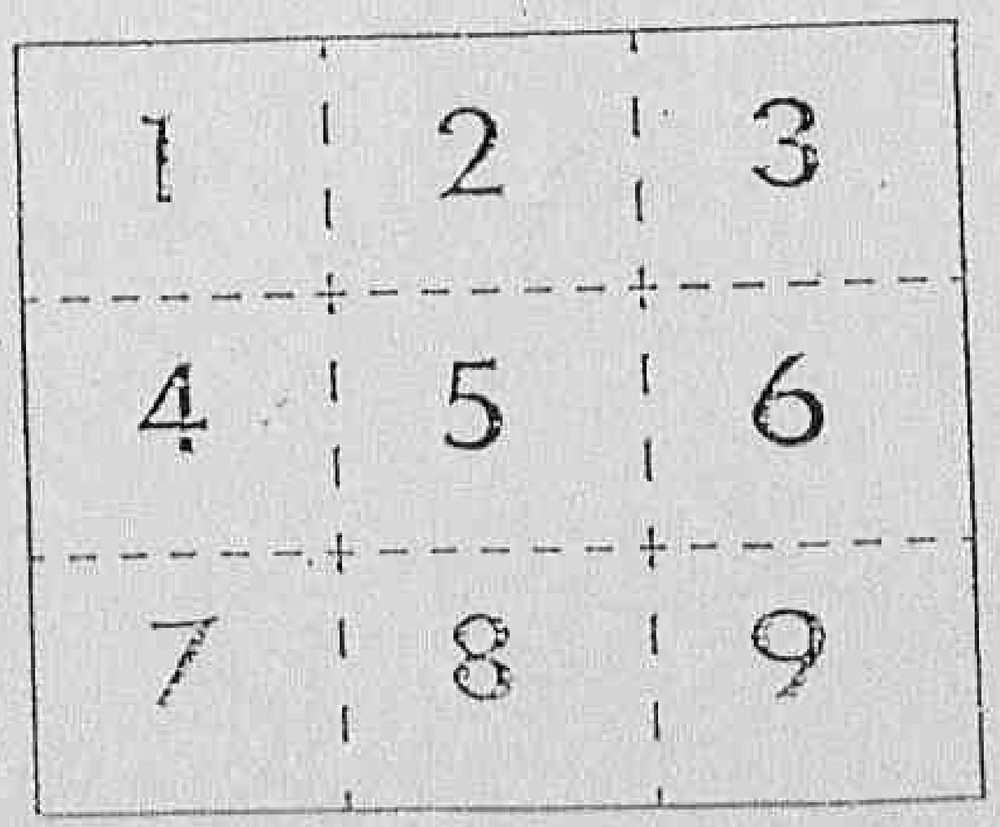
Declassified E.O. 12356 Section 3.3/NND No. 785019

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.







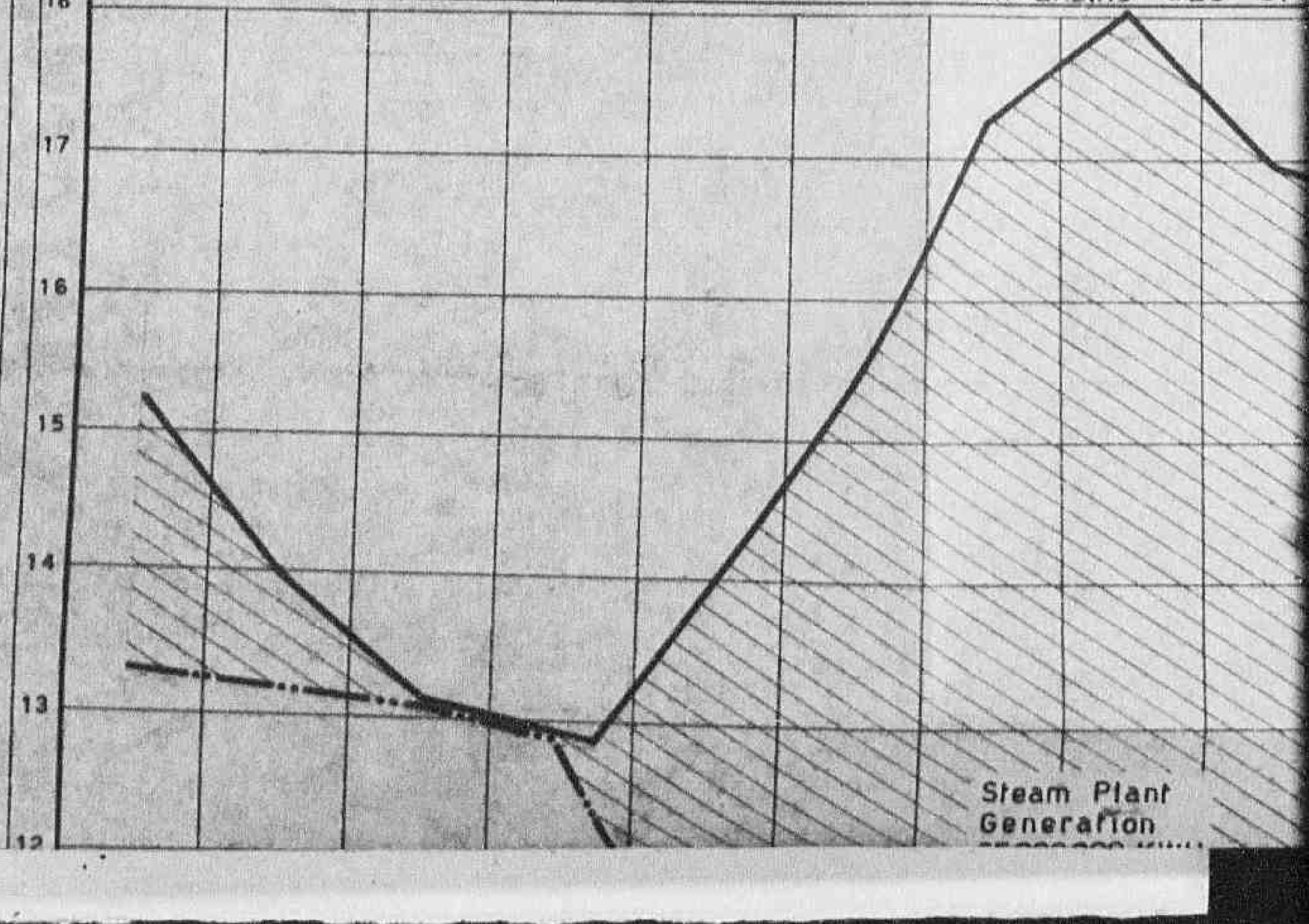
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Declassified E.O. 12356 Section 3.3/NND No. 785019

27
97

Allied Control Commiss
Public Works and Mi
Sub Commission

ESTIMATED OUTPUT TO BE OBTAINED FROM HYDRO ELECTRIC AND STEAM
AND COAL REQUIRED IN SICILY FOR YEAR ENDING DEC. 31



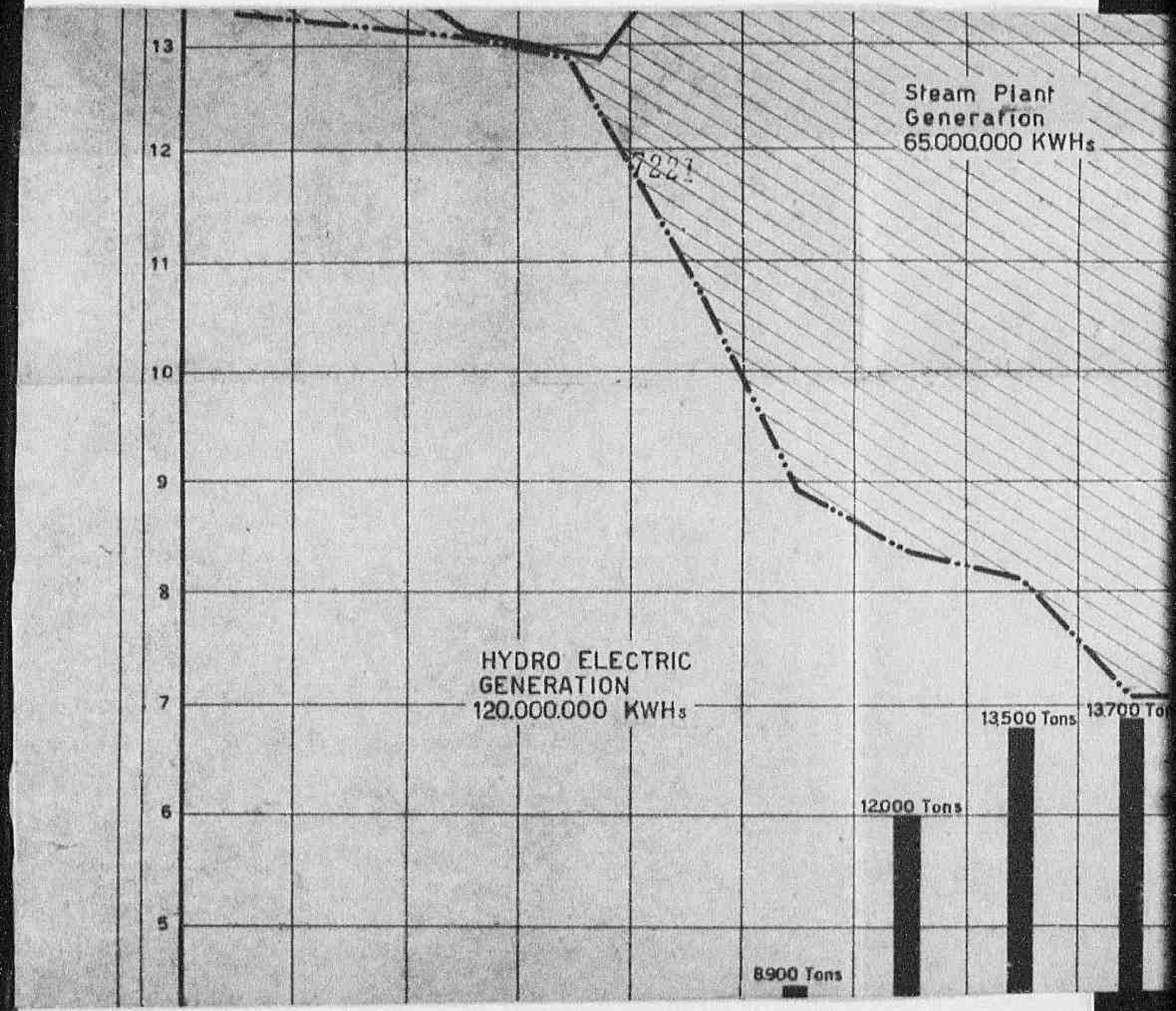
Declassified E.O. 12356 Section 3.3/NND No. 785019

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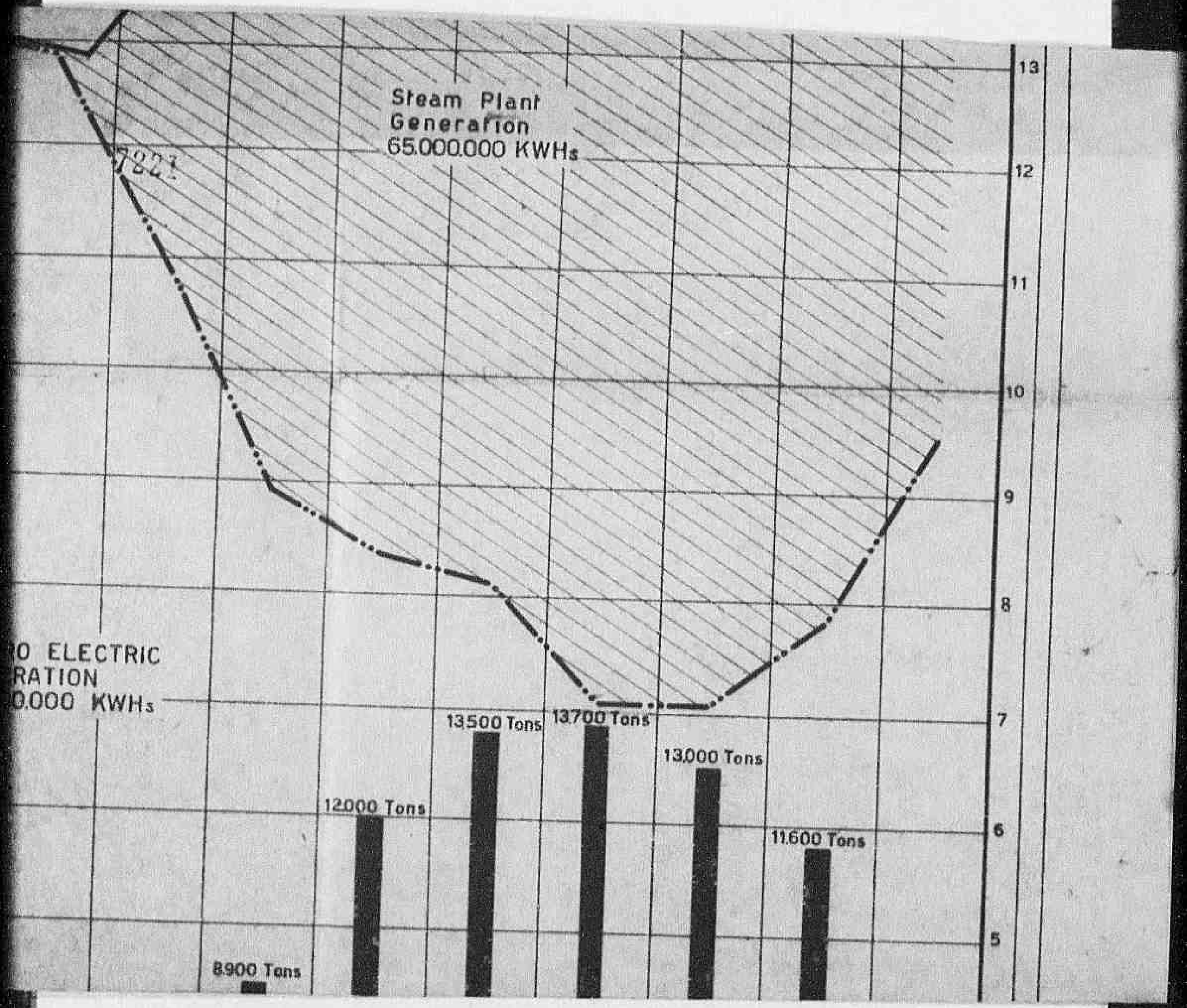
Allied Control Commission
Public Works and Mines
Sub Commission

OBTAINED FROM HYDRO ELECTRIC AND STEAM GENERATING STATIONS
QUIRED IN SICILY FOR YEAR ENDING DEC. 31ST 1944

Declassified E.O. 12356 Section 3.3/NND No. 785019

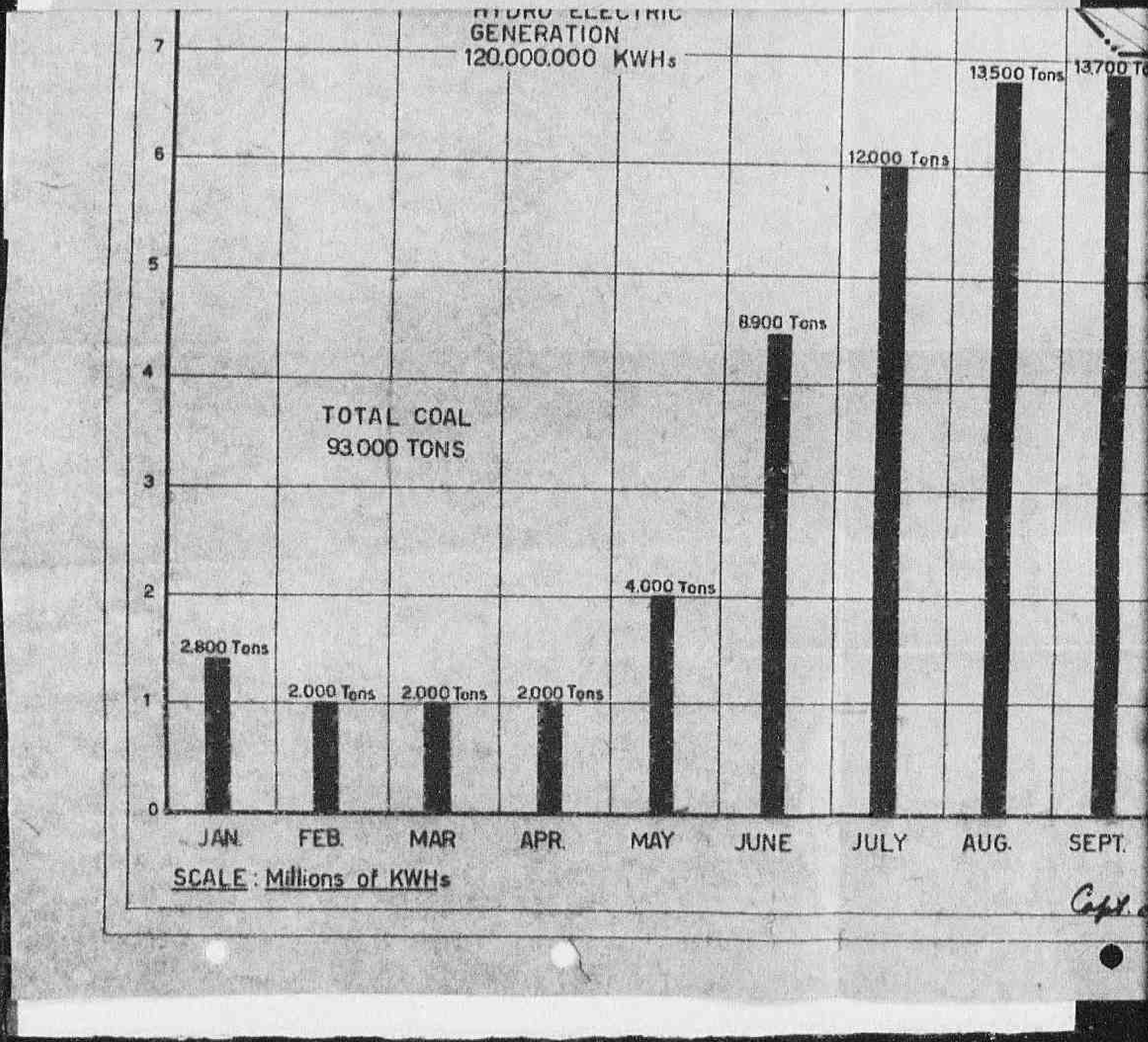


Declassified E.O. 12356 Section 3.3/NND No. 785019



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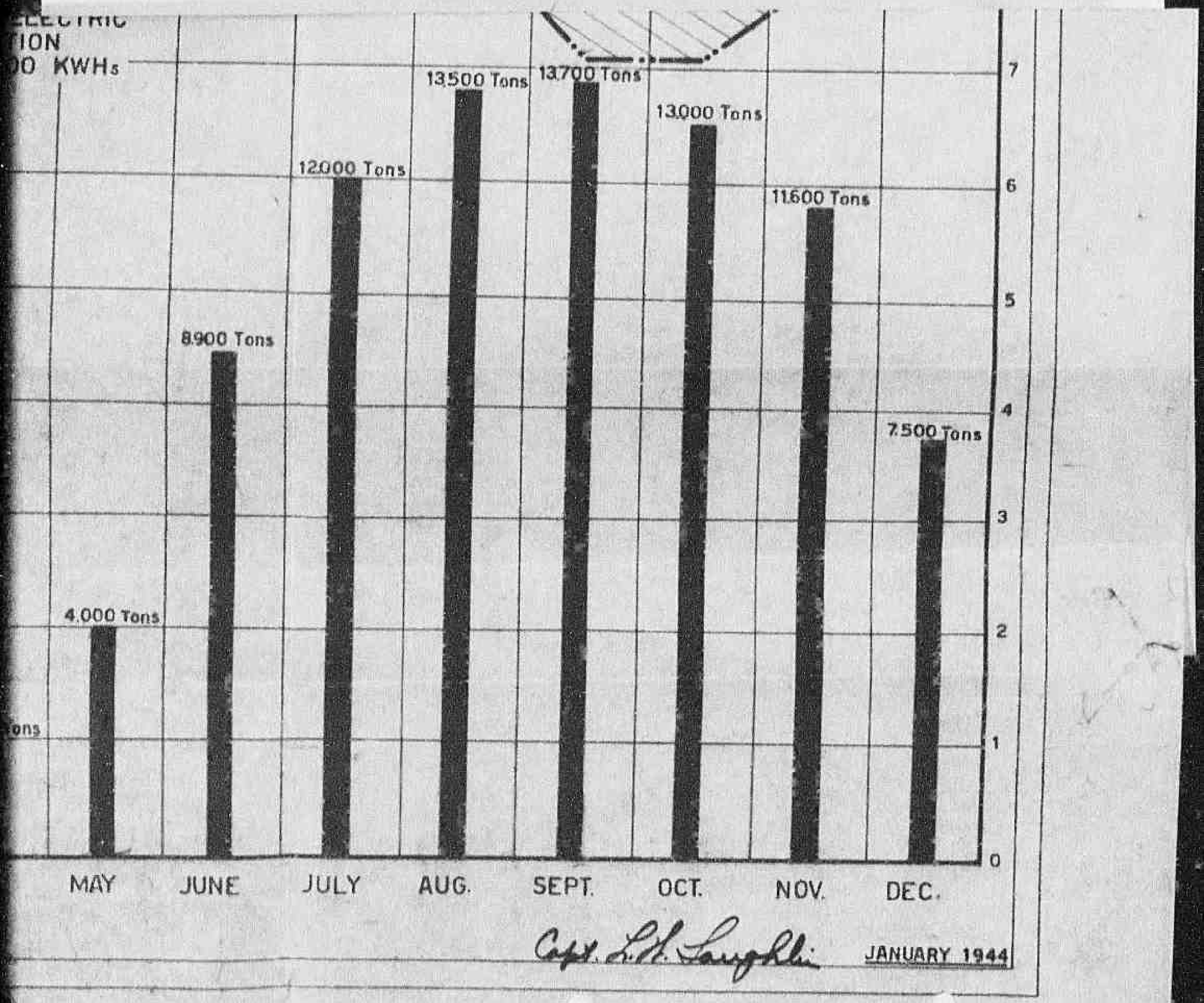
Declassified E.O. 12356 Section 3.3/NND No. 785019



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0609

Declassified E.O. 12356 Section 3.3/NND No. 785019



MAP No. 3

Declassified E.O. 12356 Section 3.3/NND No. 785019

File : ACC/152/PWM 1st Ind. CFB/el
ALLIED MILITARY GOVERNMENT, SICILY REGION HEADQUARTERS,
T.C.U.P.W. & MINING DIV. 20 January 1944 (14/1/44)

TO : Chief, Elect. and Adm. Div., Public Works & Mines Sub-Commission, A.C.C., APO 394.

1 . a . The full file on this study is inclosed, together with one copy of the report. Two copies were sent direct to Capt. Laughlin and another will be sent with the December Operations report.

b . It is suggested that this file be retained at that headquarters, as there will be no one here to handle such reports hereafter.

c . It is requested that this office be furnished one copy of the chart showing percentage allocations to classes I to VI loads.

2 . There is also inclosed a table showing 1938 coal consumption in Sicily according to an official Italian report as indicated. This is for distribution or use as may be desired there.

For the R.C.A.C.,

copy of this letter and attached filed 16-AC-099-PWMM.

C.P. BOLICK
Lt. Col.,F.A.,
Chief, T.C.U.P.W.
& Mining Div.

INCL. (4):
1. Basic.
2. Worksheets of Capt. Laughlin.
3. Copy report of " "
4. Coal consumption, 1938, Sicily (6).

7229

Declassified E.O. 12356 Section 3.3/NND No. 785019

INCL. 4

95

COAL CONSUMPTION - 1938
SICILY (Metric tons)

IMPORTED:

Coal	119,452
Nafta	1,591
Gas coke	10,661
Byproduct Distillates	70.

ITALIAN FUELS:

Arsa coal	-(Istria)	50,281
Sulcis coal	-(Sardinia)	80,068
Olive residue cake		41,144
Wood residue		8,226
Grape residue		8,101
Wood Charcoal		1,085

Data by " Assoc. Nat. per il Controllo della Combustione "
Palermo

7214

Declassified E.O. 12356 Section 3.3/NND No. 785019

Tele Field Sec in
Lt. Col Lasbury 39-HC/155/Pwm Noted Wkly 27-1-44

Note #4 a page 3. G. E. Co. is submitting a graph on load and coal study for 1944 which may show some variations.

Note #3 - a, b, c page 3 & 4 indicates need for Steam power plant repair supplies being handled by Col. Crowden. Use of steam plants in production of electric energy will ~~become~~ become progressively greater beginning about the middle of June.

L. H. Laughlin (sgd) 721

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
(Rear Detachment)
APO 394

Econ Div
17494

22 January 1944

To: Lt Col L.A. Jenny,
Director, P.W. & M. Sub-Commission.

I attach 3 copies of a report from Lt Col C.P. Bolick on the SGES, Sicily. I have seen Lt Col Bolick and am arranging to go with him to see the operation of a boiler at the Palermo Power Station, using Sardinian coal, to see what possibility there is of using increased tonnage of that coal.

The Rear Party isexpecting to move to Naples on or about the 31 January 44, and I expect to arrive with them.

Major,
(W. Knight)
P.W. & M. Sub-Commission,
(Rear).

Will you kindly note and see me with it.
We should represent all points to
instead of importing it from U.K.

7217

Declassified E.O. 12356 Section 3.3/NND No. 785019

92

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 394

CFB/el

File : RTC 463

18 January 1944

SUBJECT : Estimates of Fuel Requirements of S.G.E.S., Sicily.

TO : Director, Public Works & Mining Sub-Commission.

1 . As was recognized in basic communication, forecasts of fuel requirements involve many "ifs".

a . As an example of runoff variation, that supplying the Cassuzze plant varied from 26.7 M.M.C. in 1939 down to 12 M.M.C. in 1943. This winter has started off above average; but heavy early rains have in the past stopped suddenly.

b . None of the three steam plants are in condition to operate through the year without extensive repairs. With nominal machine ratings totalling 48,500 Kws., about 13,000 Kws. can be operated to-day when proper fuel is burned.

c . Present estimated time of completion of repairs to the 70 Kv. tie line is 15 March. It is believed that the S.G.E.S. will be able to repair or replace the vital tap changing mechanism in the Catania Substation for this line. Meanwhile water is occasionally wasting due to inability to "dump" power.

d . It is not feasible to meet the date set for submission of these reports, monthly. Due to poor communications data for December for the further stations have not yet reached the Palermo Headquarters of the S.G.E.S.; and the raw data will need considerable analysis.

For example, to obtain the system load curve, it will be necessary to obtain from the 17 stations their hourly "send out", add them by hours, and plot the resultant curve. (A helpful factor is the fact that some of the 17 are not operating and others operate in groups). To collect the data by special messenger would require a 3 to 5 day trip by car (if a car were available).

The various items called for will be submitted as quickly as they become available.

721

1397

Declassified E.O. 12356 Section 3.3/NND No. 785019

2 . Present water storage is somewhat low.

a . Piana dei Greci (for Casuzze) - contained 9.0 M.M.C. (millions of cubic meters, each equivalent to nearly 1 Kwhr.) on 15 January 1944, against 12.5 M.M.C. on 15 January 1943. Gravity flow requires 12 M.M.C. and optimum filling of the reservoir requires 33 M.M.C. Average annual runoff is about 21 M.M.C. Allowance must be made for considerable evaporation from the large lake.

b . The Prizzi reservoir (for S. Carlo et al) was not in use for the full 1943 season. There are about 3 M.M.C. now in storage with slightly under 9 M.M.C. capacity. The Margi R. project is being pushed in an effort to capture an additional 1 M.M.C. for this reservoir.

c . The other hydro plants do not have appreciable storage.

d . No major repairs are in progress or needed.

3 . None of the steam plants are in good shape; and full supply has been erratic.

a . Catania is capable of fairly complete operation but requires shutdown for deferred maintenance on turbines, condensers, boilers, and auxiliaries.

b . Palermo is limited by boiler capacity.

(1) The pulverized fuel boiler has been out of operation for some years. Repairs are in progress, but are limited by lack of materials.

(2) The other two small boilers are capable of supplying steam sufficient for 800 to 1,800 Kw. each, depending on their state of repair and the grades of coal used. They are shut down for repairs about 30% of the time.

(3) The 5,000 Kw. turbine operates satisfactorily. The 7,500 Kw. machine has been repaired and the generator is being operated on short circuit preliminary to its being used to carry load. This additional capacity is not useful, however, unless the pulverized fuel boiler is repaired.

(4) Tests are to be run on two Riley grate boilers using Sardinian coal.

(5) This is the least efficient plant; burning as high as 6.5 lbs. of Sardinian coal per Kwhr, recently, during a preliminary test.

c . The boilers in Porto Empedocle are in good shape and one was built to burn Sardinian coal.

(1) The rotor which was injured by a shell

Declassified E.O. 12356 Section 3.3/NND No. 785019

0 0 90

has been worked over at Palermo and is now en route back to Porto Empedocle. It should be capable of delivering up to 3,000 Kw. peaks. Efficiency is expected to be about 3 to 4 lbs. of Sardinian coal per Kwhr.

4 . An excellent study was made of load and production expectancies for 1944, by Capt. Laughlin of your office. Full account was taken of directives and of 1943 experience, in formulating the curves. Because they only point out the salient features, they must be used with considerable care. (Incl. no. ___).

a . The S.G.E.S. is preparing a similar study to present their opinions, on the same general basis. Their preliminary estimates call for increased use of coal for January through April and decreased use in the dry months. This is highly desirable if it can be done.

5 . Limitation of load is largely by rotation of service and limitations as to hours or days of the week on which service is made available. There are comparitively few customers to whom service is currently denied; and all vital industries are being given 24-hour service, 7 days per week.

(A "vital industry" as used above, is one requested by a military unit for military operations; or certified as essential by a Regional AMG authority).

Large customers (e.g. the Palermo cement plant which desired 270 Kws. for grinding cement clinker) have been operated a few days at a time when rains made water power available, and shut down when rains stopped. It may be safely stated that power will not be available for even important industries required for normal life.

6 . This study will furnish in tentative form the data requested in paragraph 4.

For the R.C.A.O.,

C.F. Bolick.

