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

ACC 245/PWU

10000/150/617
(VOL. I)

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

10000/150/617
(VOL. I)

ELECTRICITY SITREPS
APR. - JULY 1945

245/PWU

ELECTRICITY SITREPS

245/PWU ELECTRICITY SITREPS Volume 1

Closed

VOL. I

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

Closed

VOL. I

Opened: 25 April 1945
Closed: 7 July 1945

245

10000 150 617

THIS FOLDER
CONTAINS PAPERS
FROM APR. 45
TO JULY. 45
CATALOGUE -

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

2388

36-2u 189
.2661

MINISTERO DELLE CORPORAZIONI

DIVISIONE INDUSTRIA

Costruzioni Meccaniche e
Navali "Panzera"

Palermo

Rich certificato prodotto nazionale

9661

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Costruzioni Meccaniche e
Navali "Panzera"

Taberna

Rich certificato prodotto nazionale

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9 JUL 1945 245

ENGINEER SECTION (BR)
A.F.H.Q.
C.M.F.
Tele. No. Freedom 818

ENG/2002

7 July 45

SUBJECT:Electricity Supply NORTH ITALY.

TO : HQ ALCOM APO 394,
Public Works & Utilities Sub Com.

1. Receipt is acknowledged of copies of your field reports from your VENICE office dated 26 June 1945. 66

2. The information contained therein is of great assistance to us in maintaining our records.

3. Please accept our thanks for your cooperation and trouble taken.

G.J.S.DRURY,
Lt Col RE,
for Brigadier,
Director of Works.

767

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Tel. 489081
Ext. 217

HEADQUARTERS ALLIED COMMISSION
APO 394

Public Works and Utilities Sub-Commission

LWL/ec

5 July 1945

Reference : 245/PWU

Subject : Energy Company - Bolżano
(Energie Gesellschaft - Bozen)

To : REGIONAL COMMISSIONER VENEZIA REGION
(Att. Regional Engineer)

1. With reference to letter 27 June 1945, File PW/pp from Capt. Vannoy concerning the completion of the high voltage transmission line between Bressanone (Italy) and Innbruck (Austria) we comment as follows :

2. It should be remembered that all materials in connection with transmission line construction are in extremely short supply and can only be allocated to work which is necessary for the exchange of power.

3. We understand that the electrical situation in Austria is satisfactory and we also believe that allowing for seasonal changes and export to Central Italy the whole of the power in Northern Italy can be absorbed.

4. Under these circumstances the completion of the line to Innsbruck does not justify using materials which are presently in short supply but if the companies are able to proceed with the work without interfering with the other work which they have in hand we see no objection to their completing the line if they so desire.

By Command of Rear Admiral STONE,

14 - 2nd Part ufgs
32 - 2nd Part ufgs

W.M. LAPPER 7674
Lieut-Colonel
Chief, Elec. Div.

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Tel : 489081.
Ext : 317.

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

FB/sg

70

REFERENCE : 245/PWU.

4 July 1945.

SUBJECT : Generating stations damaged.

TO : Regional Commissioner (Emilia Region
Attention : Regional Engineer (Piemonte "
(Liguria "
(Lombardia "
(Venezia "

1. It is necessary, in order to complete our records, to make a final check on the generating stations in your region, which were found in a damaged condition upon occupation.

2. The report should only include plants of 1,000 KW installed capacity and larger.

3. Prepare a list of the damaged plants only, together with the name of the operating company and the approximate date the plant resumed or will resume either partial or full operation.

4. Please furnish the information in the manner shown in the attached form.

Folio 8 - 2nd Part refers

Folio 4 - 2nd Part refers

W.M. LAPPER,
Lieut-Colonel,
Chief, Elec.Div.

Folio 11 - 2nd Part refers

Folio 16 - 2nd Part refers 7673

Folio 17 - 2nd Part refers

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69

Folio 69

Transfer to 247

Copies Booklet on Release

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Q

Memo on Fols 67

6000 kg
12000
12000
12000 = 6½ tons 68.