C.F. BOLICK
Lt. Col., F.A.,
Chief, T.C.U.P.W.
& Mining Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Mines Sub-Commission
APO 394

El & Adm Div.
WML/ocb
83

ACC/155/PWM

28 Jan 44

Subject: Electricity, Sicily.

To : Chief, T.C.U.P.W. & Mines Division, Region I.

1. With reference to the two copies of Capt Laughlin's report and charts, which were forwarded to this station by Major Knight, we are particularly interested in Major Bowman's statement in his letter to Capt Laughlin that tests are being carried out using only Sardinia coal.

2. Experience which we had in England in the burning of low grade fuels on chain grate stokers showed that the normal forced draught was quite insufficient to maintain combustion. Increase in the forced draught and the excess air over the fire gave the desired results and the very low grades of fuel were burned satisfactorily.

3. We shall be glad to have the results of the tests and if possible the evaporative power of the fuel expressed say in lbs of water evaporated per lb of fuel or the equivalent measurements that they use. It is appreciated that the instruments available at Palermo may not be sufficient to give test results but we shall be glad to have what information is available.

W.M. LAPPER,
Lieut-Colonel,
Chief, El & Adm Div.

721

Declassified E.O. 12356 Section 3.3/NND No. 785019

COPY

MEMORANDUM

30 - AC/155/PWM

5 Dec 43 82

To: Lt-Col Lapper.

From: Capt L.W. Laughlin.

Subject: Materials and supplies for General Electric Co, Palermo, Sicily.

1. Major Bowman (PW Region I) and the writer conferred with Lt-Com A.L. Myrland, USN, on Dec 5th relative to obtaining needed operating and maintenance supplies for the G.E. Co. from Naval stores.

2. Needed supplies are:

(a) Steam turbine oil;
(b) Boiler tubes.
(c) Firebrick.
(d) Steel plate and shapes.

Note: Many other power plant, substation, transmission and distribution supplies are desired by G.E. The above items are considered important in the production of electricity.

3. The Navy stores contain some turbine oil that is the property of the Allied Governments. The Italian supplies acquired by the Navy contain some boiler tubes, steel plate and shapes and a limited amount of firebrick.

4. The question is raised as to the correct procedure to follow to permit the Navy to release material from its own stores to a private company and the release of Italian supplies to a private company. Ownership of the Italian supplies is unknown and no information is available as to its value or price in order to determine the amount to charge the G.E. Co.

5. The questions raised in paragraph 4 will, it appears, have to be answered by competent authority before any transactions can be made or the material made available to G.E.

(Signed) L.W. Laughlin,
Capt, S.R.

See Lt-Col Harris, Property Control, as to ownership of Navy stocks, See Capt Acker Ratz, Finance, Via Bari on payment. Let G.E. Co buy firebrick direct from S.A. Ferro e Metalli Co.

Let Navy turn over above to AMG on receipt and AMG Region I sell to G.E., money to go to cost of operation of Ntl Govt.

Phone F.M. Reiter: No 10002 (Foreign Trade). 7213

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
Rear Detachment.
APO 394

39-AG/155/Pwm

To: Lt Col L.H. Jenny, P.W.M. Sub-Commission, HQ AMG.

SUBJECT: Reports on S.G.E.S.

Herewith 2 copies of Capt Laughlin's report and charts, which have been forwarded to this HQ by Capt Bowman, Region I, for attention of Capt Laughlin.

W. Knight. Major,
(W. Knight)
P.W. & M. Sub Commission,
HQ. AMG. (Rear)

21 January 1944.

7213

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 394

MEMORANDUM 12 January 1944

SUBJECT: Anticipated 1944 Fuel and electric energy requirements Societa Generale Elettrica della Sicilia.

1. The attached sheet of graphs labelled "A" - "A" is intended to reflect the anticipated trend of energy and fuel needs of the S.I. economy for the year 1944.

2. The graphs are subject to:-

a. Variations in rainfall affecting hydrogeneration.

b. Unforeseen load conditions.

c. The fact that the physical plant may not be able to fully utilise water and coal as required.

d. The completion of emergency repairs to the 70kv. tie line between the plants on the eastern side of the island and the plants on the western side of the island. This line was damaged during military operations. Without this tie line in operation, water power may be wasted on one side of the island which will have to be replaced by energy production from coal on the other side of the island. This will require coal in addition to the amounts shown. The estimated date of completion of repairs to the tie line is March 15 1944.

e. The ability of the 70kv.line to transport the quantity of hydro power that will be needed and available.

f. The repair and use of the tap changing equipment on the 70kv. transformer in the Catania substation controlling the 70kv.line (e).

3. The graphs are based on such factual data as is available from the S.I. Co's actual experience during 1941 and 1942. In preparing the forecast all phases of the military effort, which would be directly or indirectly affected by electric power, were given first consideration. Non-essential consumption from the forecast.

4. The forecast on power generation of 180,000,000 KW

Declassified E.O. 12356 Section 3.3/NND No. 763019

2. Variations in rainfall affecting hydroproduction.

3. Unforseen load conditions.

4. The fact that the physical plant may not be able to fully utilize water and coal as required.

5. The completion of emergency repair to the 70kv. tie line between the plants on the eastern side of the island and the plants on the western side of the island. This line was damaged during military operations. Without this tie line in operation, water power may be wasted on one side of the island which will have to be replaced by query production from coal on the other side of the island. This will require coal in addition to the amounts shown. The estimated date of completion of repairs to the tie line is March 15 1944.

6. The ability of the 70kv.line to transport the quantity of hydro power that will be needed and available.

7. The repair and use of the top charging equipment on the 70kv. transformer in the Osmia substation controlling the 70kv.line (6).

3. The graphs are based on such factual data as is available from the O.J. Co's actual experience during 1941 and 1942. In preparing the forecast all phases of the military effort, which would be directly or indirectly affected by electric power, were given first consideration. Non-essential uses were omitted from the forecast.

4. The forecast on hydro generation of 120,000,000 KWH for 1944 is the average of the company's actual experience for the years 1941 and 1942 which closely approximates the 13 year average curve.

5. The graphs, reflecting the sales totaling 120,000,000 KWH for the following classes, represent estimates and appraisals based from a study of the factual data obtained from the records of the O.J. Company. Due consideration was given to the knowledge and experience gained during the latter part of the year 1943. During this period full military control was exercised with the use of electricity reduced to a minimum.

7217

Declassified E.O. 12356 Section 3.3/NND No. 748049

Class I	- Military	16,340,000 Kwh.
Class II	- Vital Industry	40,600,000 Kwh
Class III	- Military Industry	3,200,000 Kwh
Class IV	- Food production	53,400,000 Kwh
Class V	- Essential Industry	2,200,000 Kwh
Class VI	- Domestic lighting & Power	9,100,000 Kwh
1944 Total		125,000,000 Kwh

6. As indicated on the graph the C.E. company has had, in the past, requests for electric service which would average 25,000,000 Kwh per month estimated for 1944 after adjustments where as the 1944 forecast will only permit and average monthly use of 15,400,000 Kwh.

7. Line losses in 1942 were 24,000,000 Kwh or 23% on 130,000,000 Kwh delivered. With 125,000,000 kwh delivered there will be a smaller kwh loss but a higher percentage. The estimate is placed at 30,400,000 Kwh or 23 1/2%.

8. The coal requirements are based on 3.15 lbs of coal being required per net kwh delivered from the steam plants. This is higher than experienced in 1941 at 2.35 lbs per kwh for 91,000,000 Kwh net delivered and for 1942 of 2.23 lbs per Kwh on a net delivery of 112,000,000 kwh. The forecast for 1944 estimates a gross steam plant production of 85,000,000 kwh. Allowing for auxiliary plant requirements, operation in connection with voltage regulation, holding boiler fires for emergency service and lowered efficiency from decreased production and desired maintenance the 1944 fuel requirements are estimated to be 91,000 tons. This is equivalent to 2.05 lbs per kwh gross plant production and 3.15 lbs per kwh net delivered to the lines by the steam plants.

9. Attention is called to the fact that the amount of 91,000 tons does not provide the fuel required by about 30 small producer gas internal plants scattered over the island. These plants require 500 tons of coal per month; the largest consuming approximately 50 tons per month. The L.E.C. general coal supply provides a decentralized method of distribution to these small units. The request for coal for these units is included in the L.E.C. request for coal.

10. The straight line "A" represents the energy produced from voltage regulation emergency service and holding boiler fires. This represents 1,000,000 kwh per month and is portrayed as a straight line curve. The 12,000,000 Kwh for the year represented there by are included and are a part of the 85,000,000 Kwh gross steam plant production anticipated for 1944.

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Declassified E.O. 12356 Section 3.3/NND No. 785019

have as the 1944 forecast will only permit and average monthly use of 15,400,000 Kwh.

7. Line losses in 1942 were 54,000,000 Kwh or 23% of 180,000,000 Kwh delivered. With 145,000,000 Kwh delivered there will be a smaller Kwh loss but a higher percentage. The estimate is placed at 50,400,000 Kwh or 25 1/2%.

8. The coal requirements are based on 3.15 lbs of coal being required per net Kwh delivered from the steam plants. This is higher than experienced in 1941 at 2.35 lbs per Kwh for 91,000,000 Kwh net delivered and for 1942 of 2.21 lbs per Kwh on a net delivery of 112,000,000 kwh. The forecast for 1944 estimates a gross steam plant production of 65,000,000 Kwh. Allowing for auxiliary plant requirements, operation in conjunction with voltage regulation, holding boiler fires for emergency service and lowered efficiency from decreased production and deferred maintenance the 1944 fuel requirements are estimated to be 91,000 tons. This is equivalent to 2.35 lbs per Kwh gross plant production and 3.15 lbs per kwh net delivered to the lines by the steam plants.

9. Attention is called to the fact that the amount of 91,000 tons does not provide the fuel required by about 80 small producer gas internal plants scattered over the island. These plants require 500 tons of coal per month; the largest consuming approximately 90 tons per month. The A.F.C. general coal supply provides a decentralized method of distribution to these small units. The request for coal for these units is included in the A.N.C. request for coal.

10. The straight line "A" represents the energy produced from voltage regulation emergency service and holding boiler fires. This represents 1,000,000 kwh per month and is portrayed as a straight line curve. The 12,000,000 Kwh for the year represented above by are included and are a part of the 65,000,000 Kwh gross steam plant production anticipated for 1944.

LOUIS F. LAUGHLIN
Capt. U.S. Army

0424

Declassified E.O. 12356 Section 3.3/NND No. 785019

Societa Gener

Anticipated prod
fuel requirements,

NOTE: The forecasts represented by the following graphs, are based on such factual data as is available. The curves are intended to reflect the anticipated trend of energy and fuel needs subject to variations in rainfall and unforseen load conditions.

NOTE: Estimated possible average monthly load 25,000,000Kw hrs

Essential
1944 Average load/mo. 15.4

Losses 30%/yr
(28½% Gross Production)

20
19
18
17
16
15
14
13
12

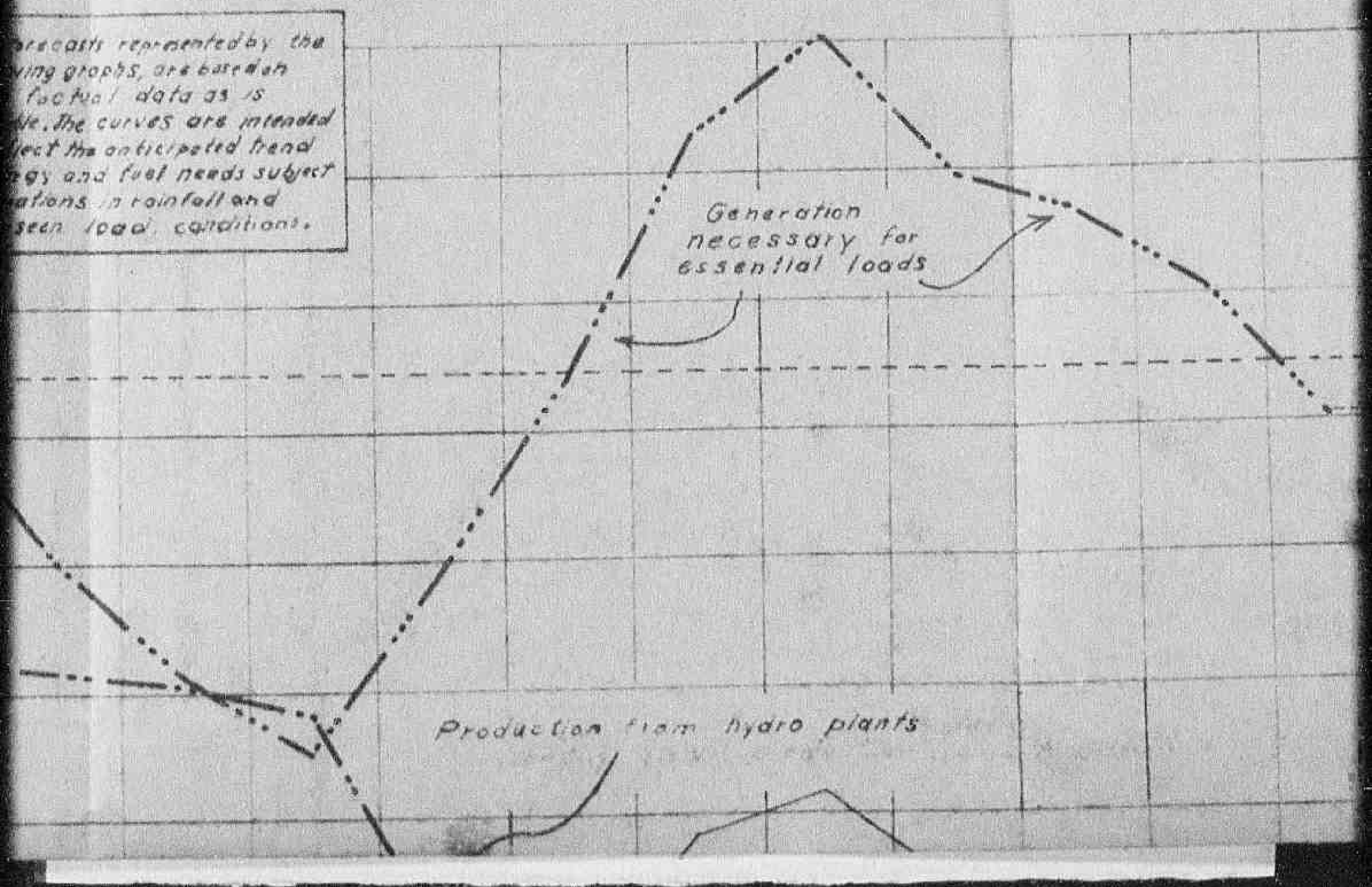
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Declassified E.O. 12356 Section 3.3/NND No. 785019

Societa Generale Electrica della Sicilia

Anticipated production, and fuel requirements, 1944 TABLE "A-A"

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factual data as is
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seen load conditions.



Declassified E.O. 12356 Section 3.3/NND No. 785019

...lectrica della Sicilia

..., and TABLE "A-A"

Declassified E.O. 12356 Section 3.3/NND No. 785019

Losses 50 #/yr
(28% Gross Production)

CLASS VI
Domestic Lighting + Pr.
9.3 /yr.

CLASS V
Essential Industry
2.2 /yr

CLASS IV
Food Production
53.4 /yr

CLASS III
Military Industry
3.2 /yr

Tons/mo - Millions

14
13
12
11
10
9
8
7
6
5

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Declassified E.O. 12356 Section 3.3/NND No. 785019

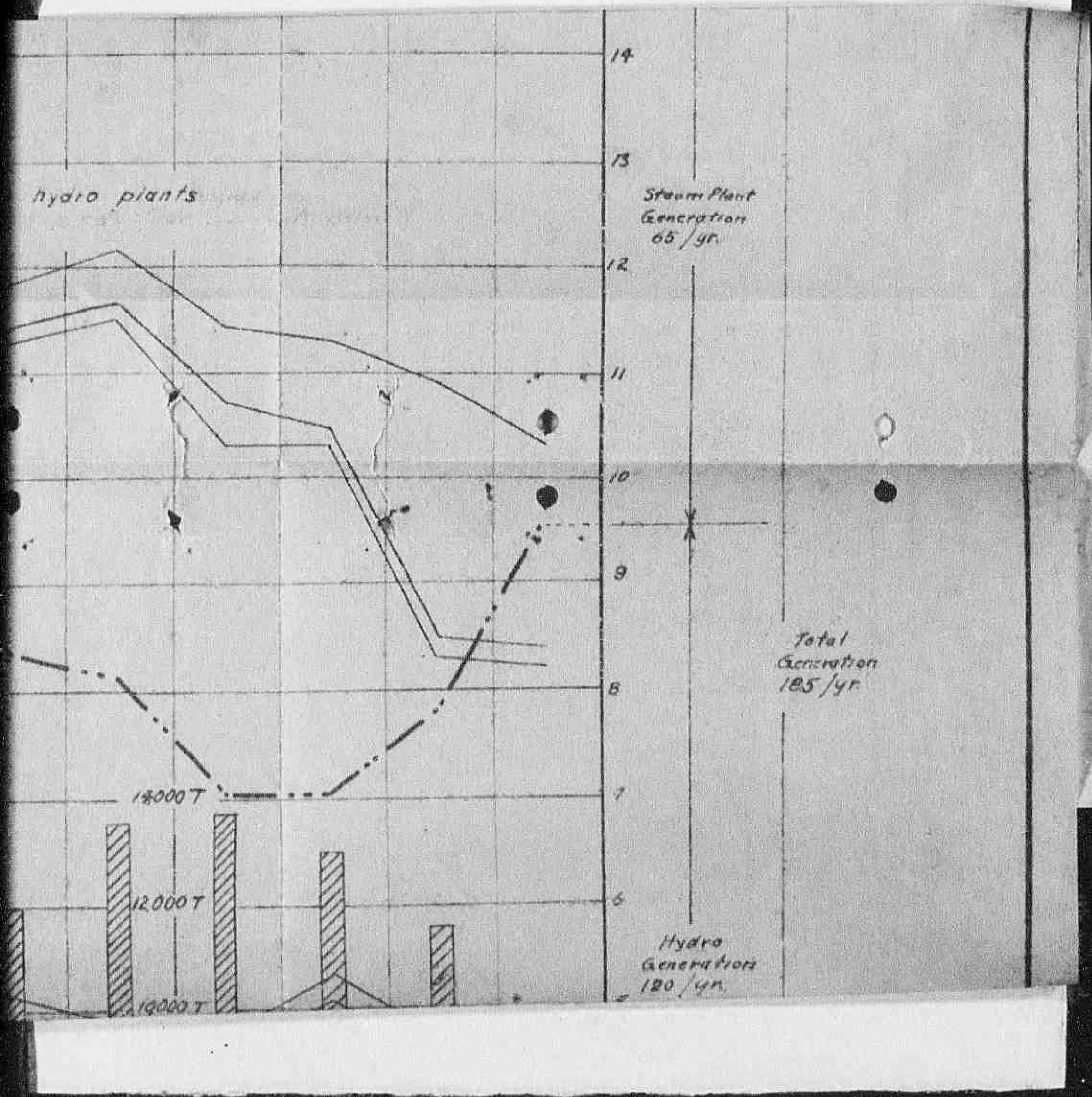
Production from hydro plants

14000 T

12000 T

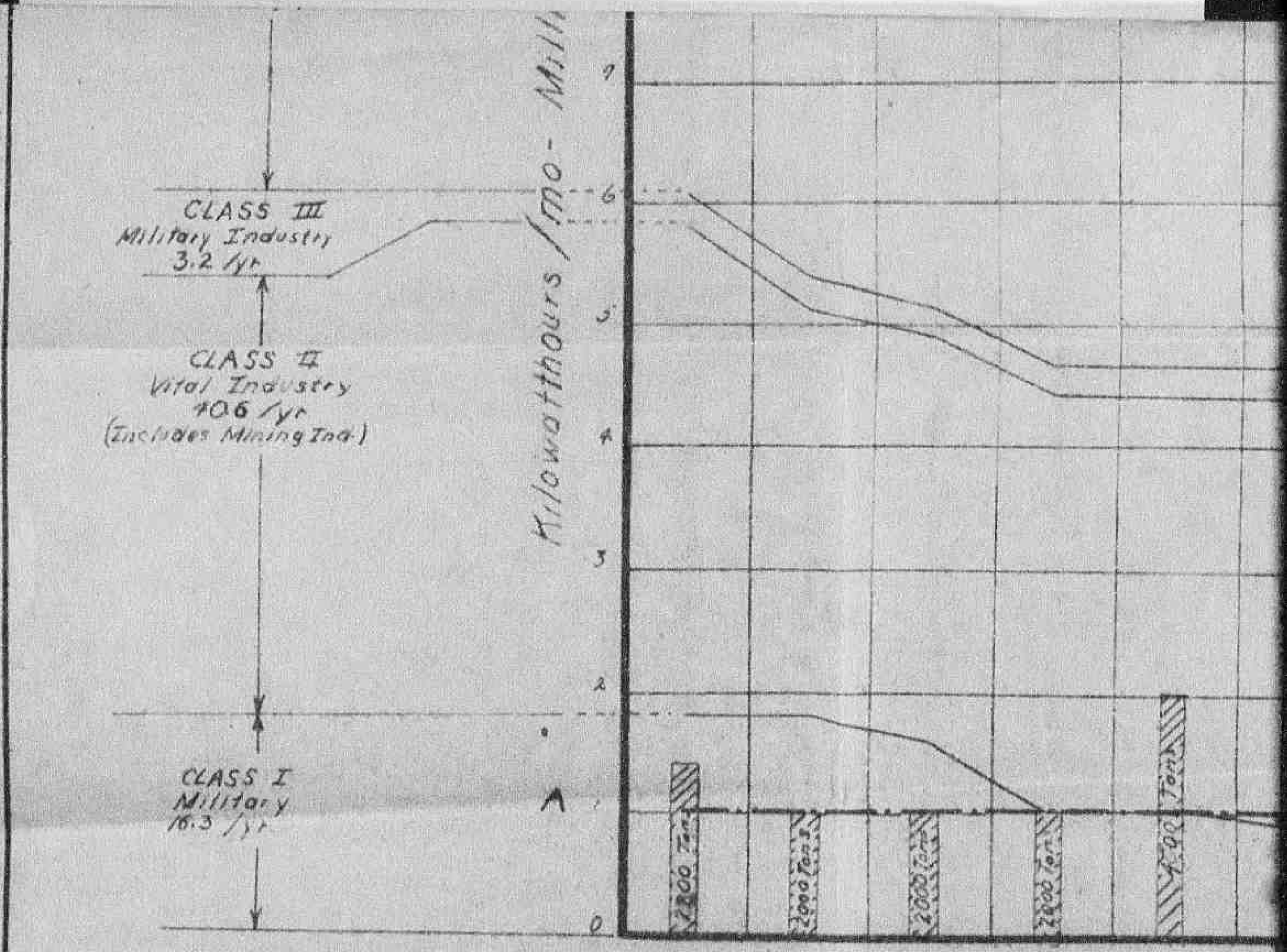
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Declassified E.O. 12356 Section 3.3/NND No. 785019



0630

Declassified E.O. 12356 Section 3.3/NND No. 785019

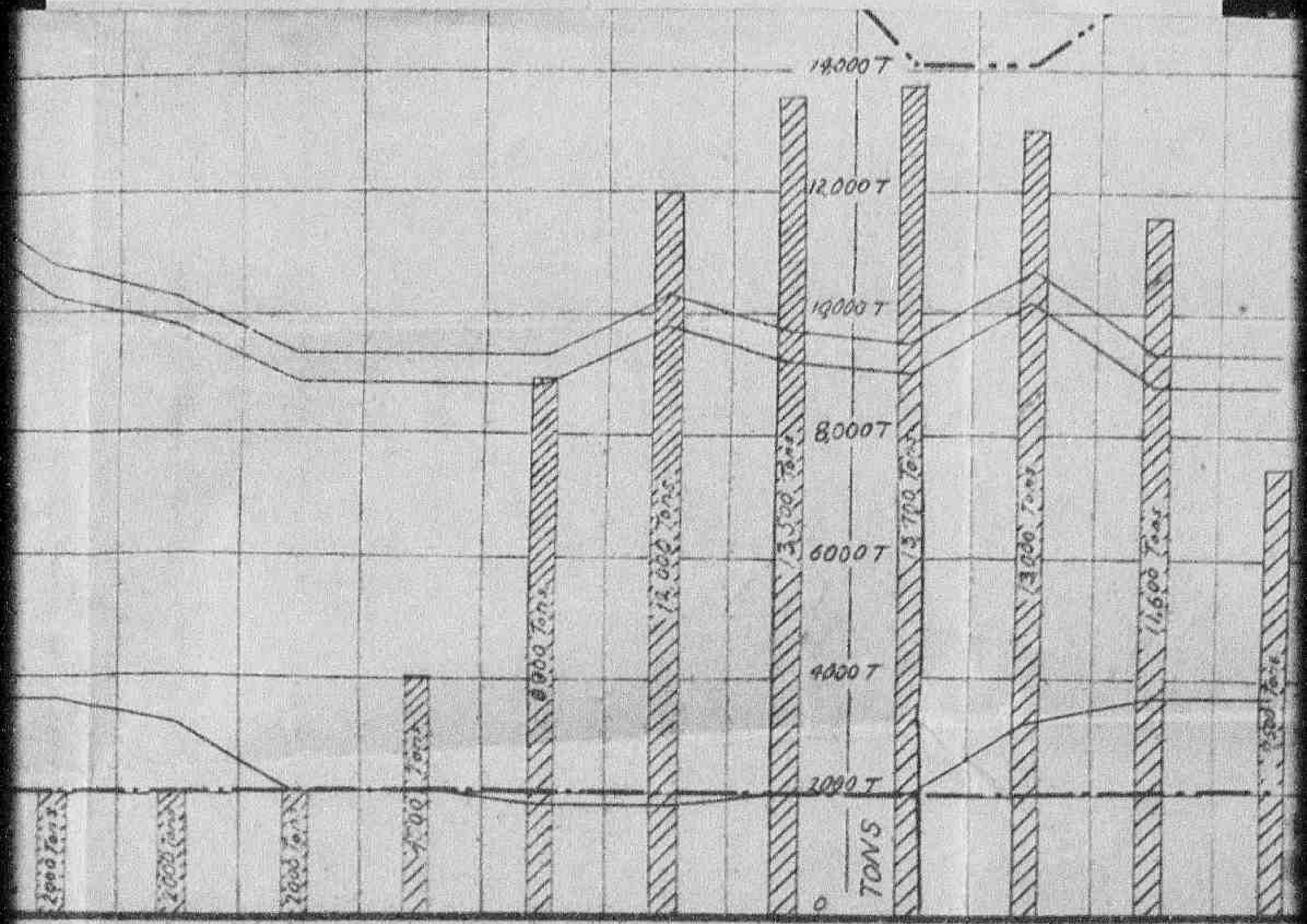


Data compiled under direction of and approved by Region #1 Utilities Officer.

Clair F. Bowman Major, C.E.

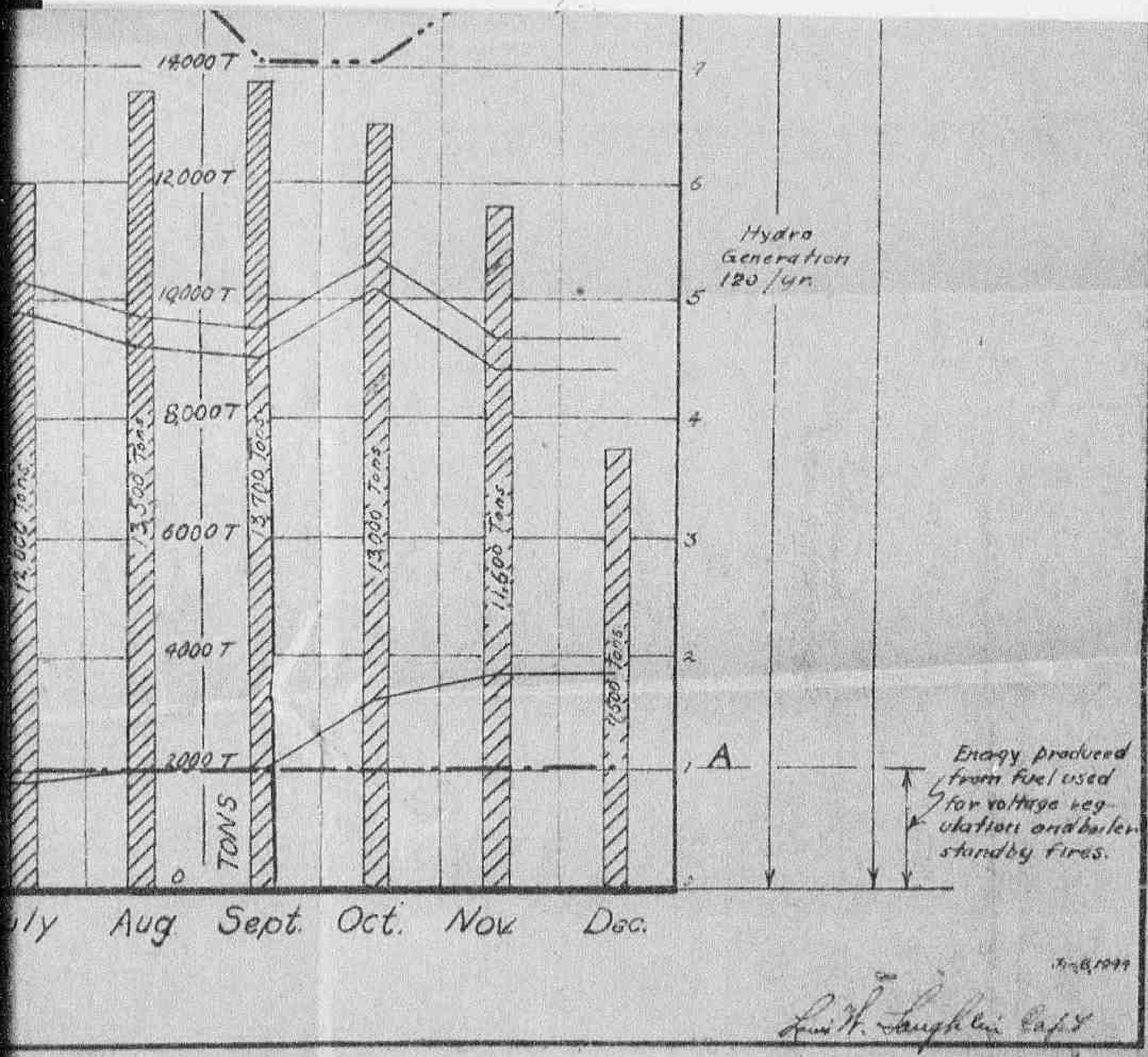
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Declassified E.O. 12356 Section 3.3/NND No. 785019



0437

Declassified E.O. 12356 Section 3.3/NND No. 785019



1-8-1944

Lewis F. Kraft Engr

Declassified E.O. 12356 Section 3.3/NND No. 785019

Rear Detachment.
APO 374

To: Lt Col L.H. Jenny, P.W.B. Sub-Commission, HQ AFHQ.

SUBJECT: Reports on S.G.E.S.

Herewith 2 copies of Capt Laughlin's report and charts, which have been forwarded to this HQ by Capt Bowman, Region I, for attention of Capt Laughlin.

A.C. 155/PWB
#39

Major.
(W. Knight)
P.W. & B. Sub Commission,
HQ. AFHQ. (Rear)

21 January 1944.

7208

Declassified E.O. 12356 Section 3.3/NND No. 785019

13 January 1944

Capt. Laughlin:

In attaching two copies of your report for your own use. Two others are going forward to P.W. & M. S.C. as soon as the other requirements can be met.

Tomorrow we are trying a boiler here on 100% Sardinian coal to see what happens. I am getting Col. Bolick, Capt. McQuire and a Sicilian boiler expert to help me watch the test.

Modica asked permission to submit his own version of your chart. I told him I'D welcome it.

The roter started south the 11 th. Thanks a lot for your help and your company. If you get any information as to the location of that unit I am interested in, let me know will you?

Yours truly
Clair F. Bowman
Clair F. Bowman
Major C.E.

Lt Col Kapp
24/1

7207

Declassified E.O. 12356 Section 3.3/NND No. 785019

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 394

MEMORANDUM 12 January 1944

SUBJECT: Anticipated 1944 Fuel and electric energy requirements Societa Generale Elettrica della Sicilia.

1. The attached chart of graphs labelled "A" - "A" is intended to reflect the anticipated trend of energy and fuel needs of the S.G.E. company for the year 1944.

2. The graphs are subject to:-

a. Variations in rainfall effecting hydroproduction.

b. Unforseen load conditions.

c. The fact that the physical plant may not be able to fully utilize water and coal as required.

d. The completion of emergency repairs to the 70Kv. tie line between the plants on the western side of the island and the plants on the eastern side of the island. This line was damaged during military operations. Without this tie line in operation, water power may be wasted on one side of the island which will have to be replaced by energy production from coal on the other side of the island. This will require coal in addition to the amounts shown. The estimated date of completion of repairs to the tie line is March 15 1944.

e. The ability of the 70Kv. line to transport the quantity of hydro power that will be needed and available.

f. The repair and use of the tap changing equipment on the 70Kv. transformer in the Catania substation controlling the 70Kv. line (e).

3. The graphs are based on such factual data as is available from the S.G.E. Co's actual experience during 1942 and 1943. In preparing the forecast all phases of the military effort, which could be directly or indirectly effected, by electric power, were given first consideration. Non-essential uses were omitted from the forecast.

4. The forecast on hydro generation of [illegible] KW [illegible] of the emergency repairs

7206

a. Variations in rainfall affecting hydro power.

b. Unforeseen load conditions.

c. The fact that the physical plant may not be able to fully utilize water and coal as required.

d. The completion of emergency repairs to the 70Kv. tie line between the plants on the eastern side of the island and the plants on the western side of the island. This line was damaged during military operations. Without this tie line in operation, water power may be wasted on one side of the island which will have to be replaced by energy produced from coal on the other side of the island. This will require coal in addition to the amounts shown. The estimated date of completion of repairs to the tie line is March 15 1944.

e. The ability of the 70Kv. lins to transport the quantity of hydro power that will be needed and available.

f. The repair and use of the tap changing equipment on the 70Kv. transformer in the Setunia substation controlling the 70Kv. line (e).

3. The graphs are based on such factual data as is available from the U.S. Co's actual experience during 1942. In preparing the forecast all phases of the military duty which would be directly or indirectly affected by electric power, were given first consideration. Non-essential uses were omitted from the forecast.

4. The forecast on hydro generation of 140,000,000 KWH for 1944 is the average of the company's actual experience for the years 1941 and 1942 which closely approximates the 13 year average curve.

5. The graphs, reflecting the sales totaling 147,000,000 KWH for the following classes, represent estimates and approximations founded from a study of the factual data obtained from the records of the U.S. Company. Due consideration was given to the knowledge and experience gained during the latter part of the year 1943. During this period full military control was exercised with the use of electricity reduced to a minimum.

Declassified E.O. 12356 Section 3.3/NND No. 785049

Class I	- Military	10,300,000 Kwh
Class II	- Vital Industry	40,600,000 Kwh
Class III	- Military Industry	3,204,000 Kwh
Class IV	- Food production	53,400,000 Kwh
Class V	- Essential Industry	2,300,000 Kwh
Class VI	- Domestic lighting & Power	[illegible] Kwh
1944 Total		125,000,000 Kwh

5. As indicated on the graph the C.E. company has had, in the past, requests for electric service which would average 25,000,000 Kwh per month estimated for 1944 after adjustments where as the 1944 forecast will only permit an average monthly use of 15,400,000 Kwh.

7. Line [illegible] in 1942 were 94,000,000 Kwh or 23% of 150,000,000 Kwh delivered. With 125,000,000 Kwh delivered there will be a smaller Kwh loss but a higher percentage loss. The estimate is placed at 30,400,000 Kwh or 24 1/2%.

8. The coal requirements are based on 3.15 lbs of coal being required per net Kwh delivered from the steam plants. This is higher than experienced in 1941 at 2.39 lbs per Kwh for 91,000,000 Kwh net delivered and for 1942 of 2.43 lbs per Kwh on a net delivery of 112,000,000 kwh. the forecast for 1944 estimates a gross steam plant production of 65,000,000 Kwh. Allowing for auxiliary plant requirements, operation in connection with voltage regulation, holding boiler fires for emergency service and lowered efficiency from decreased production and deferred maintenance the 1944 fuel requirements are estimated to be 93,000 tons. This is equivalent to 2.85 lbs per Kwh gross plant production and 3.19 lbs per Kwh net delivered to the lines by the steam plants.

9. Attention is called to the fact that the amount of 93,000 tons does not provide the fuel required by about 80 small producer gas internal plants scattered over the island. These plants require 300 tons of coal per month; the largest consuming approximately 50 tons per month. The A.F.C. general coal supply provides a decentralized method of distribution to these small units. The request for coal for these units is included in the A.F.C. request for coal.

10. The straight line "A" represents the energy produced from voltage regulation emergency service and holding boiler fires. This represents 1,000,000 kwh per month and is portrayed as a straight line curve. The 12,000,000 Kwh for the year represented there by are included and are a part of the 65,000,000 Kwh gross steam plant production anticipated for 1944.

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use of 15,000,000 kwh.

7. Line losses in 1942 were 54,000,000 kwh or 23% on 130,000,000 kwh delivered. With 125,000,000 kwh delivered there will be a smaller kwh loss but a higher percentage loss. The estimate is placed at 50,000,000 kwh or 28 1/2%.

8. The coal requirements are based on 3.15 lbs of coal being required per net kwh delivered from the steam plants. This is higher than experienced in 1941 at 2.35 lbs per kwh for 91,000,000 kwh net delivered and for 1942 of 2.23 lbs per kwh on a net delivery of 112,000,000 kwh. The forecast for 1944 estimates a gross steam plant production of 65,000,000 kwh. Allowing for auxiliary plant requirements, operation in connection with voltage regulation, holding boiler fires for emergency service and lowered efficiency from decreased production and deferred maintenance the 1944 coal requirements are estimated to be 93,000 tons. This is equivalent to 2.85 lbs per kwh gross plant production and 3.15 lbs per kwh net delivered to the lines by the steam plants.

9. Attention is called to the fact that the amount of 93,000 tons does not provide the coal required by about 80 small producer gas internal plants scattered over the island. These plants require 500 tons of coal per month; the largest consuming approximately 50 tons per month. The A.M.G. general coal supply provides a decentralized method of distribution to these small units. The request for coal for these units is included in the A.E.S. request for coal.

10. The straight line "A" represents the energy produced from voltage regulation emergency service and holding boiler fires. This represents 1,000,000 kwh per month and is portrayed as a straight line curve. The 12,000,000 kwh for the year represented there by are included and are a part of the 65,000,000 kwh gross steam plant production anticipated for 1944.

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LOUIS V. LAUGHLIN
Capt. U.S. Army

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Fils Electriques Sicile

PRODUZIONE TERMICA 1942

	Catania,	Palermo	Porto Empedocle	Totale
1 -Produzione netta kWh.	64.720.400	19.408.860	28.342.980	112.472.240
2 - " lorda "	70.220.098	21.334.802	31.142.400	122.697.300
3 -Energia per i serv.ausiliari kWh	5.499.698	1.925.942	2.799.420	10.225.060
4 -Consumo totale di carbone Kg	66.249.150	27.647.774	27.613.911	121.510.835
5 -Consumo carb.per kWh prod. netta Kg/	1,023	1,424	0,974	0,990

1941

1 -Produzione netta kWh.	51.215.250	11.886.480	28.489.700	91.591.430
2 - " lorda "	55.657.160	13.109.144	30.685.610	99.451.914
3 -Energia per i serv.ausiliari kWh	4.441.910	1.222. 664	2.195.910	7.860.484
4 -Consumo totale di carbone Kg.	54.181.180	14.628.810	24.213.403	93.023.383
5 -Consumo carb.per kWh prod. netta Kg.	1,057	1,230	0,849	1,015
6 - " " " " " "	0,973	1,116	0,789	0,935

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SGES.— SERVIZIO PRODUZIONE

PRODUZIONE ENERGIA IDRO-TERMO-ELETTRICA NEGLI ANNI 1941–1942

MESI	ALCANTARA 1º SALTO		ALCANTARA 2º SALTO		CASSIBILE		A. BELICE 1º S	
	1941	1942	1941	1942	1941	1942	1941	19
GENNAIO	2 049050	2 106 400	2 775 000	2 795 000	503 650	1 216 950	1 154 160	1
FEBBRAIO	1 640 900	1 845 600	2 466 600	2 508 500	412 250	989 450	1 375 920	1 9
MARZO	1 430 850	2 070 800	2 268 600	2 697 600	481 250	1 396 350	1 911 000	1 0
APRILE	1 237 650	1 977 850	2 126 400	2 823 000	433 250	885 500	2 403 960	1 7
MAGGIO	980 450	1 430 100	1 811 800	2 463 800	412 250	653 750	2 916 840	2 8
GIUGNO	649 750	1 019 200	1 536 200	1 898 000	296 550	565 250	3 649 580	2 7
LUGLIO	585 550	775 600	1 462 000	1 689 800	272 750	462 250	3 106 500	3 1
AGOSTO	543 750	643 250	1 362 200	1 589 800	225 700	490 850	3 947 700	2 7
SETTEMBRE	536 300	578 150	1 399 400	1 455 200	309 800	516 000	2 100 660	2 8
OTTOBRE	682 450	596 900	1 710 200	1 611 800	401 450	582 200	2 494 080	1 6
NOVEMBRE	1 390 700	741 800	2 326 400	1 738 400	803 850	648 850	1 142 400	1 5
DICEMBRE	1 508 600	1 152 800	2 527 000	2 088 600	744 650	1 037 650	1 676 820	1 2
TOTALI	13 236 000	14 938 450	23 771 800	25 359 500	5 297 400	9 445 000	27 879 620	24 5

	PRODUZIONE TERMICA 1942							TOTALE PRODUZI TERMICA	
	CATANIA	PALERMO	REMPEDOCLE	TRAPANI	RACALMUTO	AGRIGENTO	SCIACCA	1941	1
GENNAIO	4 118 860	1 575 540	1 956 920	1 690	—	—	—	4 801 733	7
FEBBRAIO	3 512 986	701 460	1 498 840	—	—	—	439	4 212 276	5
MARZO	2 492 054	801 720	2 636 400	—	—	—	133	4 382 660	5
APRILE									

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GLI ANNI 1941-1942

LE	A. BELICE 1º SALTO		A. BELICE 2º SALTO		SOSIO 1º SALTO (S. Carlo)		SOSIO 2º SALTO (Favara)		SOSI (P
1942	1941	1942	1941	1942	1941	1942	1941	1942	1941
1 216 950	1 154 160	1 124 040	105 835	83 308	3 566 000	3 552 000	—	—	2 138
989 450	1 375 920	1 905 540	121 183	121 106	3 287 000	3 635 000	—	—	1 363
1 396 350	1 911 000	1 032 480	146 305	82 163	3 228 000	3 515 000	—	—	2 675
885 500	2 403 960	1 717 680	162 875	97 817	3 101 000	3 401 000	—	—	2 353
653 750	2 916 840	2 877 540	144 396	38 027	2 429 000	2 100 000	—	—	1 610
565 250	3 649 580	2 737 140	6 566	31 536	1 462 000	1 449 000	—	—	903
462 250	3 106 500	3 164 040	—	19 395	1 132 000	1 756 000	—	—	699
490 850	3 947 700	2 712 660	—	—	1 168 000	1 514 000	—	—	663
516 000	2 100 660	2 829 660	—	—	1 033 000	1 381 000	—	—	638
582 200	2 494 080	1 641 000	83 919	—	1 348 000	907 000	—	—	819
648 800	1 142 400	1 554 420	87 203	35 812	1 693 000	886 000	—	—	1 274
1 037 650	1 676 820	1 213 920	121 183	81 781	2 513 000	1 059 000	—	—	1 674
9 445 000	27 879 620	24 510 120	979 465	590 945	25 960 000	25 155 000	—	—	16 809

		TOTALE PRODUZIONE TERMICA		TOTALE PRODUZIONE IDRO-TERMO-ELETTRICA		MEDIA GIORNALIERA TOTALE		(x) ALCANTARA POMPE DI SOLLEVAMENTO		CATA
o	SCIACCA	1941	1942	1941	1942	1941	1942	1941	1942	3,038
	—	4 801 733	7 653 010	17 618 944	21 337 377	568 353	688 302	—	—	1,75†
	439	4 212 276	5 713 725	15 182 625	19 245 072	542 236	687 323	—	—	
	133	4 382 660	5 930 307	16 866 233	19 546 882	544 072	630 545	144 000	—	1,346

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1º SALTO (arlo)		SOSIO 2º SALTO (Favara)		SOSIO 3º SALTO (Poggiodiana)		ACI	FICARAZZI	TERMINI	TOTALE PRODUZ IDRO-ELETTRI	
	1942	1941	1942	1941	1942	1942	1942	1942	1941	19
00	3 552000	———	———	2 138 000	2 456 000	49 100	127 889	173 680	12 817 211	13 68
00	3 635000	———	———	1 363 000	2 290000	———	112 271	123 880	10 970 349	13 55
00	3 515000	———	———	2 675 000	2 515 000	43 700	126 122	137 360	12 483 573	13 61
00	3 401 000	———	———	2 353 000	2 335 000	54 800	94 909	109 800	12 183 037	13 4
00	2 100 000	———	———	1 610 000	1 406 000	———	121 780	166 800	10 679 912	11 2
00	1 449000	———	———	903 000	970 000	———	118 873	164 200	8 805 646	8 9
00	1 756 000	———	———	699 000	1 000000	———	124307	177 720	7 570 452	9 1
00	1 514000	———	———	663 000	821000	———	121 875	163 080	8 187 533	8 0
00	1 381 000	———	———	638 000	829000	———	112 551	165 320	6 297 875	7 8
00	907 000	———	———	819 000	644000	———	120 251	160 880	7 843678	6 2
00	886000	———	———	1 274000	679000	31 200	121 096	149000	9 045 530	6 5
00	1 059000	———	———	1 674000	930000	62000	120 835	144840	11 146652	7 8
00	25 155000	———	———	16 809 000	16 875000	240800	1422 759	1836560	118 031 448	120 3

A GIORNALIERA TOTALE		(x) ALCANTARA POMPE DI SOLLEVAMENTO	
41	1942	1941	1942
8 353	688 302	———	———
2 236	687 323	———	———
4 072	630 545	144 000	———

1941 STEAM PLANT PRODUCTION

CATANIA	PALERMO	P.E'PEDOCLE/TRAPANI	RAGALMUTO SCIACCA		TOTAL
3,038,890	478,980	1,281,160	2,703	NONE	4,801,733
1,751,310	562,500	1,891,790	676	"	4,212,276
1,346,040	402,120	2,634,500	-	"	4,382,660

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SIO 3º SALTO (Poggiodiana)		ACI	FICARAZZI	TERMINI	TOTALE PRODUZIONE IDRO-ELETTRICA		MEDIA GIORNALIERA IDRO-ELETTRICA	
1	1942	1942	1942	1942	1941	1942	1941	1942
8 000	2 456 000	49 100	127 889	173 680	12 817 211	13 684 367	413 490	441 431
3 000	2 290 000	———	112 271	123 880	10 970 349	13 531 347	391 797	483 297
5 000	2 515 000	43 700	126 122	137 360	12 483 573	13 616 575	402 696	439 244
3 000	2 335 000	54 800	94 909	109 800	12 183 037	13 497 356	406 001	449 912
0 000	1 406 000	———	121 780	166 800	10 679 912	11 257 797	344 513	363 154
3 000	970 000	———	118 873	164 200	8 805 646	8 953 199	293 521	295 439
9 000	1 000 000	———	124 307	177 720	7 570 452	9 169 112	244 208	295 777
3 000	821 000	———	121 875	163 080	8 187 533	8 056 515	264 114	259 887
3 000	829 000	———	112 551	165 320	6 297 875	7 866 881	209 929	262 229
9 000	644 000	———	120 251	160 880	7 843 678	6 264 031	253 021	202 066
4 000	679 000	31 200	121 096	149 000	9 045 530	6 585 528	301 517	201 951
4 000	930 000	82 000	120 835	144 840	11 146 652	7 891 426	359 560	254 562
6 000	16 875 000	240 800	1422 759	1836 560	118 031 448	120 374 134	323 374	329 792

1941 STEAM PLANT PRODUCTION

ANIA	PALERMO	P.EMPEDOCLE/TRAPANI	RAGALTUTO ACRIGENTO SCIACCA		TOTAL
,890	478,980	1,281,160	2,703	NONE	4,801,733
,310	562,500	1,891,790	676	"	4,212,276
,040	402,120	2,634,500	-	"	4,382,660

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	845 150	1 013 200	1 336 200	1 898 000	296 550	565 250	3 649 580	2 1
LUGLIO	585 550	775 600	1 462 000	1 689 800	272 750	462 250	3 106 500	3 1
AGOSTO	543 750	643 250	1 362 200	1 589 800	225 700	490 850	3 947 700	2 7
SETTEMBRE	536 300	578 150	1 399 400	1 455 200	309 800	516 000	2 100 660	2 6
OTTOBRE	682 450	596 900	1 710 200	1 611 800	401 450	582 200	2 494 080	1 6
NOVEMBRE	1 390 700	741 800	2 326 400	1 738 400	803 850	648 800	1 142 400	1 3
DICEMBRE	1 508 600	1 152 800	2 527 000	2 088 600	744 650	1 037 650	1 676 820	1 2
TOTALI	13 236 000	14 938 450	23 771 800	25 359 500	5 297 400	9 445 000	27 879 620	24 5

PRODUZIONE TERMICA 1942

	CATANIA	PALERMO	PEMPEDOCLE	TRAPANI	RACALMUTO	AGRIGENTO	SCIACCA	TOTALE PRODUZ. TERMICA 1941	19
GENNAIO	4 118 860	1 575 540	1 956 920	1 690	—	—	—	4 801 733	7
FEBBRAIO	3 512 986	701 460	1 498 840	—	—	—	439	4 212 276	5
MARZO	2 492 054	801 720	2 636 400	—	—	—	133	4 382 660	5
APRILE	2 388 000	1 325 520	585 880	7263	—	—	—	4 176 210	4
MAGGIO	3 541 800	1 584 180	2 648 630	—	—	—	—	6 732 515	7
GIUGNO	5 250 000	1 680 300	2 757 170	—	—	—	81	8 013 180	9
LUGLIO	7 415 200	2 016 900	1 942 240	13 864	—	—	—	11 115 018	11
AGOSTO	8 053 800	1 865 160	2 410 420	3 100	—	—	—	10 491 037	12
SETTEMBRE	6 721 800	2 279 160	2 506 050	—	—	—	—	10 528 462	11
OTTOBRE	7 133 400	2 417 040	3 190 420	66 140	3 240	—	—	9 616 076	12
NOVEMBRE	7 623 000	1 473 120	2 958 330	40 854	4 680	—	57	8 998 292	12
DICEMBRE	6 469 500	1 688 760	3 251 680	9 649	26 760	—	140	8 572 266	11
TOTALI	64 720 400	19 408 860	28 342 980	135 297	34 680	—	850	91 639 725	112 6

(x) L'energia indicata in questa colonna è già compresa nella produzione della Centrale Alcantara 2

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00	296 550	565 250	3 649 580	2 737 140	6 566	31 536	1 462 000	1 449 000	—
00	272 750	462 250	3 106 500	3 164 040	—	19 395	1 132 000	1 756 000	—
00	225 700	490 850	3 947 700	2 712 660	—	—	1 168 000	1 514 000	—
00	309 800	516 000	2 100 660	2 829 660	—	—	1 033 000	1 381 000	—
00	401 450	582 200	2 494 080	1 641 000	83 919	—	1 348 000	907 000	—
00	803 850	648 830	1 142 400	1 554 420	87 203	35 812	1 693 000	886 000	—
00	744 650	1 037 650	1 676 820	1 213 920	121 183	81 781	2 513 000	1 059 000	—
00	5 297 400	9 445 000	27 879 620	24 510 120	979 465	590 945	25 960 000	25 155 000	—

1942			TOTALE PRODUZIONE TERMICA		TOTALE PRODUZIONE IDRO-TERMO-ELETTRICA		MEDIA GIORNALIERA TOTALE		(*) ALCANT POMPE DI SOLL
RACALMUTO	AGRIGENTO	SCIACCA	1941	1942	1941	1942	1941	1942	1941
—	—	—	4 801 733	7 653 010	17 618 944	21 337 377	568 353	688 302	—
—	—	439	4 212 276	5 713 725	15 182 625	19 245 072	542 236	687 323	—
—	—	133	4 382 660	5 930 307	16 866 233	19 546 882	544 072	630 545	144 000
—	—	—	4 176 210	4 299 400	16 359 247	17 796 756	545 308	593 225	260 000
—	—	—	6 732 515	7 774 610	17 412 427	19 032 407	561 691	613 948	288 400
—	—	81	8 013 180	9 687 551	16 818 826	18 640 750	560 627	621 358	282 300
—	—	—	11 115 018	11 388 204	18 685 470	20 557 316	602 757	663 139	256 600
—	—	—	10 491 037	12 332 480	18 678 570	20 388 995	602 534	657 709	284 600
—	—	—	10 528 462	11 507 010	16 826 337	19 373 891	560 877	645 796	282 700
3 240	—	—	9 616 076	12 810 240	17 459 754	19 074 271	563 218	615 299	247 500
4 680	—	57	8 998 292	12 100 041	18 043 822	18 685 569	601 460	622 852	127 100
26 760	—	140	8 572 266	11 446 489	19 718 918	19 337 915	636 094	623 803	165 350
34 680	—	850	91 639 725	112 643 067	209 671 173	233 017 201	574 440	638 403	2 338 550

(*) della produzione della Centrale Alcantara 2° salto

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36	1 462 000	1 449 000	—	—	903 000	970 000	—	118 873	164 200	8 80
95	1 132 000	1 756 000	—	—	699 000	1 000 000	—	124 307	177 720	7 5
—	1 168 000	1 514 000	—	—	663 000	821 000	—	121 875	163 080	8 1
—	1 033 000	1 381 000	—	—	638 000	829 000	—	112 551	165 320	6 2
—	1 348 000	907 000	—	—	819 000	644 000	—	120 251	160 880	7 8
12	1 693 000	886 000	—	—	1 274 000	679 000	31 200	121 096	149 000	9 0
81	2 513 000	1 059 000	—	—	1 674 000	930 000	62 000	120 835	144 840	11 1
45	25 960 000	25 155 000	—	—	16 809 000	16 875 000	240 800	1422 759	1836 560	118 0

ONE TRICA	MEDIA GIORNALIERA TOTALE		(*) ALCANTARA POMPE DI SOLLEVAMENTO	
42	1941	1942	1941	1942
337 377	568 353	688 302	—	—
245 072	542 236	687 323	—	—
546 882	544 072	630 545	144 000	—
196 756	545 308	593 225	260 000	—
052 407	561 691	613 948	288 400	
640 750	560 627	621 358	282 300	
557 316	602 757	663 139	256 600	
588 995	602 534	657 709	284 600	
573 891	560 877	645 796	282 700	
074 271	563 218	615 299	247 500	
585 569	601 460	622 852	127 100	
537 915	636 094	623 803	165 350	
217 201	574 440	638 403	2 338 550	

1941 STEAM PLANT PRODUCTION

CATANIA	PALERMO	P.E'PEDOCLE/TRAPANI	RAGALMUTO SCIACCA		T
3,038,890	475,980	1,281,160	2,703	NONE	4,80
1,754,310	562,500	1,891,790	676	"	4,21
1,346,040	402,120	2,634,500	-	"	4,38
1,877,120	184,140	2,114,950	-	"	4,17
3,105,360	91,260	3,535,420	475	"	6,73
4,516,570	267,300	3,229,310	-	"	8,01
4,777,500	1,066,140	5,271,040	338	"	11,11
5,411,750	1,776,060	3,302,100	1,187	"	10,49
5,892,190	1,650,600	2,964,660	21,612	"	10,52
7,480,370	2,122,740	-	12,966	"	9,61
5,863,950	1,794,780	1,339,280	282	"	8,99
6,148,200	1,489,860	926,090	8,116	"	8,57
51,215,250	11,886,480	28,489,700	48,295	NONE	91,63

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903 000	970 000	——	118 873	164 200	8 805 646	8 953 199	293 521	295 439
699 000	1 000 000	——	124 307	177 720	7 570 452	9 169 112	244 208	295 777
663 000	821 000	——	121 875	163 080	8 187 533	8 056 515	264 114	259 887
638 000	829 000	——	112 551	165 320	6 297 875	7 866 881	209 929	262 229
819 000	644 000	——	120 251	160 880	7 843 678	6 264 031	253 021	202 066
274 000	679 000	31 200	121 096	149 000	9 045 530	6 585 528	301 517	201 951
674 000	930 000	62 000	120 835	144 840	11 146 652	7 891 426	359 560	254 562
809 000	16 875 000	240 800	1422 759	1836 560	118 031 448	120 374 134	323 374	329 792

1941 STEAM PLANT PRODUCTION

CATANIA	PALERMO	P.EMPEDOCLE/TRAPANI	AGRIGENTO	BACALUTO SCIACCA	TOTAL
038,850	475,980	1,281,160	2,703	NONE	4,801,733
751,310	562,500	1,091,790	676	"	4,212,276
346,040	402,120	2,634,500	-	"	4,382,660
877,120	164,140	2,114,930	-	"	4,176,210
105,360	91,260	3,535,420	475	"	6,732,515
516,570	267,300	3,229,310	-	"	8,013,180
777,500	1,066,140	5,271,040	338	"	11,115,018
411,750	1,776,060	3,302,100	1,127	"	10,491,037
892,190	1,650,600	2,964,880	21,612	"	10,528,462
480,370	2,122,740	-	12,966	"	9,616,076
863,950	1,794,780	1,339,280	282	"	8,998,292
148,200	1,489,860	926,090	8,116	"	8,572,266
215,250	11,886,480	28,489,700	48,295	NONE	91,639,725

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HEADQUARTERS
Allied Military Government
APO 513.
Industrial Planning Staff.

4 December 1943.

SUBJECT: Power Allotment to Costruzioni Meccaniche e Navali Panzera, Palermo.

To: Chief, Public Works & Utilities Sub-Commission.

1. The attached survey of this facility was completed by this office, through their engineer, Fabio Capuano, in accordance with the request of Major Roesti and your office.

2. This facility is deemed a very essential industry for the island of Sicily for the following reasons:

a. It is an integrated metal fabricating plant, capable of commercial and general manufacture of metal parts from the casting to the finished piece. It can supply parts for the assistance of other plants in re-establishing production; repair equipment of all types reqdring machine shop and foundry operations. It can do work for the Armed Forces: ordnance, naval, automotive, and other operations, especially those too heavy for our own units.

b. Its equipment is ready to operate as soon as power is supplied. It needs no new equipment nor repairs.

c. It has practically all materials necessary for production available.

3. The plant has the following four (4) departments, which can be operated as units, or as an integrated whole:

a. GRAY IRON FOUNDRY: capacity: 3 tons of castings per day. Complete with cupola and blower, core and annealing oven, flasks, moulding equipment, sand grinder, ladles - everything essential to immediate production of castings. Power is required for air blower, which will operate 4 hours per day.

b. STEEL FOUNDRY: capacity, 3 tons steel per melt, 300 tons per month. Equipment: Herault electric arc furnace, complete with automatic controls, transformers, ladles, electrodes, etc. Requires 400 KW per hour of operation. Current characteristics: 10,000 volts inlet reduced to 80 volts at electrodes, 50 cycle, 3 phase. This furnace need operate only at night. This equipment is practically new.

c. ROLLING MILL: Complete rolling mill, five stands, with extra rolls for various sections of products: bar, rod, small angles, etc. Billet size: 40 mm x 40 mm. Driven by 200 HP motor and belt. Oil fired billet furnace capable of using

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Power Allotment to Panzero (Cont.)

crank-case drainings or conversion to solid fuels. This equipment is practically new.

d. MACHINE SHOP: Complete shop with various lathes capable of machining shafts of all types, rings up to 30" diameter (est.), shaper, milling machine, radial and other drill presses, and other machine tools necessary for an integrated shop. Necessary hand tools are on hand. Machinery is shaft, pulley and belt driven, by 10 small motors, ½ to 5 HP. Average present power consumption, due to diversified usage of machines, expected to be 10 HP. Maximum load if all equipment were used simultaneously would total approx. 30 H.P.

e. FORGE SHOP: Hammers: 100 Kg steam hammer complete with boiler and control equipment; belt driven catapult type smaller hammer, with usual hand forges. Shop complete with furnaces, tools, etc., ready to operate. Total motor capacity: 3½ H.P.