1- All material available except 6000 kg cement
2- Will require 2 months to complete after resumption of work, Work must be done in summer, Impossible in winter.
3- Free clearance through mountain forests not sufficient.
4- Power not required in Italy at present time.
5- Started as a German project after armistice Italy 1943
6- Same material and conductor laying on ground should be picked up to avoid theft.
7- Austrian A.C. should be contacted before deciding to ~~[illegible]~~ delay the job,
8- Would provide same labor for a works project. 767?
9- transport would be needed on Italian side.
10- Capacity of line = 50,000 kw. (detailed 100,000 kw with two circuits) one circuit

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and most of the works will be carried out at the stations, owing to shortage of transport.

Maj. Ryan asked whether the two Diesel units at Voltur no could be maintained in operation to assist during the peak period.

Eng.Maione stated that the cooling system was deficient and also one of the units was required for maintenance. The Committee recommended that the Volturno Company be asked to look into this matter to see if the plant availability could be improved.

In view of the serious delay in the repair to transmission systems due to mining of areas in the vicinity of the lines, the Committee recommended that immediate action be taken to have all mines cleared from the Electrical plants and equipment.

For this purpose all electric companies in Southern Italy are to be asked to send a Diagram to Maj. Ryan indicating the areas requiring attention.

3) - <u>To discuss the operation programme and the allocation of power for the month of March 1945</u>

The Committee recommended that the matter of frequency control should be studied and a safe margin of spare capacity allowed for. Eng.Masturzo will discuss this with Maj.Ryan.

The request for 14,000 KW, or 7,000 KW on a reduced programme, for the Montecatini fertilizer factory at Crotone was discussed.

It was considered that there was not sufficient power available for the month of March and that the position would again be reviewed at the next meeting.

4) [illegible] <u>business</u>

[illegible] that more transport and tires [illegible] quirements of [illegible]es

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Reference to existing lines (U.S.A)

1) Roseland - Metuchen : 132 KV - 40 Km length - ACSR - about 400 sq.mm 125,000 KVA

2) Indianapolis - Cincinnati : 132 KV - 100 Km length - ACSR about 200 sq.mm. 30,000 KVA

3) Canton - Massillon 132 KV - 20 Km length - ACSR about 170 sq.mm. 50,000 KVA

120 KV Ø 72,4 Km length 307 sq. mm ACSR

~ 50,000 KW

one circuit

ACSR (Aluminum core steel reinforced conductor)

7673

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TELEPH. 20004
EXT. 53

VENICE OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB COM.
ALLIED COMMISSION
A. P. O. 394

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P.W. & U. S/C A.C.
2 JUL 1945 245

VENICE 27 June 1945
S. MARCO CALLE GOLDONI 4455 A

PMV/pp

SUBJECT: Energy Company - Bolzano (Energie Gesellschaft - Bozen)

TO: Chief Electrical Division - Public Works & Utilities S/C
Hqs. Allied Commission

Attached is a translation of reports submitted by the Energie Gesellschaft, Bozen to the Bolzano Province A.M.G. A field inspection has revealed that the estimates and reports concerning the present status of the construction of the transmission line are essentially correct.

Information has been obtained that this project was conceived after the Italian Armistice and that the Company's policies were dictated by some political or military force of German origin.

A brief review of the attached tables of Hydroelectric Plants in Bolzano, Belluno and Trento Provinces indicates the large amount of power which the Energy Company was attempting to transmit into Germany.

I wish to point out that the present power situation in Northern Italy is very good. It will be from three to five years before industry, transportation, etc., can be rehabilitated sufficiently to require the full output of these generating stations. At least for the present, Italy will not benefit by the completion of this line.

Also attached is a letter of transmittal from the Deputy Provincial Commissioner of Bolzano requesting direction on this problem.

11 enclosures
32 - 2nd Ind. enclosures

VENICE OFFICE PW&U Sub. Com. OFFICIAL DATE 27 JUL 1945 AL COM Electrical Division

O. M. Vannoy, Capt.
Chief Venice Office

7669

cc. Chief Elect. Div., Alcom (1)
cc. " " " " (2)
cc. Regional Commissioner, Venezie Region
cc. " " " " (Attn.Reg.Eng.)
cc. Lt. Col. Parker
cc. File

See memo 6 and 6a

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

Copy

BOLZANO PROVINCE = VENEZIE REGION

ALLIED MILITARY GOVERNMENT

A P O 394

Date: 13th June 1945

To: Public Works & Utilities Division
VENEZIA REGION

Subject: Power line.

Ref.: RXII/BZ/104/IV.2

1. The attached report on the 120,000 V. power line from Bressanone to Innsbruck is forwarded with the request for direction as to what orders should be given to the ENERGIE company.

2. This line is partly completed, but it has not been possible to make an inspection.

Signed: J. Bruce Thompson
Lt.Col.RA
Deputy Provincial Commissioner

7663

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TELEPH. 26064
EXT. 58

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2 JUL 1945 245

VENICE 26 June 1945

S. MARCO CALLE GOLDONI 4498 A

60

FMV/pp

SUBJECT: Field Trip - FF.SS. Bolzano Area 21 and 22 June 1945

TO: Chief Milano Office - Electrical Division - Public Works & Utilities Sub Commission - Allied Commission - APO 394

The condition of some of the transmission lines was observed while travelling in the Bolzano area with the Regional Engineer of Venezie Region.

60 kV. Campodazzo-Chiusa (16.7 cycles - 2 circuits)
Repairs were being made just North of Campodazzo substation. This substation was destroyed. The railroad is operating electrically from Brennero to Bolzano.

130 kV. Bolzano-Bressanone (West circuit)
This line is broken in many places and no repair crews were observed in action.

130 kV. Bolzano-Bressanone (East circuit)
In most places this line does not follow the railroad and possibly escaped damage.

130 kV. Bressanone-Wilten (shown on map)
This line does not exist and should be deleted from maps. For further information see my report on "Energie Company".

F. M. Vannoy, Capt.
Chief Venice Office

VENICE OFFICE
PW&U
Sub. Com.
OFFICIAL
DATE 26 6 45
AL COM
Electrical Division

7667

cc. Lt. Col. Lapper
cc. File

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VENICE 26 June 1945

S. MARCO CALLE GOLDONI 4489 A

65

PMV/pp

SUBJECT: Field Trip – Energie Company Bolzano

TO: Chief Milano Office - Electrical Division - Public Works & Utilities - Sub Commission - Allied Commission -

The condition of the partially completed 130 kV. Bressanone-Innsbruck line was observed 21 and 22 June. The conductors of one circuit are completed from Bressanone to a point 5 Kilometers southeast of Vipiteno. In the vicinity of Vipiteno the conductors have been laid on the ground but no insulator units are yet on the towers.

The towers have all been erected to a point about 2 kilometers south of Brennero. No towers or steel parts were observed in this area.

The line is built thru dense pine woods for a majority of its length in Italy. The right-of-way has only been cleared to a width absolutely necessary for the one circuit. Innumerable outages will be experienced during winter operation due to snow and wind, since the width of cleared right-of-way is not sufficient.

P.M. Vannoy, Capt,
Chief Venice Office

VENICE OFFICE
PW&U
Sub. Com.
OFFICIAL
DATE 2 6 JUL 1945
AL COM
Electrical Division

7666

cc. Lt. Col. Lapper
cc. File

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2 JUL 1945
245

VENICE 26 June 1945
S. MARCO CALLE GOLDONI 4488 A

64

PMV/pp

SUBJECT: Weekly Report ending 23 June 1945

TO: Chief Milano Office, Elect. Div., P.W.& U. S/C - Alcom

1.) Reports forwarded during the week :

- Field Trip - Energie Company, Bolzano
- Field Trip - F.F.S.S., Bolzano Area
- Field Trip - Azienda Consorziale Bolzano
- Progress of Plant Repairs S.A.D.E.