4. This plant must operate to keep its skilled personnel intact within the area and plant, otherwise its productivity will be handicapped in quality and capacity. Present employment capacity; 100; at full capacity, 500; mostly skilled workmen.

5. No financial assistance is required, as it is backed by the Bank of Sicilia. Most raw materials (scrap, ferro-manganese, ferro-silicon, pig iron, etc.) are now available in limited quantities, depending upon work obtained. Power lines are connected from external sources to meters and switch boards, ready for current. Two tons of coke would be required from external sources per day of operation. Power demands are shown on the attached sheet.

6. It is recommended

a. That power be immediately allotted as a high priority facility, for operation of foundry, machine and forge shops, up to 50 KW for daytime operation, with such limitations on night operations as are their operations and available power permit.

b. That if orders for melting or rolling of steel are obtained, the Plant Manager apply for power for these operations 400 KW and 200 HP respectively, to proper authority for permits, as the situation warrants.

c. That Panzera company (subject company) be authorized to purchase two scrap shears indicated as surplus in the inventory of the Societa Anonima Ferro & Metalli, Palermo, to complete their equipment.

d. That Panzera place requisitions with Region I for 50 tons of coke for gray iron foundry operations.

e. That our Armed Forces and other agencies be advised of this plant's productivity and assistance given in work to get them on their way as a commercial concern.

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Power Allotment to Panzers (cont.)

For the Industrial Planning Staff:

FRED M. REITER
Lt. Colonel
Senior Staff Officer.

2-Incl.
Power Demand.
Survey

Distribution:

1-D-C/S
1 Director, Econ.Dir.
1 Chief, I&C Sub.Comm.

Declassified E.O. 12356 Section 3.3/NND No. 785019

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POWER DEMANDS
Costruzioni Meccaniche e Navali Panzera, Palermo.

Department	Hours of the day. 0600	0800	1000	1200	1400	1600	1800	2000	2200	2400	0200	0400	0600
	Kilowatts load												
Gray Iron Fdry.	-	-	10	10	10	-	-	-	-	-	-	-	-
Steel Foundry	-	-	-	-	-	-	-	-	400	400	400	400	400
Rolling Mill	200	200	200	200	200	-	-	-	-	-	-	-	-
Machine Shop	10	10	10	10	10	-	-	-	-	-	-	-	-
Forge Shop	3	3	3	3	3	-	-	-	-	-	-	-	-
Lighting, Contingencies	2	2	2	2	2	-	-	-	-	-	-	-	-
Total Load	215	215	215	215	215	-	-	-	400	400	400	400	400

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I.S-F-1. (Appendix B) 46

INDUSTRIAL PLANT AND RAW MATERIAL SURVEY

(Instructions to owner or manager of plant: You are requested to fill out this form in triplicate. Instructions will be furnished you at the time you receive this form as to the date on which it must be completed and the disposition you are tomake of the completed copies. Fill out answers in English if possible, otherwise Italian. If there is insufficient space to answer any question complete your answer on a separate sheet and attach it to the completed form.)

1. Name of Plant: COSTRUZIONI MECCANICHE E NAVALI PANZERA, PALERMO.
2. Location: Palermo; Commune: Palermo; St.& No. Via Buonriposo, 53.
3. Name and address of owner or manager: Eng. Fabio Massimo Capuano, Via Libertà, 39, Palermo.

4. Products and by-products of plant:

Name	Type or size	Normal monthly production	Present month production

Normal production, monthly:
The Steel-Foundry plant can produce 300 (Three hundred tons) in 25 days; The Iron-Foundry can produce 250 Tons (Two hundred and fifty) in 25 days.
Present production, monthly:
At present, nothing, in default of electrical energy.

5. Condition of plant (Give general statement indicating whether plant is operating, extent of damage if any, plans to resume operations, etc.):
The plant is in very good conditions and fully active ready to work.
6. Equipment needed to resume operations if not now operating:
a) No machine occurs, but to prepare Furnace Scraps two big scissors would l useful which could be got at Palermo.
Machine to be repaired: NONE.
b) Machine to be substituted: NONE.

7. Raw materials needed to operate (including coal, oil, and electric power):

Name	Grade, type of size	Quantity required per Mo.(capacity operations).	Quantity r per Mo. fo present op

a) Raw material needed: Oil, Coal, electricity;
b) Quantity required per Mo.: Transmissions oil Kg. 100 monthly; Special oi for the rolling mill Kg. 500 monthly; but in default of this animal's g can be used; - if the warming furnaces should work by coal 100 tons mon are required, but if the same should work by Naphtha 75 Tons monthly sho be provided. - For the Steel Foundry Kw 400 hourly are required, for th Iron Foundry Kw 200 hourly and for the Mechanical Department Kw 10 hour are required.* The aforesaid quantities occur for the maximum productio

8. Labor needed to operate plant:
a) Number of workmen required for present operations: No. 100 for the maxi production. 7198
b) Number of workmen required for capacity operations: No. 500 about.
c) ~~~~~~~~~~
d General remarks on labor situation (are women employed etc.): All the p

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is susceptible to be amplified to increase this industry, since in Sicily and in Calabria there are no similar plants while the need of Iron bars is enormous as wellas the need of steel mechanic casts.

9. List equipment on hand which might be sold or lessed for use elsewhere: No machine may be sold or leased.
10. Present Stocks of raw materials(including Coal and Oil): The firm possesses more than 500 Tons lying in its plans, the major par of which are first choice Scraps. Besides it possesses as sufficient quantities of refractory materials, dolomites, magnesite bricks, electr des, refractory accessorial for siviere, silice iron, manganese, iron m eral, etc. sufficient for three months' work.
11. Raw material sources: (Name, What was source in past, Where material could be obtained now) and Price. All materials proceeded from the Mainland; Refractory material from Leghorn; Dolomites from Sestri Ponente (Genova); Electrodes from Valchi Iron leagues from Milan, Iron minerals from Ostia.

Power in Kw and work-hours: To the Steel Foundry occur Kwh 400 at 10.000 Volts and 50 periods to be furnished to the trnsfromation room of the firm. = Work-hours: from 10 to 8 of the morning.= To the Iron Foundry occur Kwh 200 at 160 Volts and 50 periods to be furnished to the trans formation room of the Electrical Company annexed to the Foundry.= Work-hours: from 6 to 5 pm. = To the Mechanical Department occur Kwh 10 a 160 Volts and 50 periods to be furnished to the aforesaid Company's ro = Work-hours: from 6 to 5 pm.

Informations relating to the machinery and plants. The Steel Foundry cons of ~~XXXXXX~~ one Furnace of the threetons authomatic threephases HEROULT type with a transformation room of 10.000 KX and 80 Volts furnished wi Switchboard. Theplant is a modern one and was made in 1942 by Brown Bo Tecnomasio Italiano. The Iron Foundry is constituted of a rolling mill ~~fixx~~ the relative bluming Deuag type set up by Eng. Redemacher of Duss dorf in 1931. Electric Motor of 250 HP. Rolling mill of 60 meters and refrigeratory or cooling plan of 15 meters.

Palermo, December 3rd, 1943.

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ELC/pjm

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
Public Works and Utilities Sub-Commission
APO 512

27 November 1943

Subject : Report Requested by AFHQ on Public Works & Utilities for Planning Purposes

To : AFHQ, AGS., APO 512

1. There are forwarded herewith four copies of a report relating to subject matter.

For the Commanding General:

E. L. CLOUGH
Lt. Col. A.G.D.
Actg. Adjutant General

Incl.
4 Copies of Report

Declassified E.O. 12356 Section 3.3/NND No. 785019

LAJ/eob

HEADQUARTERS ALLIED CONTROL COMMISSION
and
HEADQUARTERS ALLIED MILITARY GOVERNMENT
Public Works and Utilities Sub-Commission

APO 512

18 November 1943

AC/I5C/PWU

Subject : Report requested by AFHQ Public Works and Utilities in Sicily, for planning purposes.

TO : Economic Director.

1. Attached hereto are four copies of a report on the above subject, with relevant plans attached.

The letters refce 141.8 of 13 Nov. (Major Bowman), and RTC 141.8. of the same date (Lt-Col Bolick) are self-explanatory. Shortage of staff, and other urgent duties, are noted as responsible for delays.

2. The reports concern electricity, Gas and waterworks. They have been noted by this Sub-Commission, and it is desired to make the following observations:-

GENERALLY

Though somewhat incomplete, they should be forwarded to AFHQ as they stand. This Sub-Commission has only been established here a few daus, and is not yet in possession of data that would enable fuller and more precise anwers to be given.

Such data may be available at a later date.

(a) Electricity.

A useful summary, taken in conjuntion with Map 2. Details on that map require analysis and tabulation... Materials needed are mentioned, but no indication of quantities, nor even outline specifications.

(b) Gasworks.

The report is a fair statement of the five production units in Sicily, and of the 5,500 tons of gas-coal needed, for full production monthly.

But since at Messina and Catania the works are reported as a "total loss", there remain only Palermo, Trapani and Agrigento. We estimate that Palermo will need 1,400 tons per month and Trapani and Agrigento 350 tons, total 1750 tons a month.
(Palermo to be put on 50% output only, for the time being. because of temporary retort and other difficulties).

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c) WATERWORKS.

The outlines of these are very general in character,and possibly the information given will be of little positive value to AFHQ. There are numerous separate undertakings in Sicily,and they are of many engineering types. It is known(to this Sub-Commission)that the position at the moment in the case of the Palermo Water Company is not so satisfactory as the report might indicate.

There is a reservoir that has not been in service since it was bombed last April,and repairs have only just been started.The work so involved is not great,but leakage and wastage in the distribution system is very great (2½ million gallons per day)due to mains damages ect.,and a great deal of repair work remains to be done. This must cease within three or four weeks from now,unless supplies of lead are received for jointing(4,500 tons of this said to be available in Sardinia).

Siracusa,Catania and Messina are not mentioned in the report,though their position may be similar-or much worse-than Palermo. To a lesser degree this applies also to places like Trapani,Marsala,Castelvetrano,Ragusa,Augusta and Agrigento. It would take a little time to establish the facts, through Region I,or otherwise.

In general,however,on present information,stocks of repair materials and spare mains ect. are reasonable; but there is severe shortage of pig-lead,small lead pipes,small galvenised iron pipes,small taps and valves, and large volumes of water would be saved even if a few thousand tap washers could be supplied.

L. A. JENNY,
Lt.Col.C.E.R.
Acting Director.

Declassified E.O. 12356 Section 3.3/NND No. 785019

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 512

C F B/sdb

November 13, 1943

File : I4I.8

SUBJECT : Report on Utilities in Sicily

TO : Chief, T.C.U. & P.W. Div.

1. In response to request date 18 Oct. 1943 for compliance with radiogram NR 7564 from AFHQ there is transmitted herewith six copies of the requested report.

CLAIR F. BOWMAN
Major, C.E.
Chief, Utilities Section
Region I, A.M.G.

INCL. 1
1 Report "Utilities in Sicily" (6 copies)

DISTRIBUTION

1 T.C.U. & P.W. Div. Region 1 A.M.G.
1 Public Works and Utilities Sub-Commission
4 AFHQ

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Declassified E.O. 12356 Section 3.3/NND No. 785019

File : RTC 141.8 1st. Ind.
ALLIED MILITARY GOVERNMENT,SICILY REGION HEADQUARTERS;
APO 512,T.C.U.P.W. & Mining Div. 13 Nov. ,1943.

TO : Public Works nad Utilities Sub-Commission ,Allied Commission
8 Via Bari,Palermo,Sicily.

1. Trasmitted herewith five copies of the above report.

2. This report was delayed because there are no clerks or draftsmen inthe Utilities Section and all work had to be done by barrowed personnel as they could be obtainde.

3. It is desired to repeat here that there is only one Electrical Engineer available for the Utilities section,assisted by one,non electrical,R.E.officer. Additional clerks and draftsmen are essential for the operation of this section.

4. During the current wek,in addition to normal duties of planning and directing operations,these two officers have been involved in settlement of:

(1) Two food riots

(2) Two incipient striks

(3) One power plant failure.

C.P. BOLICK
Lt.Col.,F.A.,
Chief, T.C.U.P.W.
& Mining Div.

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Declassified E.O. 12356 Section 3.3/NND No. 785019

ALLIED MILITARY GOVERNMENT

AMGOT/10050/TCU

SUBJECT : Work Assignment Memo re Msg. NR 7564.
TO : Chief Utilities Section, TC & U Div. AMGOT.HQ.SICILY
18 Oct. 1943

1. AFHQ, by radio, has requested technical reports, with respect to public utilities (electric, gas and water) in Sicily, be submitted showing:

a. Extent and types of utilities.

b. Degree distruction thereof.

c. Extent to which it has been possible to restore skeleton local emergency services by cannibalization of local resources alone.

2. Example : What percentage of the various utilities has it been possible to put back in service ?.

3. Information from requested reports to be used in "planning";

4. It is requested that such reports be prepared as soon as possible from information available in Palermo.

LDD/tbw.

L. D. DENSMORE,
Lt.Col., S.C.,
Director, Transportation
Communications & Utilities.

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Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
Public Works and Mines Sub-Commission

4 Jan 44

Memorandum:

To: Lt Col Jenny.

Subject: Panzera Plant. Palermo.

We have already replied to Industrial Planning re the putting into operation of the above plant.

Our letter dated 16th Dec (AG/190) stated that owing to shortage of electric power, it is not possible to start up the plant. A copy was sent to Col Polack. Region 1.

We informed Industrial Planning that G.S.C. Sicily met Region 1 almost daily to discuss the Electricity Supply position and further factories will be put on as energy becomes available.

Lt Col Lapper
write to Polack and find
out what the present and
operative current situation
is. Ref our letter and then
up with Prod & Com the question
of Renting use of the plant as it has
considerable power. Cities.
Adj 5/1/44

W.M.LAPPER.
LT. Col.
Chief, Elect. & Gas Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

Lt Col Logan

Will you see me with this

E. J. Allen

HEADQUARTERS
ALLIED MILITARY GOVERNMENT

BUCK SLIP

31 December 1943
Date

Sub: _____
Date

FROM	TO
C. G. AMG	
C. of S.	
Exec Off	
Economic Director	
Industry & Commerce	
Fuel	
Agriculture	✓
P. W. & Utilities	
Labor	
Interior	
Information	
Public Health	
Legal	
Public Safety	
Property Control	
Education	
Fine Arts	
Shipping	
Internal Transportation	
Telecommunications	
Hq Commandant	
C of Secretariat	
Message Center	
G-1	
G-4	
Displaced Persons	
Adjutant	
✓ Industrial Planning Staff	

FOR:

_____ Recommendation & Remark
✓ Information & Guidance
_____ Approval or Disapproval
_____ Necessary action
_____ Investigation & Report
_____ To note and return
_____ File
_____ Dispatch

REMARKS:

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
Industrial Planning Staff.

31 December 1943

SUBJECT: Panzera plant - Palermo.
TO: Industry & Commerce Sub- Comalesion

1 . At the suggestion of P.W. & U. Sub-Comm. attached data is submitted for your information and such action as may be deemed advisable.

2 . The General Electric Co. , Palermo, plans to install transformers about 1 January 1944, and power supply is being taken care of through Major Newman .

3 . However , the other recommendations merit consideration , depending upon the needs of the Armed Forces and essential civilian industries for the services of a complete foundry , forge and machine shop. It is probably the only complete repair and salvage shop of this type on the Island.It has ample finances.

4 . Recommendation of par 6 d indicates the maximum quantity of coke for requisition and would constitute one month's normal operation.

5 . All Agencies should be informed of its capabilities ; I.S.S. , R.O.D. , District No 1 , and Island Civil Supply Officers who may need parts or repairs , to assist other industries in their operations.

For the Industrial Planning Staff

FRED M. REITER
Lt. Colonel
Senior Staff Officer

3 Incl
1 PW. & U.
1 Survey
1 Report to PW. & U.

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HEADQUARTERS
ALLIED MILITARY GOVERNMENT
APO #4.
Industrial Planning Staff.

4 December 1943.

SUBJECT: Power Allotment to Costruzioni Meccaniche e Navali Panzera, Palermo.

TO: Chief, Public Works & Utilities Sub-Commission.

1. The attached survey of this facility was completed by this office, through their engineer, Fabio Capuano, in accorrence with the request of Major Roesti and your office.

2. This facility is deemed a very essential industry for the island of Sicily for the following reasons:

a. It is an integraded metal fabricating plant, capable of commercial and general manufacture of metal parts from the casting to the finished piece. It can supply parts for the assistance of other plants in re-establishing production; repair equipment of all types requiring machine shop and foundry operations. It can do work for the Armed Forces: ordnance, naval, automotive, and other operations , especially those too heavy for our own units.

b. Its equipment is ready to operate as soon as power is supplied . It needs no new equipment nor repairs.

c. It has practically all materials necessary for production available.

3. The plant has the following four (4) departments , which can be operated as units, or as an integrated whole:

a. GRAY IRON FOUNDRY: capacity: 3 tons of castings per day. Complete with cupola and blower, core and annealing oven, flasks, moulding equipment, sand grinder, ladles - everything essential to immediate production of castings. Power is required for air blower, which will operate 4 hours per day.

b. STEEL FOUNDRY: capacity, 3 tons steel per melt, 300 tons per month. Equipment: Herault electric arc furnace,

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complete with automatic controls, transformers, ladles, electrodes, etc. Requires 400 KW per hour of operations Current characteristics: 10,000volts inlet reduced in 80 volts at electrodes, 50 cycle, 3 phase. This furnace need operate only at night. This equipment is practically new.

c. ROLLING MILL: Complete rolling mill, five stands, with extra rolls for various sections of products: bar, rod, small angles, etc. Billet size: 40 mm x 40 mm. Driven by 200 HP motor and belt. Oil fired billet furnace capable of using crank-case drainings or conversion to solid fuels. This equipment is practically new.

d. MACHINE SHOP: Complete shop with various lathes capable of machining shafts of all types , rings up to 30 diameter (est) shaper, milling machine,radial and other drill presses , and other machine tools necessary for an integrated shop. Necessary hand tools are on hand. Machinery is shaft, pulley and belt driven , by 10 small motors, ½ to 5 HP. Average present power consumption, due to diversified usage of machines, expected to be 10 HP. Maximum load if all equipment were used simultaneously would total approx. 30 HP.

e. FORGE SHOP: Hammers: 100 Kg steam hammer complete with boiler and control equipment; belt driven catapult type smaller hammer, with usual hand forges. Shop complete with furnaces, tools, etc. , ready to operate. Total motor capacity: 3½ H.P.

4. This plants must operate to keeps its skilled personnel intact within the area and plant, otherwise its productivity will be handicapped in quality and capacity. Present employment capacity; 100; at full capacity, 300; mostly skilled workmen.

5. No financial assistance is required, as it is backed by the Bank of Sicilia. Most raw materials (scrap, ferro-manganese, ferro-silicon,pig iron, etc.) are now available in limited quantities, depending upon work obtained. Power lines are connected from external sources to meters and switch boards, ready for current. Two tons of coke would be required from external sources per day of operation. Power demands are shown on the attached sheet.

6. It is recommended

a. That power be immediately allotted as a big priority facility, for operation of foundry, machine and forge shops, up to 80 HP for daytime operation, with such limitations on night operations as are their operations and available power permit.

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Power Allotment to Panzers (cont)

b. That if orders for melting or rolling of steel are obtained, the Plant Manager apply for power for these operations, 400 KW and 200 HP. respectively, to proper authority for permits, as the situation warrants.

c. That Panzers company (subject company) be authorized to purchase two scrap shears indicated as surplus in the inventory of the Societa' Anonima Ferro & Metalli, Palermo, to complete their equipment.

d. That Panzers place requisitions with Region I for 50 tons of coke for gray iron foundry operations.

e. That our Armed Forces and other agencies be advised of this plant's productivity and assistance given in work to get them on their way as a commercial concern.

For the Industrial Planning Staff

Fred A. Reiten
Lt. Colonel
Senior Staff officer.

1- Incl.
Power demand.

Distribution:

1 D-C/S
1 Director, Econ. Dir.
1 Chief, I & C Sub-Comm.

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POWER DEMANDS
Costruzioni Meccaniche e Navali Panzera, Palermo.

Department	Hours of the day: 0600	0800	1000	1200	1400	1600	1800	2000	2200	2400	0200	0400	0600
	Kilowatts load												
Gray Iron Fdry.	-	-	150	10	10	-	-	-	-	-	-	-	-
Steel Foundry	-	-	-	-	-	-	-	-	400	400	400	400	400
Rolling Mill	200	200	200	200	200	-	-	-	-	-	-	-	-
Machine shop	10	10	10	10	10	-	-	-	-	-	-	-	-
Forge Shop	3	3	3	3	3	-	-	-	-	-	-	-	-
Lighting, Contingencies	2	2	2	2	2	-	-	-	-	-	-	-	-
Total Load	215	215	225	225	225	-	-	-	400	400	400	400	400

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WDL/ow

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
Public Works and Utilities Sub-Commission
APO 512

10 December 43

AC/ISU/PWU

Subject: Power Allotment to Costruzioni Meccaniche e Navali Panzero, Palermo.

To : Chief Industrial Planning Staff.

1. With reference to your report on Power allotment to Costruzioni Meccaniche e Navali Panzero, Palermo, dated 4th Dec 43, it is necessary that before an allotment can be made that we satisfy ourselves regarding the degree of war effort work that will be carried on by the factory.

2. Owing to the extreme shortage of generating capacity on the island, it is not possible to consider any supplies of electricit except for those engaged on work which may be classified as being directly for the war effort.

3. This type of factory is given the first priority for supply and there is still a waiting list under this category.

4. Your report however, covers the factory as a whole and I shall be pleased if you will consider whether there is any section which could be put into operation on the basis of direct war work only, by this is meant that the machine shop, for instance, would work on repairs to army vehicles only.

5. If increase in rainfall allows of additional output to be obtained from the Hydro Electric stations, additional first priority plants will be started up, but owing to lack of rainfall within the catchment area of the Hydro plants, it may not be possible to allow of additional supplies being connected for some time.

6. This letter deals only with the part of your report requesting supplies of Electricity to the factory. The others matters not being within the scope of this Sub-Commission.

Navires, production for war effort by this factory should be encouraged

L.A. JENNY
Lt. Col., C.E.R.
Acting Director.

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HEADQUARTERS
Allied Military Government
APO 513
Industrial Planning Staff.

4 Dicembre 1943

SOGGETTO: Energia Elettrica da allocarsi alle costruzioni Meccaniche e Navali, Panzera,(Palermo).

Al : Capo della Sotto-Commissione Lavori Pubblici & Imprese di Pubblica Utilità.

1. L'esame di questo Stabilimento è stato da noi fatto con la collaborazione del loro Ingegnere, Sig. Fabio Capuano, a seguito della richiesta Vostra e del Maggiore Ronsti.

2. Si ritiene che questo Stabilimento sia un'organizzazione industriale indispensabile per la Sicilia, per le seguenti ragioni:

a. Costituisce un impianto metallurgico completo e può produrre, sia per uso commerciale che industriale parti metalliche di ogni specie, dalle fusioni a parti finite. Può fornire anche parti ad altri stabilimenti affinchè questi possano riprendere le loro produzioni. Può riparare macchinari che richiedono l'uso di macchine utensili varie (torni ecc.) e può eseguire anche lavori di fonderia. Potrebbe anche lavorare per le Forze Armate, eseguendo riparazioni di armi, riparazioni navali, di autoveicoli e riparazioni di tipo troppo complesso per essere eseguite dalle sezioni meccaniche delle nostre Forze Armate.

b. Tutto il macchinario dello Stabilimento può entrare in funzione non appena l'energia elettrica venga fornita, dato che non abbisognano nè di nuove macchine nè di riparazioni.

c. Lo Stabilimento ha a sua disposizione quasi tutte le materie prime necessarie a riprendere la sua produzione.

3. Lo Stabilimento è costituito da quattro Sezioni che possono funzionare separatamente o come un'unità organica.

a. FONDERIA DI GHISA: con una capacità di fusione di 3 tonnellate al giorno, completa con tutti gl'impianti ed il macchinario necessario per fondere in ghisa. Dell'energia elettrica è necessaria per operare il soffiatore d'aria che funzionerebbe per circa 4 ore al giorno.

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b. FONDERIA D'ACCIAIO : con una capacità di 3 tonnellate per fusione, 300 tonnellate al mese, equipaggiata con fornaci Herault ad arco elettrico con controllo automatico, trasformatori, elettrodi, ecc. Necessità per funzionare di 400 KW per ogni ora d'operazione. Caratteristiche della corrente: 10.00 volts all'entrata, ridotta a 80 volts agli elettrodi, 50 cicli, 3 fasi. La fornace funzionerebbe solo di notte. Tutte le istallazioni sono praticamente nuove.

c. CILINDRATURA E PRESSE: impianto completo per la cilindratura dell'acciaio, 5 stands (impostazioni) con istallazioni extra per diversi tipi di prodotti quali sbarre, assi, angoli, ecc. Dimensioni del materiale 40 mm x 40 mm. L'impianto è fatto funzionare da un motore elettrico a cinghia da 200 HP. La fornace che usa ora combustibili liquidi, può essere convertita all'uso di combustibile solido od equipaggiata con apparecchi per il ricupero dell'olio. Anche quest'impianto è praticamente nuovo.

d. SEZIONE UTENSILI: Officina completa con vari tipi di torni capaci di preparare parti metalliche di ogni tipo, di manifatturare anelli fino ad un diametro di circa 30", con presse di vari tipi, e fornita di tutto l'insieme di macchinario ed utensili, quali si ritrovano negli stabilimenti del genere meglio equipaggiati. E' fornita anche di ogni tipo di ordegno e macchinario a mano. Tutto questo macchinario è mosso da 10 piccoli motori, da 1/2 a 5 HP. Il consumo medio d'energia di questa sezione sarà di circa 10 HP. Il consumo totale d'energia, se tutte le macchine fossero usate insieme, sarebbe di circa 30 HP.

e. FORGE: Martelli a vapore da 100 Kg. completi con caldaia e sistema di controllo; martelli più piccoli a tipo catapulta mossi da cinghie, con le usuali forge a mano. Questa sezione è completata da fornaci ed utensili vari ed è in condizione di essere messa in operazione immediatamente. La forza totale dei suoi motori elettrici è di 35 HP.

4. Questo Stabilimento deve essere riattivato per trattenere nella località il suo personale e specializzato, altrimenti la sua produttività sarà in futuro ridotta qualitativamente e quantitativamente. Attualmente s'impiegano 100 operai in piena attività, ne impiegheranno 500 in maggioranza per personale specializzato.

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5. Non vi è necessità di alcun aiuto finanziario poichè lo Stabilimento è appoggiato dal Banco di Sicilia. Le materie prime (rottami di ferro, ferro-manganese, ferro-silice, ghisa greggia, ecc.) sono ottenibili attualmente in quantità limitata, a seconda

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dei lavori da eseguire. Le linee elettriche esterne sono tutte collegate ai quadri di distribuzione e contatori e lo Stabilimento è pronto per ricevere la corrente. Per riattivare la produzione dello Stabilimento, bisognerebbe ottenere inoltre due tonnellate di coke al giorno. La quantità d'energia elettrica necessarie sono indicate nel foglio qui allegato.

6. Si raccomanda:

a. Che dell'energia elettrica fino a 50 Kw venga fornita immediatamente per riattivare la Fonderia, le Forge, e la Sezione Forni e Macchinario Utensile, limitando la fornitura di energia notturna a seconda delle necessità delle loro lavorazioni ed a seconda delle disponibilità d'energia.

b. Che nell'eventualità che si ottengano ordini per fusioni e pressature di acciaio il Direttore dello Stabilimento domandi forniture addizionali d'energia, 400 e 200 KW sono rispettivamente i quantitativi necessari a compiere queste operazioni, alle Autorità che daranno i permessi se avranno delle disponibilità di energia.

c. Che lo Stabilimento Panzera sia autorizzato per completare le proprie installazioni a comprare due frantoi per rottami di ferro dalla Società Anonima Ferro & Metalli di Palermo, che li ha inventariati come macchinario in surplus.

d. Che lo Stabilimento Panzera chieda al Comando della I Regione xxx 50 tonnellate di coke necessario per la fusione della ghisa.

e. Che le Forze Armate ed altre organizzazioni Alleate vengano informate delle possibilità di produzione di questo Stabilimento e che l'assistano dandogli del lavoro, permettendogli così di riprendere una profittevole attività commerciale.