(To Lt.Col. Lapper only)

- Weekly Generation Report S.A.D.E. 23 June
- " " " Alto Veneto 9, 16 June
- " " " Bellunese 16 June
- Sample Daily Generation Log Sheet S.A.D.E. 20 June
- Weekly Generation Report S.I.T. 9 June
- " " " Bolzano 9 June

2.) Repairs to transmission lines completed during the week :

	Date	Line	Length Km.
-	21 June 1945	130 kV. Doblari - Opicina	50
		Total:	50 Km.

3.) Maximum daily kW generation by S.A.D.E. :

- Sunday 17 June - 118,400 kW.
- Monday 18 June - 165,500 kW.
- Tuesday 19 June - 166,000 kW.
- Wednesday 20 June - 174,600 kW.
- Thursday 21 June - 171,400 kW.
- Friday 22 June - 163,100 kW.
- Saturday 23 June - 158,100 kW.

7665

P. M. Vannoy, Capt.
Chief Venice Office

VENICE OFFICE
PW&U Sub. Com.
OFFICIAL
DATE 27.6.45
AL COM
Electrical Division

cc. to Lt.Col. Lapper
cc. to Major Knight
File

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1 JUN 1945 245

ENGINEER SECTION (BR)
A.F.H.Q.
C.M.F.
Tele. No. Freedom 818

FNG/2002

SUBJECT : Electric Power Supply - NORTH ITALY

TO : HQ AC - Public Utilities Section

30 JUN 46.

1. During the first half of this month, the E & M representative of this Directorate was obtaining information on Transmission Lines to complete our Records - App I and II of AEW (E & M's) Tour Notes attached for your information.

2. At BOLOGNA - VERONA - MILAN - TURIN - PARMA - the directors of the Power Companies all expressed how very urgently they were in need of transport and tyres to enable them to function and continue to repair the damaged lines. At PARMA the Director stated that unless he obtained some help, he would not be able to do any service at all, in two months time. He was also experiencing difficulty as his passes for circulation were from day to day and this was a great restriction for servicing lines.

3. No doubt you are fully conversant with the above. 2

G.J.S. DRURY,
Lt Col RE,
for Brigadier,
Director of Works.

Encl:

answered on 3rd July 1945

7664

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VENICE OFFICE
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A. P. O. 394

VENICE June 25 1945

S. MARCO CALLE GOLDONI 4828 A

RECEIVED
P.W. & U. S/C A.C.
20 JUN 1945
245

PMV/pp

SUBJECT: Weekly Report ending 16 June 1945

TO: Chief Milano Office, Elect.Div., P.W.& U. S/C Alcom

1.) Reports forwarded during the week :

- Società Idroelettrica Cismon, Progress Report
- Report of Società Industriale Trentina

(To Lt.Col.Lapper only)

- Weekly Generation Report S.A.D.E. 16 June
- " " " S.I.Trentina 5,12,19 & 26 May; 2 & 9 June
- " " " S.I.Cismon 26 May & 2 June
- " " " Ponale 9 & 16 June
- " " " S.I.M.A. 9 June
- " " " Bolzano 2 June
- " " " Bellunese 19 & 26 May; 2 & 9 June
- " " " Alto Veneto 26 May & 2 June.-
- SAMPLE DAILY GENERATION LOG SHEET OF S.A.D.E.

2.) Repairs to transmission lines completed during the week:

Date	Line	Length Km.
10 June 1945	50 kV. Portomaggiore-Argenta	8
14 June 1945	130 kV. Fadalto-Nove (nera)	4
14 June 1945	50 kV. Nove-Conegliano	20
	Total: Km.	32

3.) Maximum daily kW generation by S.A.D.E. :

- Sunday 10 June - 136,400 kW.
- Monday 11 June - 135,000 kW.
- Tuesday 12 June - 158,400 kW.
- Wednesday 13 June - 153,000 kW.
- Thursday 14 June - 159,100 kW.
- Friday 15 June - 156,200 kW.
- Saturday 16 June - 141,900 kW.