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PER L'UFFICIO PIANI INDUSTRIALI

Quantitativi d'energia elettrica domandati

Sezioni dello Stabilimento	Ore del giorno											
	6	8	10	12	14	16	18	20	22	24	2	4
	KW necessari											
Fonderia Ghisa	–	–	10	10	10	–	–	–	–	–	–	–
Fonderia Acciaio	–	–	–	–	–	–	–	–	400	400	400	400
Presse & Cilindratura	200	200	200	200	200	–	–	–	–	–	–	–
Torni & Macchine Utensili	10	10	10	10	10	–	–	–	–	–	–	–
Forge	3	3	3	3	3	–	–	–	–	–	–	–
Illuminazione e bisogni impreviști	2	2	2	2	2							
Totale	215	215	215	215	215	–	–	–	400	400	400	400

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PER L'UFFICIO PIANI INDUSTRIALI

Quantitativi d'energia elettrica domandati

	Ore del giorno												
	6	8	10	12	14	16	18	20	22	24	2	4	6
llo Stabilimento	KW necessari												
hisa	–	–	10	10	10	–	–	–	–	–	–	–	–
eciale	–	–	–	–	–	–	–	–	400	400	400	400	400
llindratura	200	200	200	200	200	–	–	–	–	–	–	–	–
achine Utensili	10	10	10	10	10	–	–	–	–	–	–	–	–
	3	3	3	3	3	–	–	–	–	–	–	–	–
one e bisogni	2	2	2	2	2								
Totale	215	215	215	215	215	–	–	–	400	400	400	400	400

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N-2514 1'-228-0416-12/22 RAD 42

Signal Corps, United States Army

Telegram

Received at 19

PENINSULAR BASE SECTION
SIGNAL MESSAGE CENTER 21 DECEMBER 1943

•CONFIDENTIAL CONFIDENTIAL

•ROUTINE

TO (ACTION) : CG PBS FOR FARGO FOR GUETERBOCK FOR JENNY

(INFORMATION) : NONE

FROM : RHODES FOR SEARS FOR ROGERS

DATE TIME SIGNED: 211230A

DATE TIME REC'D : 211520A

REFERENCE NR. : S-4625

CITE : ROGERS 1271

CABLE RECEIVED FROM MAJOR WILSON STATING HAS SEEN SIGNOR ~~GONZALO~~ CENZATO, ADVISOR TO PUBLIC WORKS MINISTRY ON ELECTRICAL MATTERS. HIS ADDRESS P E IMBRIANI 42 NAPOLI. YOU MAY WISH TO CONTACT HIM

action ANC Hqs
Info See CG
Electric Sec Region II
7179

5923

CONFIDENTIAL

FORM #18-A CRYPTO Lt. Weinstein

Declassified E.O. 12356 Section 3.3/NND No. 785019

N-2253 1-148-9 5 Tx 12/20

191718A

Form 1917

Signal Corps, United States Army

SECRET Telegram

AFO 3—10M

19

Received at PENINSULAR BASE SECTION SIGNAL MESSAGE CENTER

8Ø DECEMBER 1943

• SECRET

• ROUTINE

TO (ACTION) : FARGO CG PBS FOR HQ AMG FOR GROWDEN

(INFORMATION) : NONE

FROM : FATIMA, WILSON SIGNED JOYCE

DATE TIME SIGNED: 18Ø535A

DATE TIME REC'D : 191718A

REFERENCE NR. : 1487

CITE : NONE

HAVE SEEN SIGNOR CENZATO ADVISOR TO PUBLIC WORKS MINISTRY ON ELECTRICAL MATTERS. CONSIDER YOU WOULD WISH TO CONTACT HIM. HIS ADDRESS PE IMBRIANI 42 NAPOLI.

Action - AMG Hq
Info - Engr
" - G-4
" - Army
" - C. G

Electric Ltr Region II

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CRYPTO

FORM #18-A

SECRET 5674

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
[illegible]

MFP/ESG.

4 November 1943.

ao/esg/mfp

SUBJECT : Mission to Regions II & III

TO : Director, Economic Sub-Section.

1. It is requested that Capt. Frank D. Peebles (O-21336), Utilities Officer, Public Works & Utilities Sub-Commission, be authorized to proceed to Regions II and III on or about 12 Nov. 43, and to remain in this territory on temporary duty until such time as permanent change of station orders are issued affecting all personnel of the AMG.

2. The purpose of this mission is to ascertain the necessity of pertinent data relating to the electric system, to assist the AMG, Region II in electric problems and to conduct liaison with 5th Army Civil Affairs, 8 Army and 5 Army in the establishment of a coordinated program of rehabilitation.

3. It is further requested that Capt. Peebles be assigned a 1/4 ton vehicle (preferably a "Weapons Carrier" with driver furnished by Pub. Wks. & Utilities Sub-Commission) in order that his work can begin at the southeast point of Region II and end in it Region III.

4. It is finally requested that order include authorization for travel by military aircraft in the event it becomes necessary for Capt. Peebles to return to this HQ for consultation.

M. A. REILLY
Lt. Col., C. E.
Acting Director.

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Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
APO 512

AG/230/1/GS

2 November 1943

SUBJECT: Interim Utility Report

TO : R.C.A.O. - Region II

1. AMG has requested reports, based on information now at hand, setting forth status of utilities in (electric, gas and water). Such categories as listed hereunder should be covered:

a. Present and types of utilities.

b. Degree of destruction.

c. Extent of restoration of service and how accomplished.

2. Reports are to be used in "planning" and should be forwarded to this HQ as early as possible.

By command of Brigadier General Hodgson:

R. A. HALLEY
Brigadier
Assist. Deputy Director

PDC/ca

Declassified E.O. 12356 Section 3.3/NND No. 785019

Letter or File 250 4 Encl.
Folio 2 350/pwu.

Subject: Mission To Regions II & III.

TO: Dir: Economic Sub-Section.

L A Jeans
LT Col C E.
Acting Director.

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HEADQUARTERS
ISLAND BASE SECTION
APO 550

2 December 1943

AGREEMENT

between

ISLAND BASE SECTION

and

ALLIED MILITARY GOVERNMENT--SICILY REGION HEADQUARTERS

relative to

Electric Power Generation, Transmission, and Distribution

It is agreed that:--

a. Effective 0001 hours, 3 December 1943, the control, supervision and direction of electric power generation, transmission and distribution in central and western Sicily i.e. that area formerly under the jurisdiction of the Island Base Section including the provinces of Palermo, Trapani, Agrigento, Caltanissetta and the western portion of Enna province, are transferred to Allied Military Government, ~~Sicily Region~~ Headquarters.

b. All orders regarding operations of the Soc. Gen. Electria de Sicilia and interconnected companies, including direction for furnishing of electric service, use of employees, etc., will, effective the date of this agreement be given only by Allied Military Government, ~~Headquarters~~.

c. All military requirements for electric power will be given first priority. Commanders of military units will submit their requirements to the Engr. Section IBS who after approval of same, will present those requirements to Allied Military Government, ~~Sicily Region~~ Headquarters.

d. The Engr. Section IBS will keep Allied Military Government, ~~Sicily Region~~ Headquarters currently informed of any expected changes in military power requirements and will also recommend whenever it appears advisable, changes in power operations necessary to guarantee meeting of military power requirements.

R. EARS,
Colonel, Ordnance Dept.
Commanding, IBS

F. J. [illegible],
Brigadier General,
Commanding General, AMG-Sicily

Col Patterson Fld

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Memorandum:

AMGOT/10051/300

Engineer, I.B.S. - PATERNO.
ATTENTION: Lt. McGuire.

21 October 5

1. The following is the complete list of olive growers, furnished us by S.C.I.S., with corrections to date. These customers are furnished directly from S.C.I.S. circuits: ((a) already authorized; (b) - not on S.C.I.S. list. The number indicates the number of operators who are authorized at present for each town).

a. PATERNO GROUP (19)

FERRANTE IGNAZIO	(a)
DI PASE GIOVANNI	(a)
DUCE ASCURSO GIOVANNI	(a)
RUSSOMANNO GAETANO	(a)
RUSSOMANNO FRANCESCO	(a)
SACCONE GIUSEPPE	(a)
DONTA' GIROLAMO	(a)
LO GRADICO GIUSEPPE	(a)
PERROCCA SALVATORE	(a)
PERRONTO VINCENZO	(a)
VALSALLO ANTONINO	(a)
VIRGA FRANCESCO	(a)
MASSARA VITO	(a)
GAGLIALLARA ANTONINO	(a)
INTERVALLA GIOVANNI	(a)
DI CRISTOFARO FRANCESCO	(a)
LO PICCOLO FRANCESCO	(a)
CEVOLANTI PROSPERO	(a)
GAGGERI GIUSEPPE	(a)
BENOCCHI SALVATORE	(a)
DRAGOTTO ANTONINO	(a)
P/111 GRECOLI	(a)
LEPANTO RENATO	(a)
RAPPA GIUSEPPE	(a)
TORRI ROBERTO	(a)
ROSSI ANTONINO	(a)
LEGA FRANCESCO	(a)
CLAUDINA ARMANDO	(a)
BALSAMELLI BAZZARILLA & CO.	(b)
BELLAVISTA ANTONINO	(b)

6E information

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Documents in Italian - not attached

b. ALCAMO GROUP ((6)

ALCAMO.

ASTA LEONARDO (a)

Declassified E.O. 12356 Section 3.3/NND No. 785019

b. PALERMO GROUP (12)

PERRANTE ERASMO
DE PASQUALE GIOVANNI
RUSSO ALDUCCIO GIOVANNI
RICCOBONO GAETANO
RICCOBONO FRANCESCO
SACCONE GIUSEPPE
BUSCEMI GIROLAMO
LO GIUDICE GIUSEPPE
PELLEGRINO SALVATORE
PERRANTE VINCENZO
VASSALLO ANTONINO
VIRGA PROSPERO
MASTRA VITO
CASTELLANA ANTONIO
ZUCCHALA GIOVANNI
DI GIUSEPPARO FRANCESCO
LO PICCOLO FRANCESCO
CIVILETTI FRANCESCO
GAUDUZZI GIUSEPPE
BONACCORSI SALVATORE
DRAGOTTO ANTONINO
F/lla GIROLAMI
LEVANTINO ERASMO
RAPPA GIUSEPPE
TOCCI BRUNO
BONTI ANTONINO
LIGA FRANCESCO
GLADDINA ANTONINO
BALLADINI MAZZARELLA & CO.
BILLITTERI ANTONINO

GP information

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Between information and other

b. ALCAMO GROUP ((6)

ALCAMO.

ASTA LEONARDO (a)
PERRONE GIUSEPPE & ROSARIO FELICE (a)
DI GIOVANNI FRANCESCO (a)
ORLANDO PIETRO & CAPUO FELICE (a)
SCIORTINO VINCENZO (a)
ADAMO PIETRO (a)
DI GIOVANNI GIUSEPPE (a)
AVENIO PIETRO (a)
MENGANA ANTONINO (a)
GIANCIO VINCENZO (a)
VALENTE FRANCESCO (a)
QUINCIZINO BENEDETTO (a)
VALENTE FRANCESCO (a)
SILAGO GASPARE (a)

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CARABINIERI DEL GOLFO (4)

TERRA SANTO (a)
DI BIANCO NICOLO' (a)
MONTEFIORI GIUSEPPE (a)
PIZARE & ASARO (a)
TERRA SANTO (b)
ASARO G/BATTISTA (b)
TERRA SANTO (b)
LI CHIAI VINCENZO (b)

CARABINIERI (5)

BONARDO COSIMO (a)
CIPOLLA FIORENZA (a)
AZZARA CALOGERO (a)
OCCHIPINTI VITO (a)
DURANGA LORENZO (a)
MORELLINO CALOGERO (b)
CAIAZZA BERARDINO (b)
GIANCONTIERI GIOVANNI (b)
BARTERA SILVIO (b)
BARONE FRANCESCO (b)
MANGIARACINA GIACOMO (b)
GOC. AM. C.P.E.R.O. (b)
SICILIANO ANTONINO (b)

GALEAZZI (5)

TESTA GIUSEPPE (a)
DI CAPRIO GIACOMO (a)
AVILA & MORELLINO (a)
AGRELI GIOVANNI (a)
LUCIDO G/BATTISTA (a)
AVILA & MORELLINO (b)
ACCARDI SALVATORE (b)

CANTONIERI (1)

INDELICATO FRANCESCO (a)
MORETI ANDREA (b)
DI BENEDETTO (b)
BOSCOGRANDE (b)
SCUDERI GIACOMO (b)

GUERRIERA (1)

FIORENZA AGOSTINO (a)
BRUNO FERDINANDO (b)

POSSIDENTI (1)

GASPERI MARIANO (a)
TARANTELLO SALVATORE (b)

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[illegible]	(a)
MINELLINO GIACOMO	(a)
SALPARA VINCENZINA	(a)
GIANCONTIERI GIOVANNI	(a)
BANDIERA SILVIO	(a)
PUGLISI FRANCESCO	(a)
MANDIAMACINA GIACOMO	(a)
SOC. IN. S.P.E.M.O.	(a)
SICILIANO ANTONIO	(a)

CALATAFIMI (5)

TUCCIA GIUSEPPE	(a)
DI GAETANO GIACOMO	(a)
AVILA & MINERVINO	(a)
ADORNI GIOVANNI	(a)
LENTINI G/BATTISTA	(a)
AVILA & MINERVINO	(a)
ADORNI SALVATORE	(a)

CASTELVETRANO (1)

INGRANDATO FRANCESCO	(a)
MONTI ANDREA	(a)
DI BENEDETTO	(a)
BOSCOGRANDE	(a)
GUARINI GIACOMO	(a)

CHIARAMONTE (1)

FIDENZIA AGOSTINO	(a)
BRUNO FEDERICO	(a)

CORLEONESE (1)

GAGLIANI MARIANO	(a)
TRIPPODO SALVATORE	(a)

MARSALA (1)

SOC. AN. IND. CANNELLONI & DI LORENZO (a)

SANTA NINFA (1)

DE SIMONE FRANCESCO	(a)
PATTI GIOVANNI	(a)

VITA (1)

ABATE VITO	(a)
SCIORTINO GIUSEPPE	(a)

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5. MUNICIPAL GROUP.

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MUNICIPAL (3)

LO GUCO MELCHIORRE (a)
MESSINA GIROLAMO (a)
DI VONNI GIOACCHINO (a)
GIORDANO GIULIO
DI MAGGIO STEFANO
NICOLOSI GIOACCHINO
GIORDANO ANTONINO

AIRPORT (5)

LO NERO GIOACCHINO (a)
VASTALLO FEDERICO (a)
LO PIERO SALVATORE (a)
F.LLI LA BARBERA (a)
ACQUAVIVA SALVATORE (a)
LO NIGRO GIOACCHINO
TERRANOVA GIACOMO
CARUSO GIUSEPPA
BONINO ROSARIO
CASTELLANO GAETANO

MILITARY HOSPITAL (5)

PIZZO GAETANO (a)
SANTANGELO GIOVANNI (a)
BATALE VINCENZO (a)
NOTARO SALVATORE (a)
GIANGRECO GIUSEPPE (a)
RUSSO COSMO
BUTTAGAVOLI ANTONIO
SANTANGELO ANTONINO
PIZZO VINCENZO

PIAZZA DELLE ALPAMESI (1)

GUCCIA VITO (a)
DI SALVO GIUSEPPE (b)

S. GIUSEPPE JATO (1)

SCIORTINO NICOLO (a)

SANCIPIRRELLO (1)

NOVARA ANTONINO (a)

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S. Cristina Gela
Clemente Rosalia

MUNICIPAL AMBULANCE GROUP

ALPAVILLA (5)

GIANGRANDO VINCENZO (a)
DI [illegible] (a)

ACQUAVIVA SALVATORE
LO BIANCO GIOACCHINO
TERRANOVA GIACOMO
CAMPISI GIUSEPPA
BUSCEMI ROSARIO
CASTELLANA GIOVANNI

(4)

DISARMATI MINTACHI (5)

PERRO GAETANO
SANTANGELO GIOVANNI
BATTAGLIA VINCENZO
ROMANO GIOVANNI
GIAMMANCHIO GIUSEPPE
BRUNO DOMENICO
BUFFAGAVOLA ANTONIO
SANTANGELO ANTONINO
PERRO VINCENZO

(5)

FAMIGLIA DEGLI ALLUNGATI (1)

GUCCIA VITO
DI SALVO GIUSEPPA

(2)

S. GIUSEPPE JATO (1)

SCIORTINO NICOLO

(2)

SANCIUSEPPELLO (1)

NOTARO ANTONINO

(2)

S. Cristina Gela
Clemente Rosalia

ESPLOSIVI SOTTRATTI

ALCAMESE (5)

GRAGLIANO VINCENZO
DI PRIMO FRANCESCO
GUARRIANO ANTONINO
INGRASSIA ANTONINO
DI FRANCO GIUSEPPE
LOMBARDO FRANCESCO
ROMANO SALVATORE
JOVENTO ELENA
LOMBARDO GAETANO
INGRASCIA ANDREA

(5)

PADDIA (2)

GIUSTINO ANTONINO
POLIZZA BIAGIO
RESNICO PORTASIO
CANNIZZARO CLEMENTE

(2)

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TERRITI INDUSTRIE GROUP (Cont'd.)

BOLOGNETTA (2)

DEVENDRO ARCANGELO (a)
LO PASO BIAGIO (a)
SAVERINO GIRO (b)
ORONELLO GIUSEPPE (b)

CASTELDACCIA (6)

PIRAINO PIETRO (a)
DI MAIO GIOVANNI (a)
TRAINA GIUSEPPE (a)
PANNO SALVATORE (a)
VISCUSO ANTONINO (a)
TORNELLO DOMENICO (a)
MORANELLO VINCENZO (a)
BUSCEMA GAETANO (b)
MANTURANA SALVATORE (b)
RUSSO ANDREA (b)
GUZZO GREGORIO (b)
TORNELLO GIUSEPPE (b)
GUASTELLA GAETANO (b)

CERDA (1)

LUPO CARMELO (a)

FICARAZZI (1)

MENDOLICCHIA GIOVANNI (a)
FIANZA SALVATORE (b)
MACCHIARELLA PIETRO (b)
MACCHIARELLA F/LLI (PIETRO & ANTONINO) (b)

MEZZOJUSO (1)

BRANCATO SALVATORE (a)
DI MARCO SANTI (b)
UNGO ANGELINA (b)

MISILMERI (2)

CALDERONE GIRO (a)
ARNONE GIUSEPPE (a)
CALDERONE FRANCESCO (b)
FIORUCCIA ANDREA (b)
MAIORANA NATALE (b)
LA GALA FRANCESCO (b)

MONREALE (5)

PALAZZOTTO MARIA (a)
BONO FILIPPO (a)
INCARDONA GIUSEPPE (a)
TRAPANI MADDALENA (a)
DE PERA FILIPPO (a)
[illegible] (b)

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MANFORAVA SALVATORE (a)
RENZO ANDREA (b)
GUIDA GREGORIO (c)
TONARELLO GIUSEPPE (d)
BUFFELLA GAETANO (e)

GIUSSO (1)

LEVO CARMELO (a)

FIGARAZZI (1)

MENZARDOSA GIOVANNI (a)
FLORIA SALVATORE (b)
MACCHIARELLA PIETRO (c)
MACCHIARELLA F/LLI (PIETRO & ANTONINO) (d)

MENGALUSO (1)

BRANCATO SALVATORE (a)
DI MARCO SANTI (b)
UCCO ANGELINA (c)

MARSINO (2)

CALENDRINI GINO (a)
ARNONE GIUSEPPE (b)
CALENDRINI FRANCESCO (c)
FIDUCCIA ANDREA (d)
RAINERI NATALE (e)
LA SALA FRANCESCO (f)

MENDICINI (8)

PALAMOTTO MARIA (a)
BONO FILIPPO (b)
TRENTACOSTE GIUSEPPE (c)
MENDICINI MICHELANGELO (d)
DI PISA FILIPPO (e)
CORRENTE GIUSTO (f)
TRAINA BIAGIO (g)
BONANNO SALVATORE (h)
SCHIERENTI NATALE (i)
MACALUSO ANGELO (j)
BONANNO ANTONINO (k)
PIPITONE PAOLO (l)
GIMO' GIUSEPPE (m)
SCHIERENTI SANTO (n)
POLIZZI FRANCESCO (o)
GIMO' FRANCESCO (p)
LO PRESTI GASPARE (q)

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SARRA FLAVIA (1)

MENTONTIA GIROLAMO (a)

TRAPIA (7)

GRECO SALVATORE (a)
GRECO ANTONINO (a)
SANFILIPPO GIACOMO (a)
LIMA ANTONINO (a)
PIAZZA IGNAZIO (a)
PIAZZA ANTONINO (a)
PIAZZA GIOVANNI (a)
LIMA SALVATORE (a)
RAPISARDI ROSA (b)
CASTRUCCIO GASPARE (b)
RUSSO RAIMONDA (b)
PIAZZA SALVATORE (b)
MENDOLIA SALVATORE (b)
GRECO SALVATORE (b)
ACCARDI SALVATORE (b)

VENTIMIGLIA (2)

CALI' ROSARIO (a)
LA CAVERA RAFFAELE (a)
CATTOLICCHIO GIUSEPPE (b)
CASSARA DOMENICO (b)

VICARI (1)

LO CASCIATO GIOVANNI (a)
CASTILLA VITO (b)

VILLALBA (5)

GIARRUSSO TERZA - PITARRESI (a)
PITARRESI GIOVANNI (a)
PITARRESI ELIGIO (a)
D'AGATI ROSA (a)
CUSUMANO GAETANO (a)
BORSELLI SANTO (b)
BORSELLINA GIOVANNI (b)
TERRANOVA GIUSEPPINA (b)
GAETANO GIACINTO (b)
MICELOCCO ANGELO (b)
LICARTOLI SALVATORE (b)

VILLAFRATI (1)

PRADDO GIUSEPPE (a)
PRIARO FRANCESCO (b)
GALFAVUTURO (1) (-)
MARINO ROSARIO (b)
TORRISI CARMELO GIUSEPPE (b)
RUVOLO GIUSEPPE (b)

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Town of

[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

VESTIGNIA (2)

CALI' ROSARIO (a)
LA CAVERA RAFFAELE (a)
CASTIGLIANO GIUSEPPE (a)
CASSATA DOMENICO (a)

VEZZI (1)

LO CASCIO CASPARE (a)
CASTILLA VITO (a)

VILLANOVA (5)

GIANNONE TERESA - PIZZARELLI (a)
PIZZARELLI GIOVANNI (a)
PIZZARELLI BIAGIO (a)
D'AGATA ROSA (a)
CUSUMANO GAETANO (a)
BONETTI MARCO (a)
BONFANA GIOVANNI (a)
CERRONOVA CATERINA (a)
GAETANO GIANCARLO (a)
LAGLEDDOCO ANGELO (a)
LEONARDI SALVATORE (a)

VILLAZZOLO (1)

FRANCO GIUSEPPE (a)
ROMANO FRANCESCO (a)
CALCATERRA (1) (a)
UCCELLO ROMANO (a)
FERRARA GIUSEPPE (a)
RIVIERO GIULIANA (a)

TRAPANI (NOTO)

TRAPANI (1)

SOLINA ROCCO & PIETRO (a)

NOTO

NOTO (1)

GENTILE VINCENZO (a)

NOTO (5)

CUNSOLO DUCA SALVATORE (a)
F/LLI PIAZZA (a)

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FASCIO (Cont'd.)

COTTONE MICHELE
PASCUCCI CONTE MARIO
LA FRANCESCA LEONARDO
CONSO GIUSEPPE

(a)
(a)
(a)
(a)

GRUPPI GRUPPI

BALESTRAZZI (2)

DEGREGO F.SCO PAOLO
CARUSO GAETANO
VALERI NICOLO
GAGLIO ROSARIO

(a)
(a)
(a)
(a)

LANCIATORI (3)

PETRUSO ANTONINO
FRANCHINI SALVATORE
RUSSO VINCENZO
CANCELLI LEONARDO
FRANCHINI GIUSEPPE

(a)
(a)
(a)
(a)
(a)

CAPACI (1)

BERGAMO FRANCESCO
PUCCIO GIUSEPPE

(a)
(a)

GALLERI (5)

GENOVA SEBASTIANO
BADALAMENTI TOMMASO
LA FATA GAETANO (FERRANTI)
BADALAMENTI VINCENZO
D'ALESSANDRO BENEDETTO
DEGREGO PAOLO
ERGIA SALVATORE
ARMETTA VINCENZO
FRATELLI VALLONE
CATALDO FELIPPO
AMATO PAOLO
GUERRERA GABRIELE
GALLENGA FRANCESCO

(a)
(a)
(a)
(a)
(a)
(a)
(a)
(a)
(a)
(a)
(a)
(a)
(a)

GRUPPI (1)

CERMIA SALVATORE
TALLUTO SALVATORE

(a)
(a)

GRANDINAIO (1)

GAGLIO ROSARIO (a)

MANOVALANZA (2)

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BORGETTO (2)

PETRUSO ANTONINO (a)
FRANZESE SALVATORE (a)
RAIPA VINCENZO (a)
CANNIZZI LEONARDO (b)
FRANZESE GIUSEPPE (b)

CAPACI (1)

RENDETTO FRANCESCO (a)
PUCCIO GIUSEPPE (b)

CARINI (5)

CAPPONA SEBASTIANO (a)
BADALAMENTI TOMMASO (a)
LA PAZA GAETANO (PEDDANTI) (a)
BADALAMENTI VINCENZO (a)
D'ALESSANDRO BENEDETTO (a)
ZAGONE PAOLO (b)
TRIA SALVATORE (b)
ARGENTA VINCENZO (b)
FRATELLI VALLONE (b)
GAPALDO FILIPPO (b)
AMATO PAOLO (b)
GUERRIA CARMELO (b)
GALLINA FRANCESCO (b)

ERICINI (1)

GIUNTA SALVATORE (a)
TALENTO SALVATORE (b)

GIARDINELLO (1)

GENNUSO EUGENIO (a)

MONTELEPRE (2)

PERFUMO ANTONINO (a)
SPADAFORA SALVATORE (a)
GABRIELE SALVATORE (b)
MONTEFORTE GIACOMO (b)

PARTINICO (9)

MAGGIO MICHELANGELO (a)
GRECO SALVATORE (a)
TERRANI ANTONINO (a)
MANZADORGI VITO (a)
GUASTELLA FRANCESCO (a)
RICCO VITO (a)
BASTONI MARIANNA (a)
CANNARA' AGOSTINO (a)
MATRANGOLA FRANCESCO (a)

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MARSALA (Contd.)

CANNELLARO MARIANNA (a)
VITALE GERARDINO
SCIORARA EUGENIO
LIPARI ANO FRANCESCO
LIPARI ANO GIOVANNI
BADALI DOMENICO
GRIMALDI GIOVANNI
DI TRAPANI SALVATORE
DI MARCO SALVATORE
GIACOMO SALVATORE
CANNIATA GIOVANNI
ANGELLOTTI ROSA

ALCAMO (1)

ALONGI GIUSEPPE (a)
DE LEO VINCENZO

CASTELVETRANO (2)

MARSALA' FRANCESCO (a)
BADALUCCHI ANTONINO
CHIARELLA VINCENZO
BONAMICO VITALE

2. Following are additional olive oil press operators supplied through local electrical distribution companies as indicated. These are in regions where there is already waste through over ripe crops. ((a) already authorized. The number indicates the number of operators who are authorized at present for each town).

a. Soc. Prod. Energia Mazara. (SIPEM)
Town: MAZZARA (2)

PIERRO PIERO (a)
MICHELANGELO VITO (a)
BARRO ANTONINO

b. Soc. An. Luce Elettr. Belice
Town: SALEMI (2)

CURTI GIACOMO (a)
EVANGELISTA CARMANO (a)
MARTORANA VITO
GIACOMO GIUSEPPE

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c. Soc. Elettr. Marsalese
Town: MARSALA (1)

Ist. TECN. AGRARIO

d. Soc. Elet. Carbonese.
Town: CASTELVETRANO (2)

DI IESI VINCENZO (a)

PORTICI (2)

MARRA' FRANCESCO (a)
MENDUNNI ANTONINO (a)
CHIARELLA VINCENZO
MONTESANO VITALE

2. Following are additional olive oil press operators supplied through local electrical distribution companies as indicated. These are in regions where there is already waste through over ripe crops. ((a) already authorized. The number indicates the number of operators who are authorized at present for each town).

a. Soc. Prel. Energia Mazzara (SEPE)
Town: MAZZARA (2)

PIPPO PIETRO (a)
MINEO VITO (a)
BRUNO ANTONINO

b.
Soc. An. Luce Elettr. Salemi
Town: SALEMI (2)

CUCCI GIUSEPPE (a)
MONTANA GAETANO (a)
MONTANA VITO
CLARIDES GIUSEPPE

c. Soc. Elettr. Marsalese
Town: MARSALA (1)

Ind. TECN. AGRARIO

d. Soc. Elet. Partannese.
Town: PARTANNA (3)

SIRLI & PICCIONA (a)
VIZZO NICOLO' (a)
LENTINI FRANCESCO (a)
PALERMO PATERA GIOVAN.
DITTA ARLEO & PANDOLFO
MARIA ONOFRIO

e. Impresa Boselino Gagliardo Gagberia.
Town: MARINEDA (6)

ARTALO & CASTIGLIONE (a)
BUFFETTA FRANCESCO (a)
BENIVINO FRANCESCO (a)
CORRENTA GIACCHINO (a)
DI PASQUALE ARCUDIO (a)
PERDANO PIETRO (a)

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CIACCIARELLI ERNESTO
MICHELI ANTONINO
MERCURIO ANTONINO
RAIMONDI
SCARCIGLIA CALOGERO
SCLAFANI GIUSEPPE
ROTOLO FILIPPO

f. Soc. Industriale di Termini
Town: CEFALU'(4)

CAVALLARO GIUSEPPE (a)
SALAMONE CARMELO (a)
PERI SALVATORE (a)
MACALUSO AURELIO (a)
GIACCONE SALVATORE
DE MARCO SALVATORE
DI MARCO GIUSEPPE
BATTAGLIA & CICERO

3. Following are additional olive oil press operators supplied through local distribution companies as indicated. These are regions in which the crop is mature but not wanting: ((a) already authorized. The number indicates the number of operators who are authorized at present for each town).

a. Soc. Siciliana di Elettricita'
Town: CARINI (4)

SCALISI PIETRO (a)
INGRASCIO SALVATORE (a)
BUSCEMI BIAGIO (a)
CURRERO ANTONINO (a)
VENTI GAN. RAFFAELE
LA TORRE LEONARDO
LIPARI EMILIANO
CASTELLI GIUSEPPE

b. Soc. Siciliana di Elettricita'
Town: SCIENZA DI SICILIA (2)

GRIFFICHI SOCIALE (a)
F/LLI PIZZO (a)
VASCIANO ANDREA
F/LLI CASTELLI

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c. Soc. Elettrica di S. Margherita
Town: S. MARGHERITA BELICE (2)

CRESCIMANNO OGLIETTA (a)
GIACONINO MICHELE (a)
DITTA GIACCHINO
SCIACCHITANO MICHELE
DITTA GRIFFI' & CO.

d. Soc. Industriale di Termini

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DI MARIO SALVATORE
DI MARIO GIUSEPPE
BATTAGLIA & CICERO

3. Following are additional olive oil press operators supplied through local distribution companies as indicated. These are regions in which the crop is mature but not running: ((a) already authorized. The number indicates the number of operators who are authorized at present for each town).

a. Soc. Siciliana di Elettricita'
Town: CORLEONE (4)

SCALIA PIETRO (a)
LAUSAMEO SALVATORE (a)
BUCCHIOTTA BIAGIO (a)
GUARINO AGOSTINO (a)
VENTI GAS. RAFFAELE
LA TORRE LORENZO
LIETI ANDREA
CASTELLI GIUSEPPE

b. Soc. Siciliana di Elettricita'
Town: SCIACCA DI SICILIA (2)

CRISTOFALO SOCCIMI (a)
F/LLI FIORE (a)
VACCARO ANDREA
F/LLI CASTELLI

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c. Soc. Elettrica di S. Margherita
Town: S. MARGHERITA BELICE (2)

CRESCIMANNO COLLETTA (a)
GIANDALFO ETTORE (a)
RITTA GIANDALFO
SCIORTINO ANDREA
DITTA SELLA' & CO.

d. Soc. Industriale di Termini
Town: CERDA (1)

ANTANELLO FRANCESCO (a)
BALISTA GIOVANNI

e. Soc. Industriale di Termini
Town: SCIARA (1)

PATTI GIOVANNI (a)

4. Following are additional olive oil press operators supplied through local electrical distribution companies as indicated. These regions will have need for processing about 1 November. ((a) already authorized. The number indicates the number of operators who are authorized at present for each town).

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1. Soc. Siciliana di Elettricita'
Tema: BIBAGNO (2)

GERVASI TEODORO (a)
DI GIORGIO BENEDETTO (a)
DITTA BONFIGLIO & CO.
DUILIO ANGELO & CO
GERVASI TEODORO

2. Soc. Siciliana di Elettricita'
Tema: CHIESA SOLARI (2)

GERVASI GIOVANNI (a)
SIG. DI GIORGIO FRANCO (a)
TIGLIO FERDINANDO
GIUFFRIDA GIOVANNI

3. Soc. Siciliana di Elettricita'
Tema: CRISTINA (1)

DI NATALE & CO. (a)
DITTA TRAPANI & CO.
DI GIORGIO DR. GIORGIO

4. Soc. Siciliana di Elettricita'
Tema: CORTEGGIA PENISOLA (1)

DI RENTA PIETRO (a)
BASSO FILIPPO

5. Soc. Siciliana di Elettricita'
Tema: CASTELFORTE (1)

FERRARO ANTONINO (a)
CANNIZZARO STEFANO

6. Soc. Siciliana di Elettricita'
Tema: BURGIO (3)

DOTT. DI MARCINO & CO. (a)
F/LLI RAGO (a)
SIG. COLLESTI ENZO (c)
CANZONERI LORENZO
DITTA PIETRO PIAZZA
DITTA GIUSEPPE ENRICO

7. Soc. Siciliana di Elettricita'
Tema: VILLAFRANCA SICULA (2)

SCIACCA CAV. GIUSEPPE (a)
CANTELLO ANDREA (a)
[illegible] FILIPPO
[illegible] CAV. ANDREA

8. Soc. Siciliana di Elettricita'

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g. Soc. Siciliana di Elettricita'
Town: CATANIA (1)

DI MARIA & CO. (a)
DITTA TRAINOTI & COSS.
DI GEORGIO DR. GIORGIO

h. Soc. Siciliana di Elettricita'
Town: CONTESSA ENTELLINA (1)

DI BETTA PIETRO (a)
DAGNO FILIPPO

i. Soc. Siciliana di Elettricita'
Town: CALTANISSETTA (1)

VETRANO ANTONINO (a)
GAMBINO SCIASCIA

j. Soc. Siciliana di Elettricita'
Town: MARSALA (3)

ING. DI MARTINO & CO. (a)
F/LLI RAGO (a)
SAC. CALLEFFI MARIO (c)
CARLINO ANTONINO
DITTA PORTO PIAZZA
DITTA GANCITANO MARCO

k. Soc. Siciliana di Elettricita'
Town: VILLAFRANCA SICULA (2)

MILIOTTA CAV. GIUSEPPE (a)
CASTELLO ANGELA (a)
BRUCCIA FILIPPO
MARCHESE CAV. ANDREA

l. Soc. Siciliana di Elettricita'
Town: LUCCA SICULA (2)

LO GIUDICE MANUELE (a)
D' ANGELO SALVATORE (a)
LO GIUDICE GIUSEPPE
DR. MENDOLA ERNESTO
F/LLI D' ANGELO

m. Soc. Siciliana di Elettricita'
Town: SALEMI (3)

TUMBARELLO DR. FRANCESCO (a)
GIANDALIA GIUSEPPE (a)
DAINO FRANCESCO (a)
RISERVI GIUSEPPE
LO MANNO GIOVANNI
AMBASSO MARIANO

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d. Soc. Industriale Alia
Town: ALIA (1)

SOG. AN. EDILIZIALE (a)
(Will alternate with flour mill in the same building, now operating.
LO MUSCHI P. PAOLO

e. Soc. Industriale Alia
Town: [illegible] (1)

FAVARA ANTONINO (a)
MIGNOSA FRANCESCO
ADELAZZO EMILIANO

f. Soc. Industriale di Termini
Town: [illegible] (2)

GUELFATI VINCENZO ROMEO (a)
ANTINORO GIUSEPPE (a)
PRINCIPATO ANGELO

g. Soc. Industriale di Termini
Town: [illegible] (1)

IMPERATO GIOVANNI (a)

CFD/ACC.

CLAIR F. BURGAN ,
Major, C. E.,
Utilities Officer,
Transportation, Communications and Utilities Division.

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Declassified E.O. 12356 Section 3.3/NND No. 785019

2. Soc. Industriale di Termini
Town: [redacted] (2)

[redacted] (a)
[redacted] (a)
[redacted]

3. Soc. Industriale di Termini
Town: [redacted] (1)

[redacted] (c)

CWF/mbc.

CLAIR F. BONHAM ,
Major, U. S. A.,
Utilities Officer,
Transportation, Communications
and Utilities Division.

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Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
Public Works and Utilities Sub-Commission
APO 512

EIC/pja

27 November 1943

SUBJECT: Report Requested by AFHQ on Public Works & Utilities for Planning Purposes

TO : AFHQ, ENS., APO 512

1. There are forwarded herewith four copies of a report relating to subject matter.

For the Commanding General:

E. I. CLOUGH
Lt. Col. A.G.D.
Actg. Adjutant General

Incl.

4 Copies of Report

Declassified E.O. 12356 Section 3.3/NND No. 785019

Lt Col Jenny.

The queries were put out by AFHQ on 18 Oct. but Major Bowman was unable to reply till 13 Nov. Lt.Col.Bolick gives the reasons for the delay.....no office staff, severe shortage of Engr. officers, and other misc.duties. The information is wanted only for "planning".

Remarks.

(a) Electricity.

Compressed in 3½ pages, together with the special map on Incl.2, it seems to me that a fair over-all picture is given. Financing and labour questions are mentioned, though the queries did not ask ~~for~~ about these. But no harm done by including.

I have had Map 2 analysed, and attach results.

Page 3 gives repairs etc materials urgently needed, but no indication as to quantities; not even as a first instalment.

Clearly "Planning" should have this, and also some sort of specification. Lt Col Lappers branch might go into these two aspects, but we should not hold up the present answers till he has completed.(A tour round the island involved, if accuracy desired.) I suggest that they be sent on later, telling AFHQ that we have it in hand.

(b) Gas installations.

Page 8 is pretty useful. Tons 5500 coal/month indicated, for full operation of the 5 plants; but since Messina and Catania are "total loss", only 3 plants can possibly hope to operate within the next 12 months, or longer. A revised figure therefore needed, based on Palermo, and the two small ones Trapani and Agrigento. Main need is this gas-coal figure(it should be made quite clear that merely "coal" is no good. It must be suitable for gas production.)

Sgt. Eggar / Nos

Fili - with a file going out today (England).) (Re letter 7462 Ref No. 5 GEF. 7/11.

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(d) Water.

Pages 5,6 and 7 are much too general in character, but this is probably inevitable as covering such a large number of separate schemes, and of every engineering type.

On the other hand, the minute details given about the bomb damages (mains) 7 pages in the single town of Palermo are a waste of time and paper. No value at all to "planning", or to anyone else except the Water Co. itself.

In general, the outline given of the Palermo position is much too rosy. (It is the only one of which I have precise particulars.) No mention is made of the damaged reservoir, nor of need for lead, chlorine, house-fittings, and even tap-washers.

Position at other most important places such as Siracusa, Catania, Messina where much damage must have occurred is not mentioned, nor smaller places such as Trapani, Marsala, Castelvetrano, Ragusa, ~~Mis~~ Augusto, and Agrigento.

It seems hopeless to expect AMG Reg.1 HQ to get this information, in view of what is said about having only 1 Elec. and 1 RE Officer. Vague or inaccurate information may be worse, from a planning standpoint, than none at all.

It is clear, to me, that if any kind of correct summary is wanted (on waterworks) we shall have to send out 2 officers to make a 10 day tour of the island. And they would do very well if they covered only the places mentioned. They could also cover Rta 4 Zones — Besides Palermo.

G. E. Rhodes
Lt. Col. R.E.
15. 11. 43.

Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS ALLIED CONTROL COMMISSION
and
HEADQUARTERS ALLIED MILITARY GOVERNMENT
Public Works and Utilities Sub-Commission
APO 512

LAJ/ech

18 November 1943.

AC/150/PWU

Subject: Report requested by AFHQ on Public Works and Utilities in Sicily, for planning purposes.

To: Economic Director.

1. Attached hereto are four copies of a report on the above subject, with relevant plans attached.

The letters refer 141.8 of 18 Nov. (Major Bowman), and AFHQ 141.8 of the same date (Lt-Col Bolick) are self-explanatory. Shortage of staff, and other urgent duties, are noted as responsible for delays.

2. The reports concern electricity, gas and waterworks. They have been noted by this Sub-Commission, and it is desired to make the following observations:-

Generally

Though somewhat incomplete, they should be forwarded to AFHQ as they stand. This Sub-Commission has only been established here a few days, and is not yet in possession of data that would enable fuller and more precise answers to be given.

Such data may be available at a later date.

(a) Electricity.

A useful summary, taken in conjunction with Map E. Details on that map require analysis and tabulation... Materials needed are mentioned, but no indication of quantities, nor even outline specifications.

(b) Gasworks.

The report is a fair statement of the five production units in Sicily, and of the 5,500 tons of gas-coal needed, for full production monthly.

But since at Messina and Catania the works are reported as a "total loss", there remain only Palermo, Trapani and Agrigento. We estimate that Palermo will need 1,400 tons per month and Trapani and Agrigento 350 tons, total 1750 tons a month. (Palermo to be put on 50% output only, for the time being, because of temporary retort and other difficulties.)

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(e) Waterworks.

The outlines of these are very general in character, and possibly the information given will be of little positive value to AFHQ. There are numerous separate undertakings in Sicily, and they are of many engineering types. It is known (to this Sub-Commission) that the position at the present in the case of the Palermo Water Company is not so satisfactory as the report might indicate.

There is a reservoir that has not been in service since it was bombed last April, and repairs have only just been started. The work so involved is not great, but leakage and wastage in the distribution system is very great (90 million gallons per day) due to mains damages etc., and a great deal of repair work remains to be done. This must cease within three or four weeks from now, unless supplies of lead are received for jointing (4,800 tons of this said to be available in Sardinia).

Syracuse, Catania and Messina are not mentioned in the report, though their position may be similar - or much worse - than Palermo. To a lesser degree, this applies also to places like Trapani, Marsala, Castelvetrano, Ragusa, Augusta and Agrigento. It would take a little time to establish the facts, through Region I, or otherwise.

In general, however, on present information, stocks of repair materials and spare mains etc. are reasonable; but there is severe shortage of pig-lead, small lead pipes, small galvanised iron pipes, small taps and valves, and large volumes of water would be saved even if a few thousand tap washers could be supplied.

L.A. JENNY,
Lt-Col. C.M.P.
Acting Director.

Unclassified E.O. 12356 Section 3.3/NND No. 785019

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ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 512

CFB/sdb

File: 141.8

November 13, 1943

SUBJECT: Report on Utilities in Sicily

TO : Chief, T.C.U. & P.W. Div.

1. In response to request date 18 Oct. 1943 for compliance with radiogram NR 7564 from AFHQ there is transmitted herewith six copies of the requested report.

Clair F. Bowman

CLAIR F. BOWMAN
Major, C.E.
Chief, Utilities Section
Region 1, A.M.G.

INCL. 1

1 Report "Utilities in Sicily" (6 copies)

DISTRIBUTION

1 T.C.U. & P.W. Div. Region 1 A.M.G.
1 Public Works And Utilities Sub-Commission
4 AFHQ

Declassified E.O. 12356 Section 3.3/NND No. 785019

1st. Ind.

File: RTC 141.8
ALLIED MILITARY GOVERNMENT, SICILY REGION HEADQUARTERS,
APO 512, T.C.U.P.W. & Mining Div. 13 Nov., 1943.

TO: Public Works and Utilities Sub-Commission, Allied Commission, 8 Via Bari, Palermo, Sicily.

1. Transmitted herewith five copies of the above report.

2. This report was delayed because there are no clerks or draftsmen in the Utilities Section and all work had to be done by borrowed personnel as they could be obtained.

3. It is desired to repeat here that there is only one Electrical Engineer available for the Utilities section, assisted by one, non-electrical, R.E. officer. Additional clerks and draftsmen are essential for the operation of this section.

a. During the current week, in addition to normal duties of planning and directing operations, these two officers have been involved in settlement of:

(1) Two food riots

(2) Two incipient strikes

(3) One power plant failure.

C.F. Bolick
C.F. BOLICK
Lt. Col., F.A.,
Chief, T.C.U.P.W.
& Mining Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

ALLIED MILITARY GOVERNMENT

21

AMGOT/10050/TCU
SUBJECT: Work Assignment Memo re Msg. RR7564. FILE No.

TO: Chief Utilities Section, TC & U Div. AMGOT HQ. SICILY

18 Oct. 1943

1. AFHQ, by radio, has requested technical reports, with respect to public utilities (electric, gas and water) in Sicily, be submitted showing:

a. Extent and types of utilities.

b. Degree distruction thereof.

c. Extent to which it has been possible to restore skeleton local emergency services by cannibalization of local resources alone.

2. Example: What percentage of the various utilities has it been possible to put back in service?

3. Information from requested reports to be used in "planning";

4. It is requested that such reports be prepared as soon as possible from information available in Palermo.

LDD/tbw

L. D. DENSMORE,
Lt. Col., S.C.,
Director, Transportation,
Communications & Utilities.

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UTILITIES SICILY

Part 1. Electric Utilities

A. The transmission grid.

The electric service in Sicily is dominated by the Società Generale Elettrica della Sicilia (hereafter referred to as "S.G.E.S.") a private enterprise. Their map showing the system is inclosed as"Incl. No. 1" on which the proposed lines and Stations ("in progetto") have not been built.

In certain towns on the island secondary, independent companies purchase wholesale and distribute to one or more communities. Others have generating stations which can be interconnected with the grid if desired. These are shown in green on the map "Incl. No. 1"

There are also industrial plants which have their own power plants operating by steam or diesel engines. These are mostly mines in the Agrigento-Enna region. They have facilities for connection with the grid, but the engines do not operate satisfactorily on interconnection with the grid. They have been used during the emergency to supply local loads, by disconnecting them from the grid.

The damage to the grid is essentially as shown on the map, "Incl. No. 1" which shows repairs completed on 1 Nov. 1943. All these repairs were made by the S.G.E.S. using supplies on hand.

Primary distribution is 10,000 volts with secondaries 4 wire star 150/260 volts. Lighting is 150 volts; power 260 volts, threephase; all at 50 cycles. Exceptions: certain towns in N W Sicily which were purchased by S.G.E.S. and added to the grid operate at 110/220 volts 50 cycles.

B. Power Plants.

The S.G.E.S. operates fromm three steam plants, seven hydro plants and four diesel plants; the diesel plants being small and so old as to be none to reliable. Maintenance of the steam plants had not been too good, while maintenance

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of the hydro plants had been excellent.

The hydro plants operate from water sources of widely varying characteristic, presenting a complicated problem of choice of plants to carry the load. Some have constant spring flow 365 days per year, while one is entirely from a large reservoir. None of the hydro plants were damaged in any way. Two even transmitted power through the battle lines for several days.

A summary of the plants: their location, electric interconnection, damage, equipment and fuel requirements are shown on the map "Incl. No. 2". For each item of equipment there is a note as to its condition as follows:

(a) No damage; or such slight damage as to warrent no mention of the fact.

(b) Considerable damage, but repaired as of 1 Nov. 1943.

(c) Seriously damaged and capable of only partial operation.

(d) Damaged beyond possibility of immediate repair.

C. Observations thought to be of possible value in planning.

1. The utilization of electricity or "saturation" is only about 10% or 15% of that in the U.S. measured in KWH's. per capita. The essential loads (drinking water; food preservation and preparation such as refrigeration and flour mills; hospitals; sewage movement, etc.) may be estimated as 30% to 50% of equivalent use in U.S. There is therefore about three times as large a proportion of the supply which cannot be diverted without introducing counterbalancing problems of supply or health.

This sharply reduces the amount of civilian power which may safely be diverted to semi-military use such as ice cream production for Army messes, ARC operations, lighting for billets, etc. There has been overestimation of the amount of use to which civilian uses can be curtailed safely. As an example, one result is the possibly permanent ruin of a large sulphur mine in Sicily from lack of pumping power, when sulphur of this mine and others is needed for export to the U.K.

2. Supply plans should include:

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a. Adequate fuel and lubricants for the plants to be operated, including allowances for isolated plants not of record. Fuel should include coal, diesel oil, gasoline; and lubricants should include supplies for large turbines (One large turbine is now inoperative from lack of oil).

b. Insulators; especially suspension units which can be used in strings as necessary for use on 5 KV to 100 KV circuits. These are favorite targets for "marksmen", even in the rear areas: and are a common need.

c. Tapes, compound, and lead sheets for sleeves for use in splicing underground cable.

d. An adequate supply of lamps for the systems to be taken over with proper bases and voltage ratings; and wiring materials to match.

e. Transformer oil; much is lost by small arms fire puncturing tanks and radiators without damagin coils, and the tanks are readily repaired by welding.

f. Transformers to provide secondary power for use on radio, lighting, and other military electrical equipment in which frequencies are immaterial but for which civilian power is desired to save army generators.

g. Bombing shatters glass and most power plants are built with large areas of windows. Supplies of blackout materials and celloglass would speed up repairs.

h. Emergency financing may be required to keep employees at work. This may at times include paying by rations in kind for entire families where civilian supplies are difficult to obtain.

i. Labor policies as to rates should be fixed in line with normal local prices to avoid labor eruptions, strikes and shutdowns. Fixing of rates by army unit commanders should be prevented.

3. To prevent diversion of equipment it is suggested that all utility property-including stores, office equipment, transportation and equipment, be promptly frozen by the Engineer of an invasion unit; and that notice of the freezing be

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given by thoroughly posting the utility premises. Otherwise power poles may be used for fuel while a needed line cannot be repaired; or a motor may be taken for a repair shop, which cuts off a circulating pump in a power plant and thereby reduces the plant capacity and there is a lack of electricity to run the motor.

4. Favorable factors which may not be met elsewhere.

a. Being somewhat isolated, Sicilians had been able to hoard supplies, concealing them from Italian government and German Military authorities. Believing the American resources to be unlimited and immediately available they have made use of their hidden reserves on the belief that they now have unlimited resources available from America and U.K. Furthermore, the occupation was welcomed by 90% of the population and their cooperation on the whole nearly as good as though in liberated American Territory. This cannot be assumed for other regions.

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PART II WATER UTILITIES

A. Aqueduct systems and condition.

The normal water supplies in Sicily are entirely inadequate during the dry season, as measured by American Standards.

Rationing in various forms is almost universal and is accepted as normal. Perhaps because there is such widespread recognition of the results of water shortage, no cases of deliberate sabotage are known to have occured; although there were innumerable cases of puncturing pipes, to get water from the main where service was shut off because of damage to branch lines.

There were serious difficulties from improper tapping of water supplies for military uses, especially where it was done by other than Engineer water supply units. A primary supply conduit passing through a bivouac area would be broken to allow water to escape for use, the unused water being allowed to waste.

The water systems in all the larger towns suffered seriously from bomb damage. These had been given emergency repairs to allow serving most of each town before or immediately after occupation by the troops. In Palermo for example, out of approximately 200 breaks in the larger mains, 130 had been repaired before occupation by the Americans on July 23rd. and the system was repaired by 1 Sept. 1943 excepting in completely demolished areas.

As an example, the dates of breaks and of repairs to mains in Palermo are given in the table "Incl. No.3". By 1 Sept. the Company was able to place a repair crew on a break the day it was reported. Some work is being done currently in demolished areas.

B. Repairs to systems, and emergency operations.

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It can be safely stated that there was full cooperation between all parties, Army Units, AMGOT, Italian City officials, Water Companies and construction firms in efforts to restore service; although not all Sicilian personnel have been fully capable, many have not been too aggressive.

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Since water supply affects health, and troops were always present in and around the larger towns, the Army provided emergency assistance through Utilities Detachments , Enginner troops and some Engineer supplies for immediately required repairs.

The majority of the work was done by Civilian contractors, through special civic projects controlled by AMGOT CAO's, by the Engineer Seventh Army, or by C.R.E. Eighth Army.

Supplies of pipe were on hand in sufficient quantities to complete all vital repairs, although concrete pipe was subsituted in places for steel or cast iron. (N.B. It was probable that the reserve stores in Sicily were greater than will be found elsewhere in Italy). Labor was available from prisoners of war and "relief workers" on the city charity rolls.

C. Organization and Control.

Water systems include.

1. Individual supplies from a spring or a well for a home, farm, villa, or castle.

2. Village fountains from which each person carries his own.

3. Municipally owned and controlled aqueducts and distribution systems.

4. Privately owned, municipally controlled systems.

5. The Ente Aqueduct of Sicily, A TVA type of State enterprise authorized and financed to acquire, maintain, extend and operate the larger aqueduct systems supplying groups of towns, particularly where poverty in a region limited the ability of the population to care for themselves.(Under Investigation).

D. Supply problems. 715

As was given above, sufficent stores for emergency repairs were found in Sicily, with some minor assistance from stocks under Army Control.

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14/

Shortages were keenly felt in hand tools, power tools and transport. It was occasionally necessary to lift large blocks of stone from above breaks or to clear heaps of rubble and otherwise handle bulky or heavy loads for which heavy equipment was necessary.

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PART III GAS UTILITIES

A. There are five gas plants in Sicily, three operated by cities or communes (Palermo, Catania, and Trapani) and two by the S.G.E.S. (Messina and Agrigento). All were seriously damaged by bombs.

Because there was no visible supply of coal sufficient for their needs (est. at 5500 T/mo. for full operation of 5 plants) the situation of thegas plants was at first given only cursory consideration. The Engineer, Seventh Army, established the following policies which have not been essentially changed:

1. Guards were established at important gas works.

2. The facilities for manufacturing certain chemicals and gasses were put into operation for Army supply.

3. Gas departments were authorized to proceed with repairs on their own initiative with such resources as were available to them.

Assistance in making repairs, on a non-priority basis, was given by A.M.G. officers.

B. Present status of gas plants.

1. The Palermo Gas Department reports that its mains and equipment are essentially ready to operate, the mains having been either repaired or cut off of the system.

2. The Trapani gas plant is giving service in a limited area.

3. The Agrigento plant is small and capable of functioning on a limited basis.

4. The Messina and Catania plants are labelled "total loss" by the R.E. officers familiar with them.

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AC/AMG/PWD

1st Ind.

PWD/SGD

HEADQUARTERS, ALLIED MILITARY GOVERNMENT,
Public Works and Utilities Sub-Commission, APO 512, 15 Nov 43

To: Headquarters, Region I.

1. Compliance with this request is impossible at this time.

2. Provisions are made to assign one electrical engineer to HQ Region I at the time of arrival of additional personnel in Africa.

By command of Brigadier General MCCREARY:

L. L. [illegible],
Lt Col, CE,
Acting Director.

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Rec 11

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 512

CMB/sdb

ETC 210.31

November 10, 1943

SUBJECT: Request for Electrical Engineers

TO : Headquarters Allied Military Government
(Attention: Public Works and Utilities
Sub-Section)

1. A request is made for the services of two Electrical Engineers, one familiar with transmission line construction and the other, steam plant operation and maintenance.

2. The above mentioned officers are urgently needed to supervise the rehabilitation and operation of the Societa Generale Elettrica della Sicilia.

3. This problem has been discussed by Lt. Col. C.F. Bolioy with Lt. Col. Jenny of the Public Works and Utilities Sub-Section and he is familiar with the existing situation in Sicily.

CHARLES POLETTI
Lt. Colonel.
A.C.A.O.

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HEADQUARTERS 15 NOV 1943 AMGOT OPB/sdb 150 1866 108

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
APO 512

November 11, 1943

RTC 675

SUBJECT: Electric Supply; Eastern Sicily

TO : Headquarters, Allied Military Government

1. Reference letter AC/050/PWU dated 4 November 1943.

2. The condition stated in para. 1 of basic communication were essentially correct as of 1 November 1943.

3. a. On 2 November 1943 Major A. Crowther, R.E. was made available for this work and left on the first available transportation for Catania. He was accompanied by Major Clair F. Bowman, C.E., Chief Utilities Section, Region I. Major Crowther reported to the S.C.A.O. Catania, to the C.R.E. No. 1 District, and to the Società Generale Elettrica della Sicilia representatives on 5 November 1943 and stated that he was assuming jurisdiction over the operation of the Electric Supply in the provinces of Messina, Catania, Syracusa and Ragusa for A.M.G., Sicily Region Headquarters.

b. A copy of the instructions given to Major Crowther is attached as inclosure No. 1.

c. A copy of the instructions given to the S.G.E.S. representative is attached as inclosure No. 2.

4. The charts at the S.G.E.S. power plant at Catania indicated proper voltage control on 5 November 1943. The frequency was low; but the verbal order to raise it to 50 cycles was complied with at once.

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10A

5. a. Rehabilitation of the S.G.E.S. system was activated by engineers of the Seventh and Eighth armies in their respective sectors.

b. Further rehabilitation of the Eastern Sicily electric system to include connection with the remainder of the island, was assigned to the S.G.E.S. under the direction of Major Crowther and such work as can be done with materials available, has been started.

c. Until the Electric Supply for the remainder of the island is transferred to A.M.G. by I/B.S., control of their operations or rehabilitation does not come within A.M.G. jurisdiction.

d. Extensive supplies and equipment will be required to rehabilitate the steam plants sufficiently to give an adequate supply of electricity after the Hydro-power plants have consumed their supply of water, estimated as 1 Sept. 1944.

(1) Lists of supplies and materials have been prepared by S.G.E.S. Engineer but appear to be excessive and are not in sufficient detail to submit requisitions. These lists of materials will need to be checked by competent Allied Engineers before submitting requisitions. The S.G.E.S. will require considerable supervision and assistance in order to carry out the necessary program.

(2) A request has been made to A.M.G. Headquarters. Att. Public Works and Utilities Sub-Section for the services of two Electrical Engineers.

(3) Region I now has only one qualified Electrical Engineer to handle this work and it is felt that two additional are urgently needed.

Charles Poletti

CHARLES POLETTI
Lt. Colonel
R.C.A.O.

7145

INCL 2
Administrative Instruction No. 7
Instructions to S.G.E.S.

Declassified E.O. 12356 Section 3.3/NND No. 785019

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS

AG/32.042/CPB/10
11/2/43

SUBJECT: Electric Supply Eastern Sicily
Instruction No. 7

TO : Major Arthur Crowther 163869

1. In compliance with directive dated November 2, 1943, signed by the M.C.A.O. (copy of which is attached), you will proceed to Catania immediately and assume full responsibility for the Reletric supply in Eastern Sicily, which includes the Provinces of Messina, Catania, Siracusa, and Ragusa.

2. You will accomplish, in the priority listed, the following:

a. Restriction of the use of electricity to the extent necessary to insure adequate supply of all military and essential civilian needs.

b. Economical and efficient operation of all electric facilities to the end that water and coal will be conserved to the maximum degree.

c. Preparation and submission of detail descriptions and quantities of all materials, including coal, necessary in restoring the electric system to a safe operating condition.

d. The Catania Plant will be restored to the best operating conditions commensurate with materials available.

e. The 70 kv. Transmission Line and 40/70 kv Transformer Station will be repaired and made ready for full operation not later than 1 April 1944.

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f. The 40 kv. transmission system will be inspected and such work performed as may be necessary for restoration to safe operating condition.

g. Accomplishment of all recommendations contained in report submitted by Lt. Col. Bolick to director T.C.U. dated 25 Oct. 1943.

3. Weekly reports of activities, accomplishments and contracts will forwarded to this Hq. promptly.

By order of Lt. Col. Charles Peletti, R.C.A.C.

C.P. Bolick.

C.P. BOLICK
Lt. Colonel
Chief, T.C.U. and P.W. Div.

Declassified E.O. 12356 Section 3.3/NND No. 785019

ALLIED MILITARY GOVERNMENT
SICILY REGION HEADQUARTERS
PALERMO

AG/31.042/CFB
13/2/43

SUBJECT: Electricity Supply, Eastern Sicily

TO : Signor Tricomi, General Manager
Societa' Generale Elettrica Della Sicilia

1. Major Arthur Crowther has been designated as Allied Military Government Utilities representative to supervise the operation of all electric facilities in Eastern Sicily; Provinces of Messina, Catania, Siracusa, and Ragusa and will be stationed at Catania.

2. All instructions and directions given to you or any employee of S.G.E.S. by Major Crowther either verbal or written, will be complied with immediately.

3. On September 21, 1943 the Societa' Generale Elettrica Della Sicilia was directed to take over the responsibility for production and distribution of electricity in the Provinces of Messina, Catania, Siracusa and Ragusa.

4. All questions affecting policy, allocation of electric power, and the procurement of supplies will be referred to Major Crowther.

5. Requests for electric service:

a. All requests for electricity for military purposes will, in all cases, be supplied upon authorization of military representative of No. 1 District.

b. Non-military requests for the use of electricity will be authorized by the Provincial Supply officers of Messina, Catania, Siracusa and Ragusa .

c. The officers designated in par. 5 b. above will exercise full authority on requests for electric service. The authorized service shall include the following categories:

(1) Water purification and pumping for community supply.

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(2) Hospitals, prisons and other public institutions providing essential human needs.

(3) Flour mills and bake shops.

(4) Commercial refrigeration essential to the preservation of perishable foods.

(5) Allied Military Government offices, (lighting only), Red Cross buildings, Allied Forces Newspaper facilities, police and fire stations.

(6) Italian newspapers authorized by F.W.B.

6. No loads other than those listed in par. 5 will be connected without the authorization of Major Crowther.

7. Major Crowther will act as liaison between all military officials, Allied Military Government officials and the electric company officials in all matters concerning electric supply from Eastern Sicily.

8. The General Manager of S.G.E.S. will be responsible for continuity of service and also that distribution of electricity will be maintained at the correct voltage and frequency.

9. The S.G.E.S. hydro plants will be utilized to the fullest extent possible for supplying the base load 24 hours per day. For the present, one unit at the Catania steam plant will be operated from 6:30 a.m. to 10:30 p.m. for peak load requirements. This plant to be shut down on order of Major Crowther for deferred maintenance and major repairs, as soon as sufficient hydro power becomes available.

CHARLES POLETTI
Lt. Colonel
Regional Civil Affairs Officer

DISTRIBUTION:

R.C.A.O.	15
S.C.A.O. Messina	1
Catania	1
Siracusa	1
	1

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HEADQUARTERS ALLIED CONTROL COMMISSION
and
HEADQUARTERS ALLIED MILITARY GOVERNMENT
Public Works & Utilities Sub-Commission

LAJ/cw

AC/[illegible]/PWU

13 November 1945

Subject: Societa Ellettricia della Sardonia.

To: Economic Director.

There is attached hereto a letter for the signature of the Chief of Staff to be sent to the RCAO, Region I, for transmittal to this company. This letter is in reply to a request made by this company for authority to increase rates to be charged for electric services rendered by it. Please forward this for signature.

I am also attaching correspondence and data regarding this matter and wish to call particular attention to the fact that the financial condition of this company is not good and should be investigated. Will you please take this matter up with the Finance Sub- Commission and advise me of any action taken and the policy to be pursued by us in the future on such matters.

L. A. JANNY,
Lt. Col., C. E.
Acting Director.

Over file on this
Sent to Col Adams
to be returned to me
13/11/45

Separate file

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HEADQUARTERS ALLIED CONTROL COMMISSION LAJ/cw
and
HEADQUARTERS ALLIED MILITARY GOVERNMENT
Public Works & Utilities Sub-Commission
APO 512

13 November 1943

Subject: Request of Societa Elettrica dalle Madonie for permission to increase rates.

To: RCAO, Region I.

On 21 October 1943 this H.Q. received a letter from the President of the Societa Elettrica dalle Madonie requesting permission to increase the rates for electric services rendered by that company. It is requested that this company be advised as follows:

" Your letter of 7 October 1943 has been received by us on 21 October 1943. We note that you request authority to increase the rates to be charged for electric services rendered by your company.

Please be advised that the Allied Military Government will not permit an increase in rates to be charged by you ".

By Command of Major General JOYCE.

E. GUSTENBECK.
Brigadier.
Acting Vice Chief of Staff.

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Declassified E.O. 12356 Section 3.3/NND No. 785019

HEADQUARTERS
ALLIED MILITARY GOVERNMENT.
PUBLIC WORKS & UTILITIES SUB-COMMISSION.

1st NOV 1943.

AC/ISC/PWU

SUBJECT: Economy in the use of Electricity.

To: Acting Executive Officer.

It It is observed that Electric Lights are left switched on both in offices and billets when rooms and passages are not in use.

2. This is a definate waste of energy and I would ask that you issue a directive to all Sub-Commissions informing them that it is in the interest of our War effort that the strictest economy should be made in the use of Electricity, and that Electric Lights should only be switched on when absolutely necessary.

L.A.JAMMY.
Lt.Col., C.M.R.
Acting Director.

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DK PLANS & MAPS

Ltr To Rept. TOAFHQ Nov 18
Incl Nos 1-2-4-3.

Inclosures

Declassified E.O. 12356 Section 3.3/NND No. 785019

LETL

PLANS & MAPS

Declassified E.O. 12356 Section 3.3/NND No. 785019

Incl. #2

Main Electric Plants
- Sicily

Declassified E.O. 12356 Section 3.3/NND No. 785019

Gen. [illegible] 2000 KW (a); 6 to engine 2000 KW (d). Boilers: 3 stokers (b) (c) 18 #/hr; 1--oil fuel (b) 30 #/hr. Duty by distillation of fresh water. Duty small and extensive [illegible]. Operating by 4 oil engines. Gen expeditions 2500 KW steady 3500 peak. Fuel--300 T/30. Repaired by Japan Navy. Well Det.

Gen. [illegible] 1750 and 1 [illegible] KVA(a). Turbines. [illegible] and 1 [illegible] HP. (a). No storage operation ranging from 10,000 KW hrs to 40,000 KW hrs operational basis. No damage whatever. Built in 1940, but in perfect condition.

Unit 1. 650 KVA gen (a) with 1000 HP 107 rpm (d). Unit 2: 200 gen (a) with 240 HP 90 rpm (d). Unit 3: 200 gen with 250 HP 450 rpm (d). Unit 4: 110 gen (a) with 170 HP 450 rpm (d). All are direct connected. Only one good pair. Set recommended load 50 KVA. All diesel engined. Some repairs by Jap. Navy. Some equipment destroyed. Fuel 70 T/30.

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FOR USE OF WAR AIR AND NAVY DEPTS ONLY
NOT FOR DISTRIBUTION

ROAD MAP 1:500,000

PLANT 6 - TRAPANI - Diesel
Gen: 1 @ 650 KVA (a); 1 @ 500 KVA (a); Engines: 1 @ 1000 HP 187 rpm (b); 1 @ 550 HP 214 r.p.m. (a)
Extensive damage to building and control equipment. Repaired by SOE
Fuel 30 T/mo.

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FOR USE OF WAR AIR AND NAVY DEPTS ONLY
NOT FOR DISTRIBUTION

SICILY

13° D 15' E

H 15' I

PALERMO - [illegible]
Gen. 1 @ 3000 K^ 1 @ 7500 K^ (a)
Boilers. 1-Yuly. Coal (a): 35
T/hr; 2-Stockers (a) (a); 18 T/hr
Four bomb hits-1000 K^ by 10 Sept.
Now 2000 K^ Max expectation-1000
K^ steady 4000 K^ peak. Fuel-1000
T/mo. Repaired by 10 Oct. Engr. Still
Dmt.

. 1 - CASSUZZE
3500 KVA; (a).
HP (a). Reser
00 mo useful ca
plus 10,000,0
basis. Built
it condition.

Terracini
Montelepre
Monreale
Borgetto
Partinico
Alcamo
Camporeale
S. Giuseppe
Piana
Misilmeri
Altofonte
PALERMO
Trabia
Termini Imerese
Cefalu
Campofelice
Balestrate
Vantimiglia di Sicilia
Villafrati
Caccamo
Collesano
Gratteri
Isnello
Castelbuono
Cerda
S. Stefano
Petraro
Mistretta
Corleone
Campofiorito
Bisacquino
Prizzi
Palazzo Adriano
Chiusa Sclafani
S. Margherita
Sambuca
Menfi
Sciacca
Ribera
Cianciana
Alessandria
Calamonaci
Cattolica Eraclea
Roccapalumba
Alia
Valledolmo
Lercara Friddi
Vicari
Mongemaggiore
Caltavuturo
Vallelunga Pratameno
Villalba
Mussomeli
Castelermini
Milena
S. Cataldo
Caltanissetta
S. Caterina
Enna
Sperlinga
Nicosia
Leonforte
Agira
Troina
Cerami
Gagliano
Regalbuto
Centuripe
Adrano
Bronte
Randazzo
Maletto
Linguaglossa
Piedimonte Etneo
Giarre
Riposto
Acireale
Catania
Aci Catena
Aci Reale
Aci Trezza
Augusta
Siracusa
Lentini
Carlentini
Francofonte
Lentini
Augusta
Priolo
Melilli
Siracusa
Floridia
Solarino
Sortino
Palazzolo Acreide
Noto
Avola
Pachino
Rosolini
Ispica
Modica
Scicli
Ragusa
Comiso
Vittoria
Acate
Chiaramonte Gulfi
Monterosso Almo
Giarratana
Ragusa
Modica
Scicli
Pozzallo
Ispica
Rosolini
Pachino
Noto
Avola
Augusta
Siracusa
Priolo
Melilli
Floridia
Solarino
Sortino
Palazzolo Acreide
Lentini
Carlentini
Francofonte

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Second Class Roads (Mostly 2 way M.T.)
Third Class Roads (1 way M.T.)
Approximate Mileages between stars

Road classification and mileages are NOT based on reconnaissance; reliability is unknown.

NOTE Officers using this map will mark hereon corrections and additions which come to their attention and forward through Engineer channels

SICILY

H 15' I 30' J 45' K 15° L 15

. 1 – CASSIBILE – Hydro
3500 KVA; (a). Turbines:
HP (a). Reservoir fed–
00 mc useful capacity,
plus 10,000,000 on
basis. Built in 1922;
t condition.

Cefalu
Campofelice
Collesano
Tanella
Castelbuono
Cerda
Caltavuturo
Roccapalumba
Petralia
Gangi
Sperlinga
Nicosia
Troina
Cesaro
Randazzo
Capo d'Orlando
Brolo
Naso
Patti
Milazzo
Barcellona
Castroreale
Messina
S Agata di Militello
S Fratello
Ucria
Caronia
S Stefano
Reitano
Mistretta
Nasaro di Sicilia
Francavilla di Sicilia
Castiglione di Sicilia
Linguaglossa
Piedimonte
Mascali
Giarre
Riposto
Monte Etno
Volleturno Pratomagno
Assoro
Agira
Leonforte
Villarosa
Enna
S Caterina
Strada Benestri
S. Cataldo
Caltanissetta
Valguarnera
Raddusa
Ragalbuto
Adrano
Biancavilla
Centuripe
Paterno
Catenanuova
Belpasso
Misterbianco
CATANIA
Aci Catena
Acireale
Trecastagni

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Road classification and mileages are NOT based on reconnaissance; reliability & uniformity

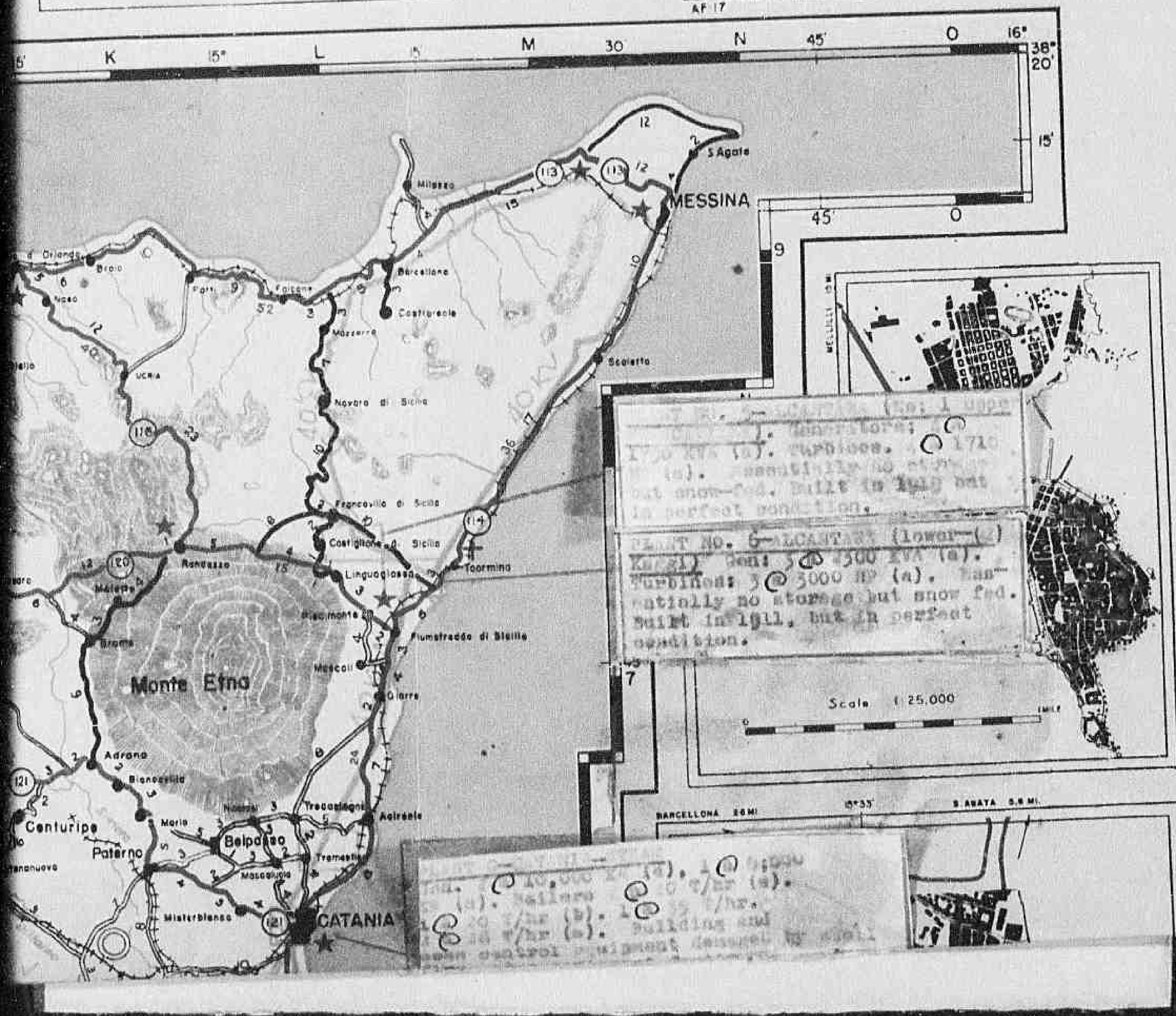
PREPARED FOR

U. S. ARMY

NOTE Officers using this map will mark hereon corrections and additions which come to their attention and forward through Engineer channels

REFER TO THIS MAP AS
ROAD MAP 1:500,000 SICILY

AF 17



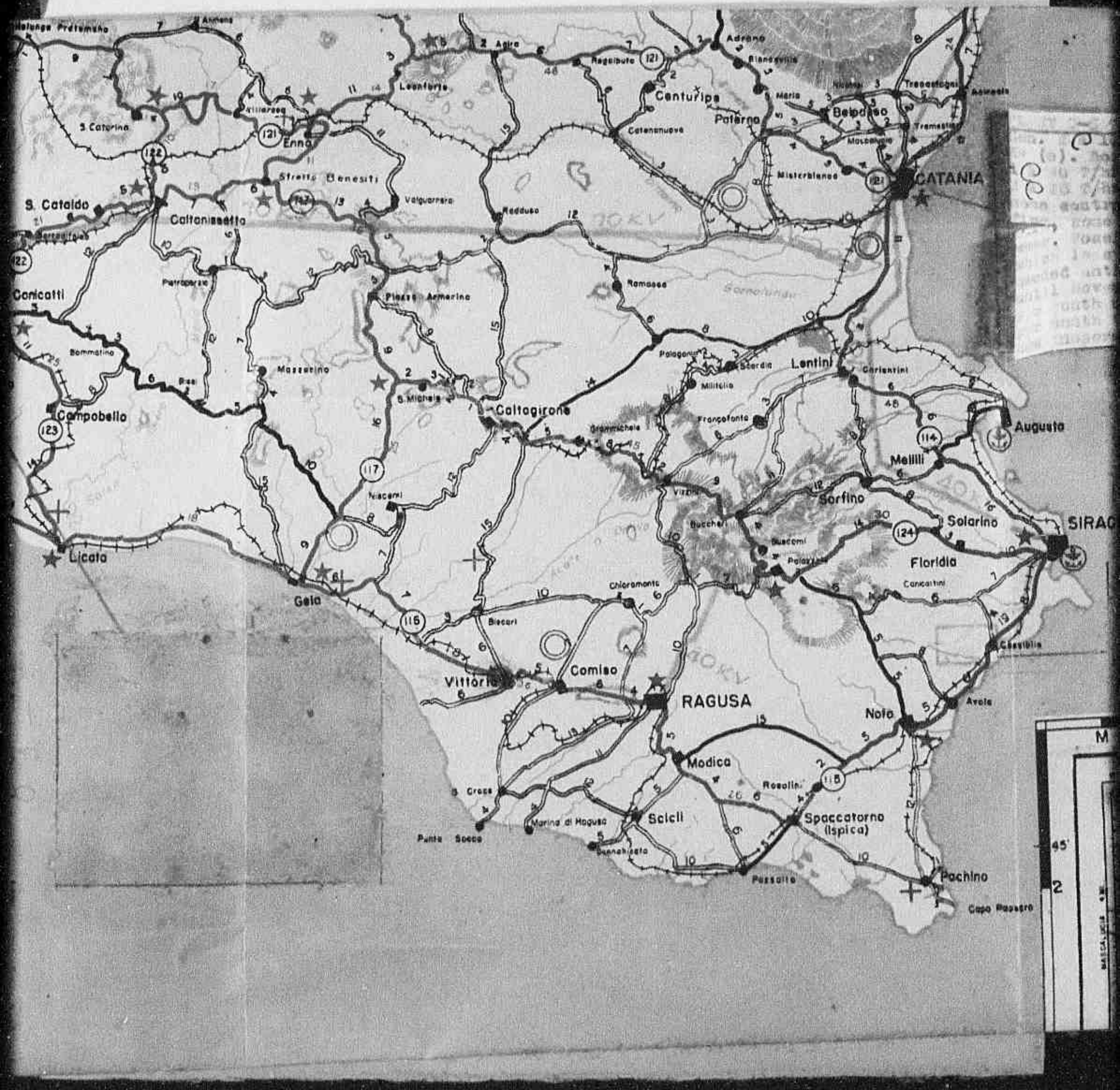
Declassified E.O. 12356 Section 3.3/NND No. 785019

Declassified E.O. 12356 Section 3.3/NND No. 785019

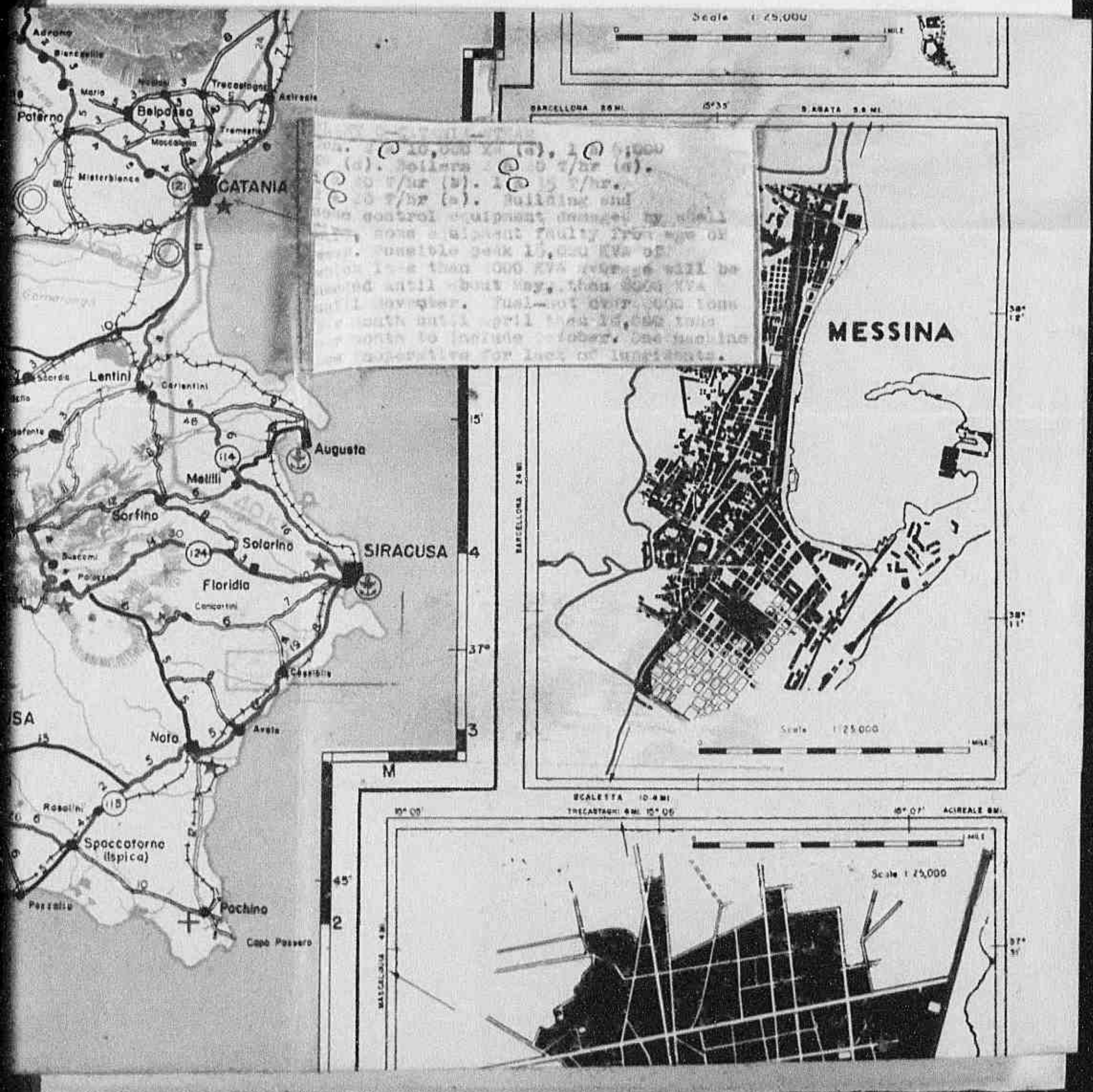


1 @ 156 KVA (b). Alimen. 3 @ 300 hp
1 @ 137 rpm, all direct
connected. 01 machines old, max
recommended load 10 K^w each total 240
K^w. Some slight damage from small fire
required by Coast. Fuel 30 T/mo.

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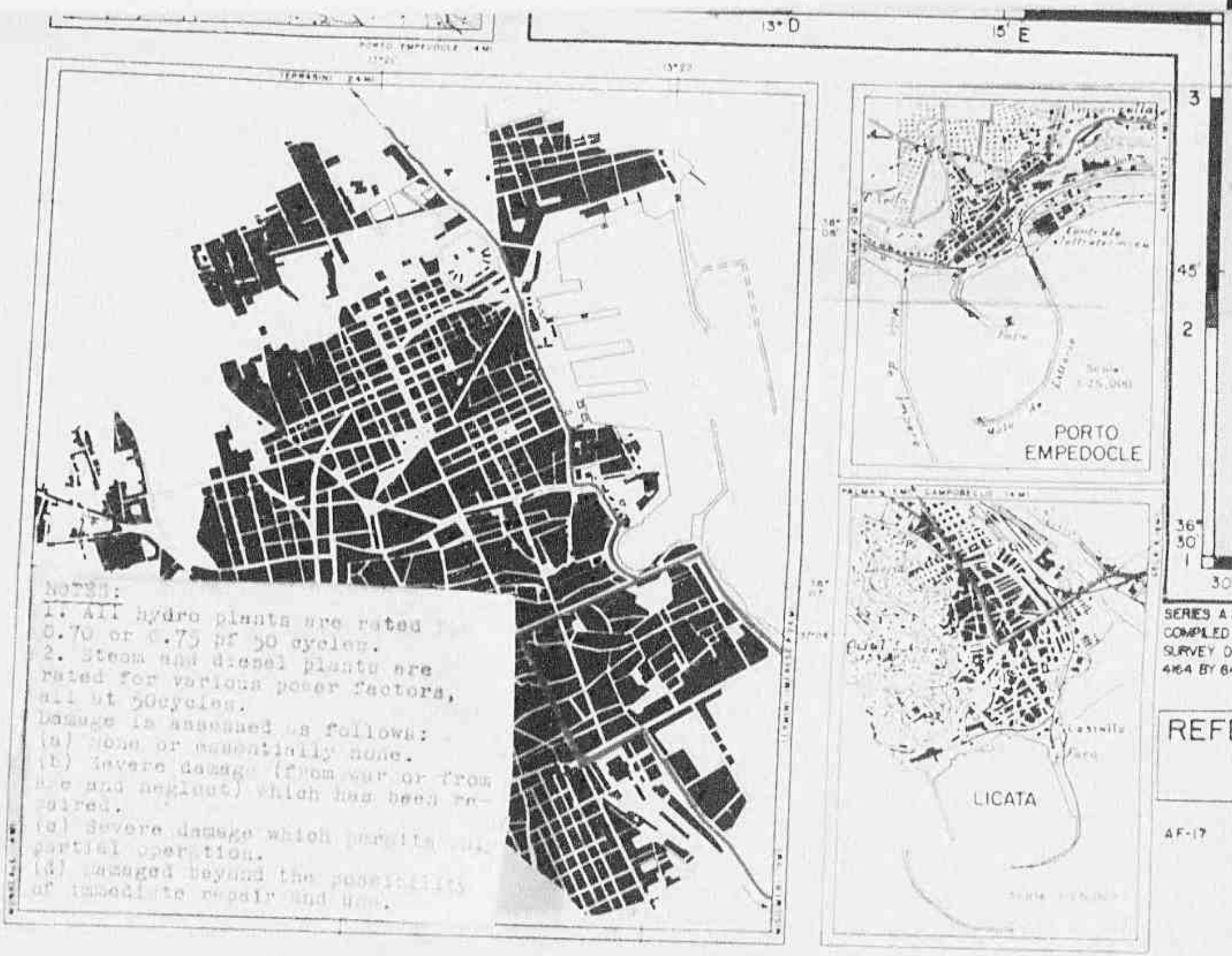

Adrano
Centuripe
Paterno
Belpasso
CATANIA
Misterbianco
Enna
Leonforte
Agira
Regalbuto
Catenanuova
Stretto Benesiti
Valguarnera
Caltanissetta
S. Cataldo
Reddusa
Ramacca
Piazza Armerina
Mazzarino
Caltagirone
Militello
Francofonte
Lentini
Augusta
Melilli
Sortino
Solarino
SIRAC
Floridia
Canicattini
Avola
Noto
Pachino
Capo Passero
Modica
Scicli
Spaccaforno (Ispica)
Vittoria
Comiso
RAGUSA
Chiaramonte
Gela
Niscemi
Licata
Campobello
Canicatti
Caltagirone
Grammichele
Buccheri
Buscemi
Palazzolo
Biscari
Chiaramonte
Marina di Ragusa
Punta Secca
Pozzallo
Rosolini
Cassibile
Palagonia
Militello
Francofonte
Grammichele
Buccheri
Buscemi
Palazzolo
Biscari
Chiaramonte
Marina di Ragusa
Punta Secca
Pozzallo
Rosolini
Cassibile
Canicattini
Carlentini
Augusta
Melilli
Sortino
Solarino
Floridia
Avola
Noto
Pachino
Capo Passero
Spaccaforno (Ispica)
Scicli
Modica
Vittoria
Comiso
RAGUSA
Chiaramonte
Gela
Niscemi
Licata
Campobello
Canicatti
Caltagirone
Grammichele
Francofonte
Militello
Lentini
Augusta
Melilli
Sortino
Solarino
Floridia
Avola
Noto
Pachino
Capo Passero
Spaccaforno (Ispica)
Scicli
Modica
Vittoria
Comiso
RAGUSA
Chiaramonte
Gela
Niscemi
Licata
Campobello
Canicatti
Caltagirone
Caltanissetta
S. Cataldo
Enna
Leonforte
Agira
Regalbuto
Centuripe
Paterno
Belpasso
CATANIA
Misterbianco
Ramacca
Piazza Armerina
Mazzarino
Caltagirone
Militello
Francofonte
Lentini
Augusta
Melilli
Sortino
Solarino
SIRAC
Floridia
Avola
Noto
Pachino
Capo Passero
Modica
Scicli
Spaccaforno (Ispica)

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0 7 3 8

Declassified E.O. 12356 Section 3.3/NND No. 780019



NOTES:

1. All hydro plants are rated [illegible] 0.70 or 0.75 pf 50 cycles.
2. Steam and diesel plants are rated for various power factors, all at 50cycles.

Damage is assessed as follows:

(a) None or essentially none.
(b) Severe damage (from war or from use and neglect) which has been repaired.
(c) Severe damage which permits [illegible] partial operation.
(d) Damaged beyond the possibility of immediate repair and use.

Declassified E.O. 12356 Section 3.3/NND No. 785019





36° 30'
30' F
45' G
14' H
15' I
30' J

SERIES A F M401
COMPILED UNDER THE DIRECTION OF THE SURVEY DIRECTORATE A.F.H.Q. FROM G.S.G.S. 4164 BY 649TH ENGINEER BN, U.S. ARMY, 1943

REFER TO THIS MAP AS
ROAD MAP 1:500,000 SICILY

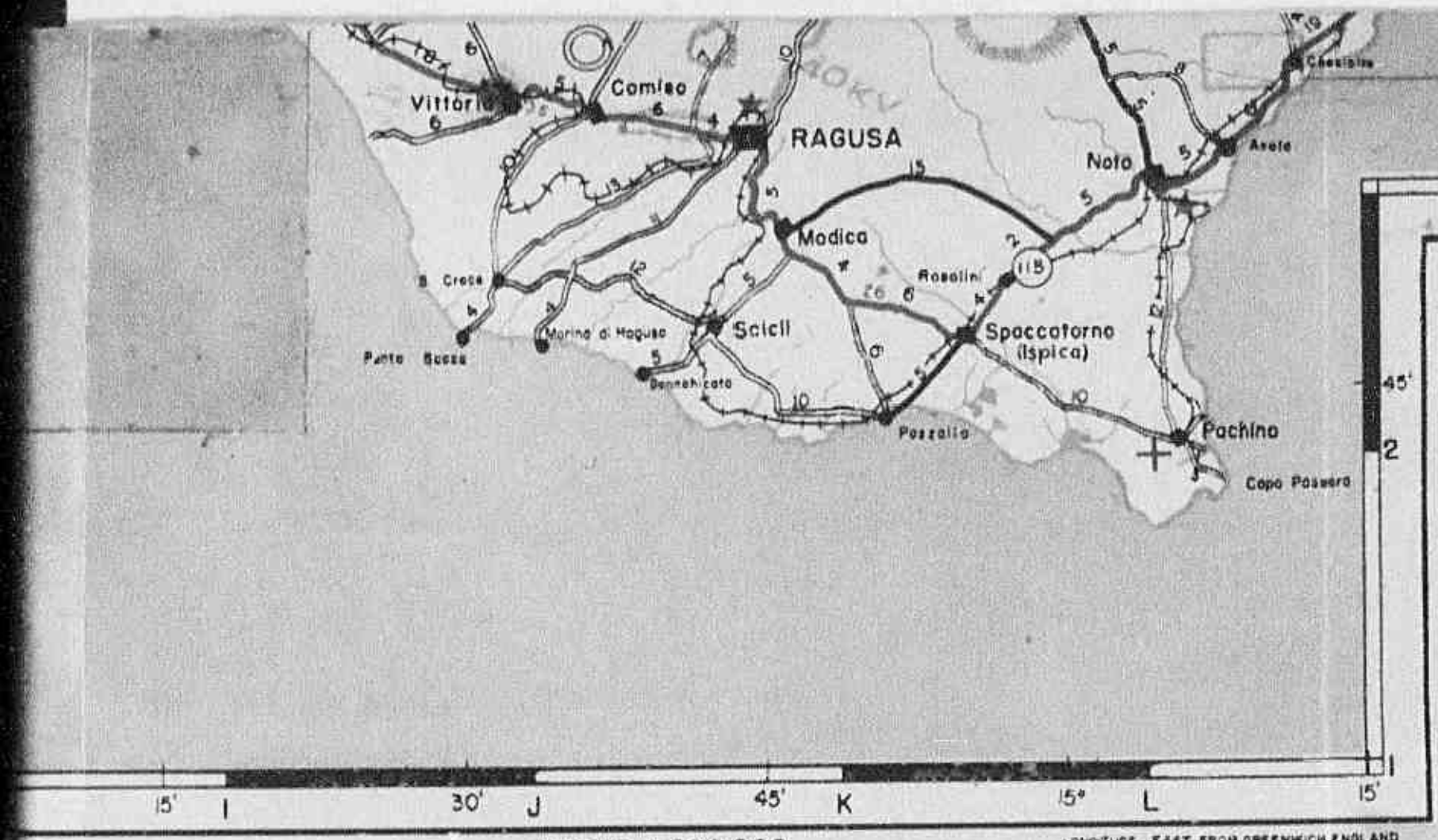
AF-17

3° 33' JAN 1943
ANNUAL CHANGE 6' EAST

SC
MILES 10 5 0 10
KILOMETRES 10 5 0 10

Railroads, Standar
First Class Roads (2-
Second Class Roads (
Third Class Roads (1 wi
Approximate Mileages
Cities
Intermediate Towns
Small Towns
Prominent Ridges and
Seaplane Base
Large Airdrome

Declassified E.O. 12356 Section 3.3/NND No. 785019



SCALE 1:500,000

LONGITUDE EAST FROM GREENWICH ENGLAND

MILES 10 5 0 10 20 30 MILES

KILOMETERS 10 5 0 10 20 30 40 50 60 KILOMETERS

LEGEND

Railroads, Standard Guage

First Class Roads (2-way M.T.) (115)

Second Class Roads (Mostly 2-way M.T.)

Third Class Roads (1-way M.T.)

Approximate Mileages between stars ★ 25 ★

Cities

Intermediate Towns

Small Towns

Prominent Ridges and Peaks

Seaplane Base

Small Airdrome

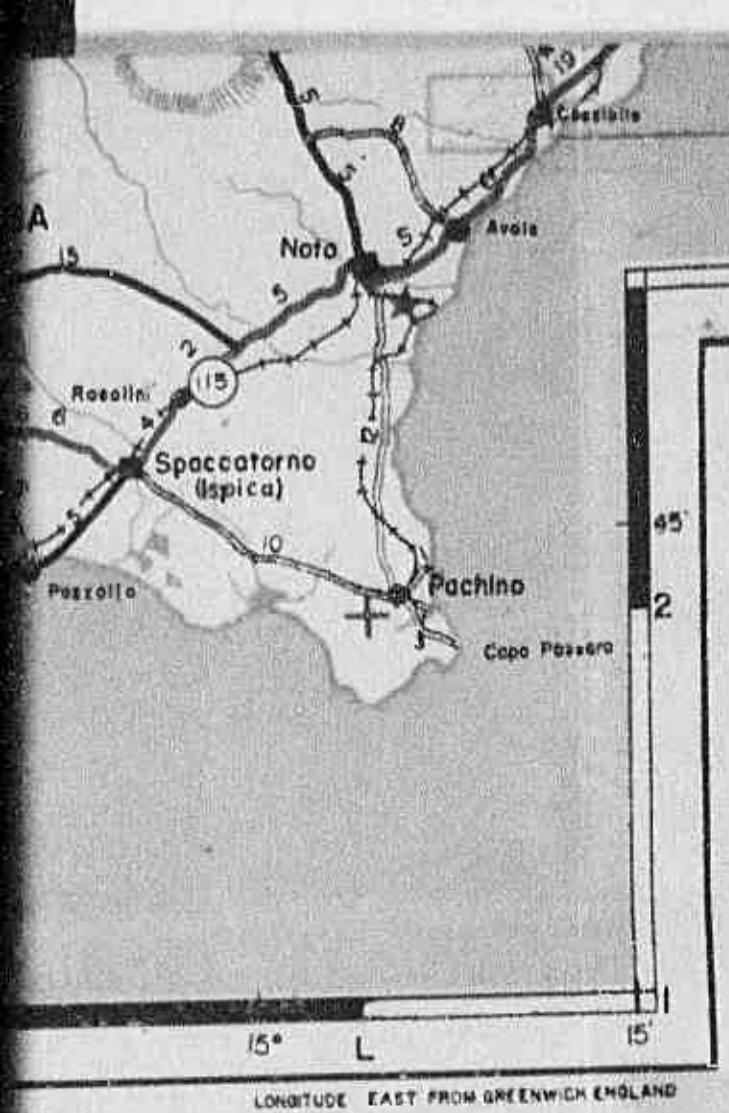
Large Airdrome

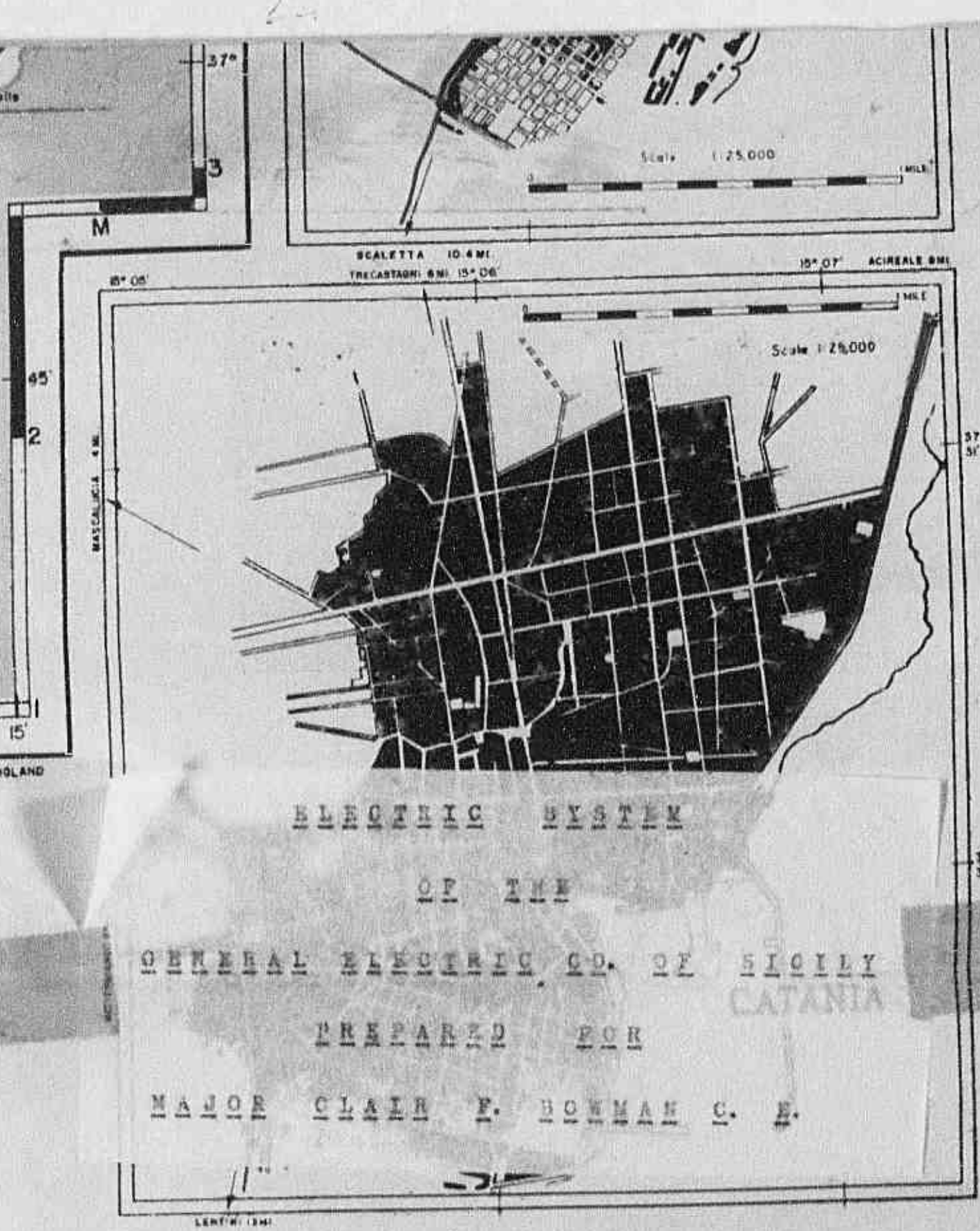
Emergency Landing Field

Third classification and mileages are NOT based on reconnaissance; reliability is uncertain.

REPRODUCED BY 648TH ENGINEER BN. JUNE 1943

Declassified E.O. 12356 Section 3.3/NND No. 785019





ELECTRIC SYSTEM

OF THE

GENERAL ELECTRIC CO. OF SICILY

CATANIA

PREPARED FOR

MAJOR CLAIR F. BOWMAN C. E.

REPRODUCED BY 648TH ENGINEER BN. JUNE, 1943

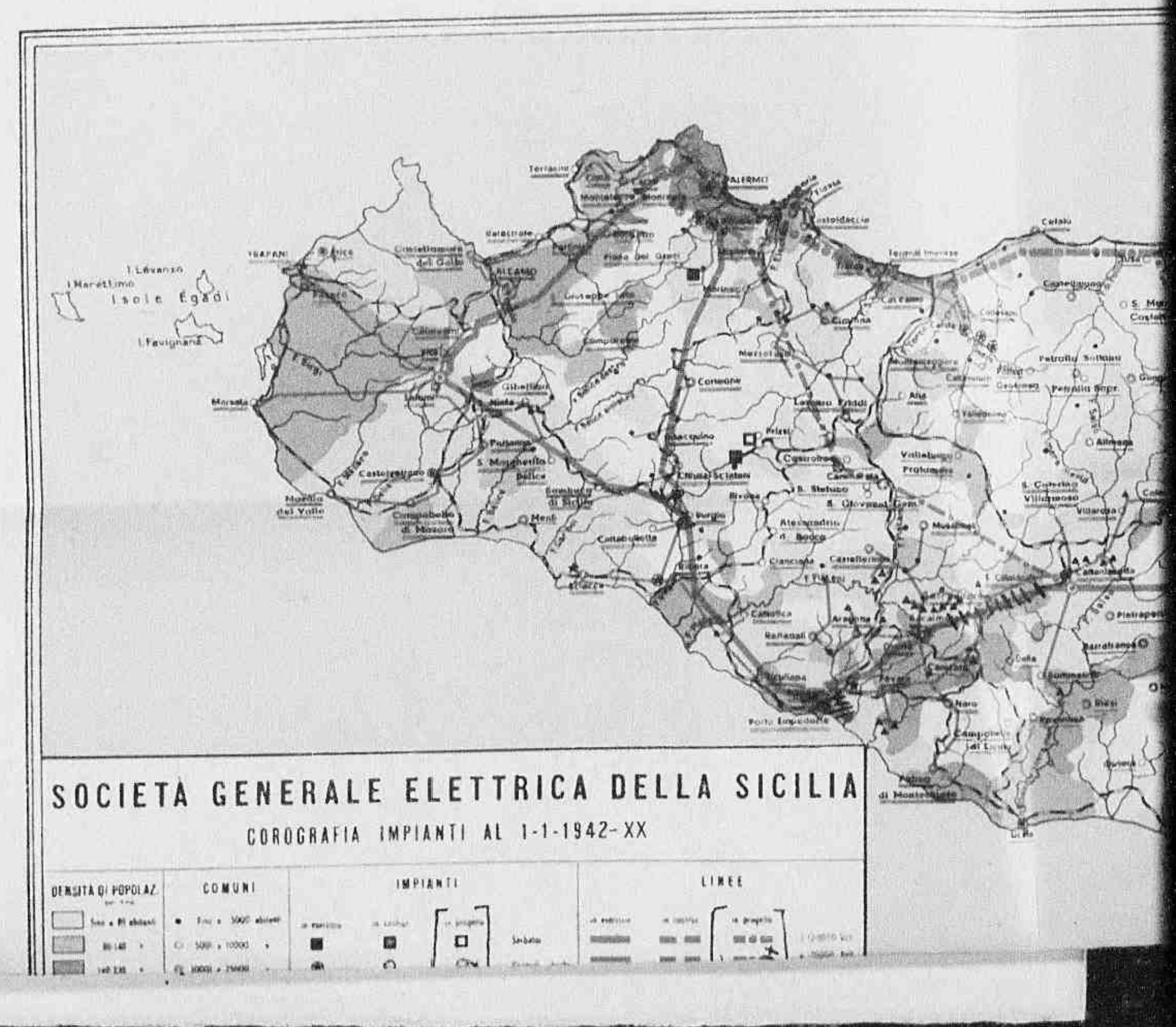
Declassified E.O. 12356 Section 3.3/NND No. 785019

Incl. #1.

Electric Lines of

S.G.E.S.

Declassified E.O. 12356 Section 3.3/NND No. 785019



SOCIETÀ GENERALE ELETTRICA DELLA SICILIA

COROGRAFIA IMPIANTI AL 1-1-1942-XX

DENSITÀ DI POPOLAZ.

COMUNI

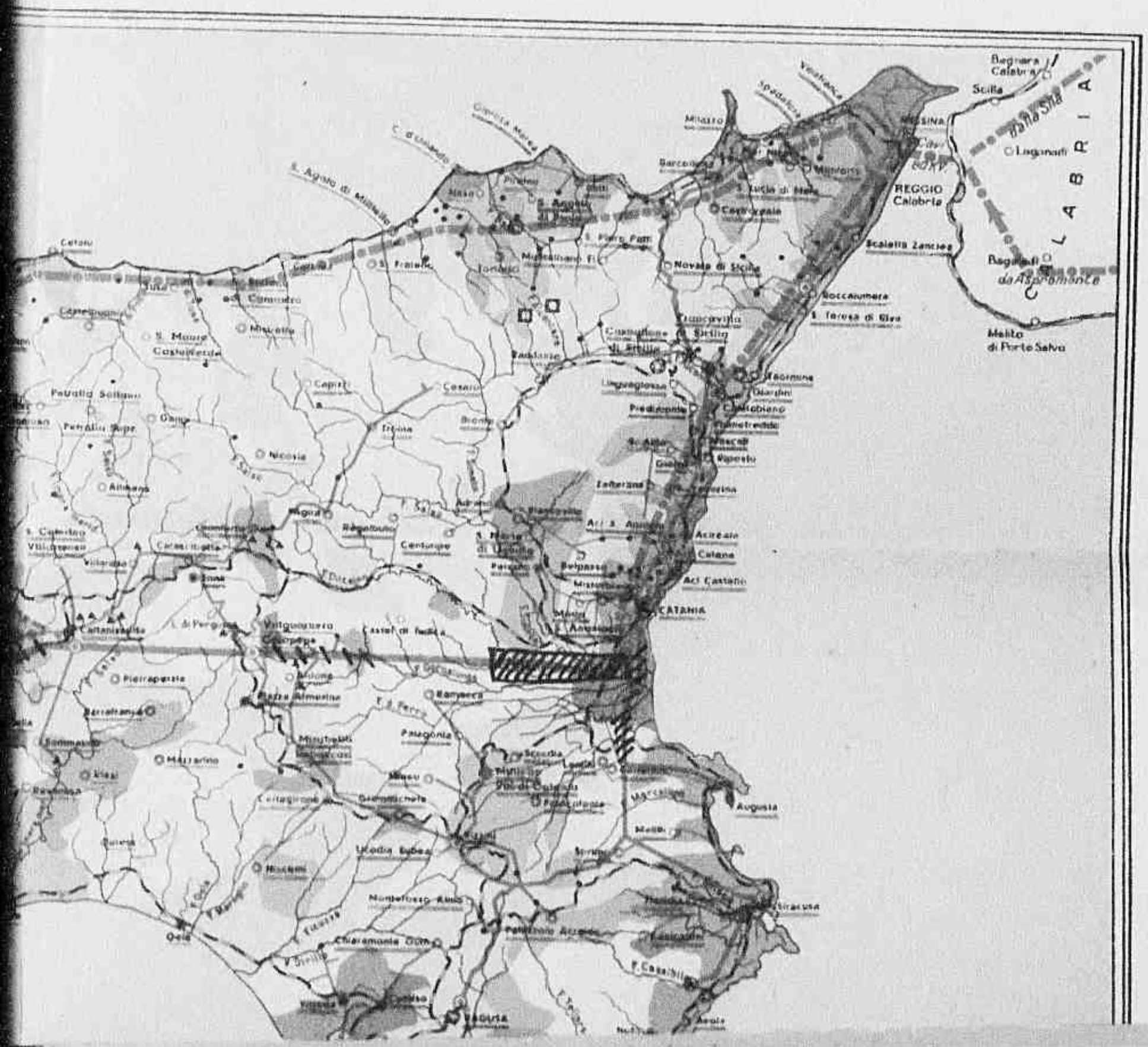
IMPIANTI

LINEE

Declassified E.O. 12356 Section 3.3/NND No. 785019


PALERMO
Cefalù
Termini Imerese
Corleone
Cinisi
Misilmeri
Caccamo
Caltanissetta
Piazza Armerina
Gela
Licata
Agrigento
Sciacca
Marsala
Trapani
Castelvetrano
Mazara del Vallo
Partinico
Alcamo
Salemi
Calatafimi
Gibellina
Menfi
Ribera
Sciacca
Canicattì
Naro
Licata
Ragusa
Modica
Pozzallo
Noto
Siracusa
Augusta
Lentini
Catania
Acireale
Giarre
Riposto
Taormina
Messina
Milazzo
Barcellona
Patti
Sant'Agata di Militello
Capo d'Orlando
Cefalù
Termini Imerese
Trapani
Marsala
Mazara del Vallo
Sciacca
Agrigento
Licata
Gela
Ragusa
Modica
Pozzallo
Siracusa
Augusta
Catania
Acireale
Giarre
Riposto
Taormina
Messina
Milazzo
Barcellona
Patti
Sant'Agata di Militello
Capo d'Orlando
REGGIO Calabria
Scalea Zanclea
Bocca d'Alaro
S. Teresa di Riva
Caltanissetta
Piazza Armerina
Enna
Nicosia
Troina
Cerami
Adrano
Paternò
Belpasso
Misterbianco
Acireale
Aci Catena
Aci Castello
CATANIA
Augusta
Melilli
Priolo Gargallo
Siracusa
Noto
Pachino
Portopalo di Capo Passero
Avola
Rosolini
Ispica
Modica
Scicli
Ragusa
Vittoria
Comiso
Acate
Chiaramonte Gulfi
Monterosso Almo
Giarratana
Palazzolo Acreide
Buccheri
Ferla
Floridia
Solarino
Sortino
Lentini
Carlentini
Francofonte
Militello in Val di Catania
Scordia
Caltagirone
Grammichele
Mineo
Palagonia
Ramacca
Paternò
Adrano
Bronte
Randazzo
Maletto
Linguaglossa
Piedimonte Etneo
Castiglione di Sicilia
Giarre
Riposto
Acireale
Aci Catena
Aci Castello
Misterbianco
Belpasso
Nicolosi
Motta Sant'Anastasia
Valguarnera Caropepe
Barrafranca
Pietraperzia
Mussomeli
Sommatino
Riesi
Butera
Mazzarino
Niscemi
Gela
Licata
Canicattì
Naro
Ribera
Cianciana
Alessandria della Rocca
Cattolica Eraclea
Siculiana
Porto Empedocle
Agrigento
Favara
Palma di Montechiaro
Campobello di Licata
Sambuca di Sicilia
Menfi
Sciacca
Caccamo
Termini Imerese
Cerda
Sclafani Bagni
Collesano
Gangi
Petralia Sottana
Petralia Soprana
Alimena
Caltavuturo
Polizzi Generosa
Castelbuono
Pollina
Isnello
Cefalù
Lascari
Campofelice di Roccella
Trabia
Casteldaccia
Bagheria
Villabate
Misilmeri
Marineo
Corleone
Prizzi
Chiusa Sclafani
Bivona
Santo Stefano di Quisquina
Alessandria della Rocca
Cianciana

Declassified E.O. 12356 Section 3.3/NND No. 785019


Reggio Calabria
Scilla
MESSINA
Milazzo
Barcellona
Patti
Cefalù
Termini Imerese
Palermo
Trapani
Marsala
Mazara del Vallo
Sciacca
Agrigento
Licata
Gela
Ragusa
Modica
Noto
Siracusa
Augusta
Catania
Acireale
Acireale
Riposto
Giarre
Taormina
Letojanni
Scaletta Zanclea
Bagnara
Palmi
Gioia Tauro
Rosarno
Nicotera
Tropea
Vibo Valentia
Pizzo
Lamezia Terme
Catanzaro
Crotone
Cirò Marina
Rossano
Corigliano Calabro
Castrovillari
Paola
Cosenza
Amantea
Belvedere Marittimo
Diamante
Scalea
Praia a Mare
Maratea
Lagonegro
Sapri
Policastro
Agropoli
Paestum
Salerno
Battipaglia
Eboli
Nocera Inferiore
Pompei
Torre Annunziata
Castellammare di Stabia
Sorrento
Meta
Piano di Sorrento
Vico Equense
Positano
Amalfi
Ravello
Cava dei Tirreni
Salerno
Avellino
Benevento
Caserta
Aversa
Napoli
Pozzuoli
Ischia
Procida
Capri
Isola di Capri
Golfo di Napoli
Golfo di Salerno
Golfo di Policastro
Golfo di Sapri
Golfo di Gaeta
Golfo di Gioia
Golfo di Squillace
Golfo di Sant'Eufemia
Golfo di Lamezia
Golfo di Santa Eufemia
Golfo di Taranto
Golfo di Catania
Golfo di Augusta
Golfo di Siracusa
Golfo di Noto
Golfo di Gela
Golfo di Licata
Golfo di Castellammare
Golfo di Trapani
Golfo di Palermo
Golfo di Termini Imerese
Golfo di Cefalù
Golfo di Patti
Golfo di Milazzo
Golfo di Messina
Golfo di Reggio Calabria
Golfo di Gioia Tauro
Golfo di Sant'Eufemia
Golfo di Squillace
Golfo di Taranto
Golfo di Policastro
Golfo di Sapri
Golfo di Gaeta
Golfo di Napoli
Golfo di Salerno

Declassified E.O. 12356 Section 3.3/NND No. 785019



SOCIETÀ GENERALE ELETTRICA DELLA SICILIA

COROGRAFIA IMPIANTI AL 1-1-1942-XX

DENSITÀ DI POPOLAZ. (per Kmq.)

- fino a 80 abitanti
- 80-140 »
- 140-230 »
- 230-350 »
- oltre 350 »

COMUNI

- fino a 5000 abitanti
- 5001 a 10000 »
- 10001 a 25000 »
- 25001 a 50000 »
- di 50000 »

IMPIANTI

in esercizio	in costruz.	in progetto	
■	■	□	Sarbatoi
⊛	○	○	Centrali idriche
★	☆	☆	» termiche
⊛	⊚	⊚	Cabine primarie

Not Built

LINEE

in esercizio	in costruz.	in progetto	
			a 150000 Volt
			a 50000 Volt
			a 45000 »
			a 30000 »
			a 3 1-10000 »

Not Built

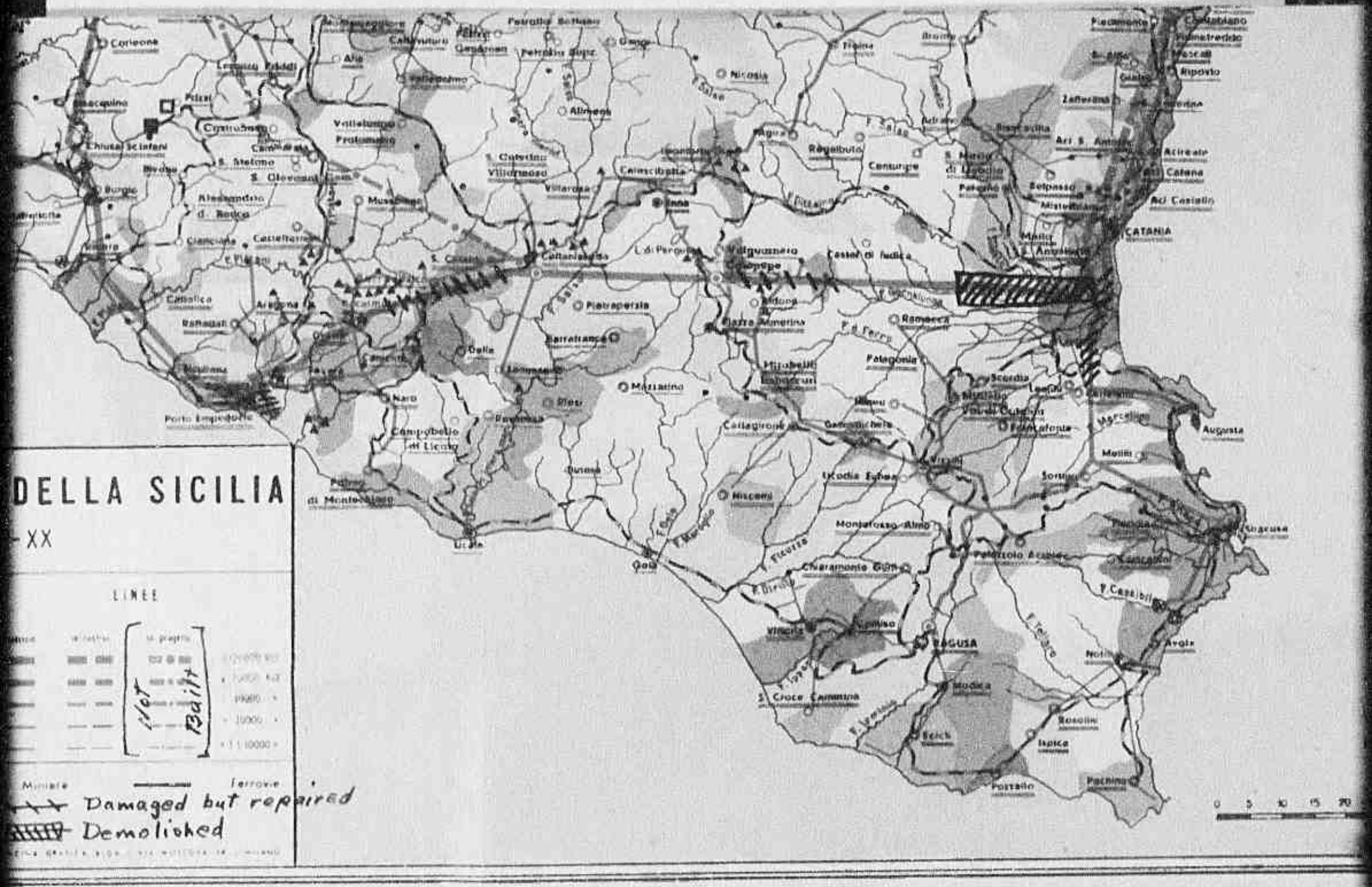
Con la colorazione verde sono indicati gli impianti e le linee di proprietà di terzi.
Sono sottolineati con doppia linea i Comuni serviti dalla S G E S
o dai suoi rivenditori; con semplice linea i Comuni serviti da terzi.

▲ Miniere — Ferrovie

Damaged but repaired

Demolished

Declassified E.O. 12356 Section 3.3/NND No. 785019


Corleone
Alia
Petralia Sottana
Petralia Soprana
Gangi
Nicosia
Troina
Regalbuto
Centuripe
Paternò
Belpasso
Misterbianco
CATANIA
Aci Castello
Aci Catena
Acireale
Riposto
Piedimonte Etneo
Giarre
Mascali
Zafferana Etnea
Adrano
Bronte
Randazzo
Caltavuturo
Polizzi Generosa
Alimena
Leonforte
Assoro
Agira
Centuripe
Enna
Calascibetta
Villarosa
Cerami
Nicosia
Troina
Gagliano Castelferrato
Cesarò
Maniace
Bronte
Randazzo
Linguaglossa
Piedimonte Etneo
Giarre
Riposto
Acireale
Aci Catena
Aci Castello
CATANIA
Misterbianco
Paternò
Belpasso
Motta Sant'Anastasia
Adrano
Biancavilla
Ragalna
Centuripe
Regalbuto
Catenanuova
Castel di Iudica
Ramacca
Caltagirone
Piazza Armerina
Barrafranca
Pietraperzia
Mazzarino
Niscemi
Gela
Licata
Palma di Montechiaro
Campobello di Licata
Naro
Canicattì
Camastra
Ravanusa
Aragona
Cattolica Eraclea
Porto Empedocle
Sciacca
Menfi
Partanna
Castelvetrano
Salemi
Gibellina
Vita
Calatafimi
Alcamo
Trapani
Marsala
Mazara del Vallo
Petrosino
Sciacca
Ribera
Cianciana
Alessandria della Rocca
Burgio
Bivona
Chiusa Sclafani
Prizzi
Corleone
Castronovo di Sicilia
Vallelunga Pratameno
Caltanissetta
Marianopoli
Sutera
Villalba
Milena
Sommatino
Delia
Riesi
Butera
Mazzarino
Piazza Armerina
Barrafranca
Pietraperzia
Aidone
Valguarnera Caropepe
Assoro
Leonforte
Agira
Troina
Cerami
Gagliano Castelferrato
Nicosia
Sperlinga
Capizzi

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