7663

P.M. Vannoy, Capt
Chief Venice Office

VENICE OFFICE
P W & U
Sub. Com.
OFFICIAL
DATE 26.5.45
AL COM
Electrical Division

cc. to Lt.Col. Lapper
cc. To Major Knight
File

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29 JUN 1945 245

VENICE 25 June 1945

S. MARCO CALLE GOLDONI 4420 A

PMV/pp

SUBJECT: Field trip to Azienda Elettrica Consorziale delle Città di Bolzano & Merano

TO: Chief Milano Office, Elect.Div., P.W.& U. S/C Alcom

I conferred with Ing. Maestranzi of the Bolzano Company on 22 June. The generating stations of Tel, Senales and Bolzano are undamaged. No damage was suffered on the 60 kV. lines connecting these plants.

They claim to have suffered about 31,000,000 Lire damage to low voltage lines and transformers in one part of the city of Bolzano.

Ing. Maestranzi seemed to be under the impression that we would assist in returning the system to its original state. I informed him that we would assist in releasing materials only so far as was necessary to provide electric service where required.

I do not think any immediate assistance is necessary on the property of this Company.

P. M. Vannoy, Capt.
Chief Venice Office

VENICE OFFICE
PW&U Sub. Com.
OFFICIAL
DATE 25.6.45
AL COM.
Electrical Division

7662

cc. Lt. Col. Lapper
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26 JUN 1945 245

FIELD TRIP - 23 June 1945

FORLI'
SER

1. Present rate of Progress on Portomaggiore-Forli 50 KV line by 25 E and M platoon.

Line tensioned	28%
Tower base sections manufactured	15%
Pylons erected	10%
Pylons dressed	40%
Towers stripped and taken to workshop	20%

2. The 127th Bomb Disposal Platoon has mine remcval teams working in close liaison with the 25 E&M platoon. Line has been cleared as far north as Cotignola. Progress of work is not being held up by mines.

3. Copper is needed for the line at once. Twelve tons processed at Brescia and transported to Imola contrary to existing priorities are being shifted to Forli. Remaining amounts will be secured from Brescia redrawing works upon completion of present priority shipment for Bologna water works system. Scrap copper is now being hauled to Brescia for processing.

Clarence S. Wilcox

Clarence S.Wilcox
Major Ord
Field Engineer

7661

DISTRIBUTION:
Lt Col Lapper
Lt Col Parker
Major Barry
Lt Col Spann
Major Wilcox

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26 JUN 1945 245

FIELD REPORT - 23 June 1945

RAVENNA -

SER

1. Eng. Nicolis of the Romagnola Co. was contacted in Ravenna relative to a survey of sub-station and transmission facilities.

2. Ravenna Sub-station.

a. Transformers. One 2000 KVA, 5/2 KV unit damaged beyond immediate repair. One 2000 KVA, 50/15 KV unit with case badly damaged, can be repaired. Two 1000 KVA, 50/30/15/2 KV units have been repaired and are now available for use.

b. Switching equipment. Need 50 KV oil circuit breakers.

3. Cotignola-Ravenna 50 KV line. There are 49 towers down and 22 tons of 50 sq.mm. copper are needed to make repairs. Oxygen and acetylene are needed for welding towers as well as transportation. Work will not commence on this line until after Portomaggiore-Forli line has been completed.

Clarence S. Wilcox
Major Ord
Field Engineer

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P.W. & U. S/C A.C.
25 JUN 1945 245

58

FIELD REPORT-21 June 1945

SAN VIOLA - RIFREDI 130 KV line

FF SS

1. Inspection of line from S.Viola to crossing with 120 KV Tre Madonne to Forli line.

a. The double line from S.Viola north to point where Imola and Rifredi lines branch is in good condition except for one tower down.

b. The line from above branch to the Forli crossing is very nearly all destroyed. Out of 65 towers a total of 38 are down. Most of the wire and insulators as well as damaged towers have been salvaged for use elsewhere.

2. The S.Viola - Imola line parallels the above line for a distance of 40 towers and can be repaired over this distance by replacing two spans of wire and repairing three towers. The remaining line to the Forli crossing consists of 23 towers of which 16 are down.

3. Minimum repairs including maximum use of S.Viola - Imola line would necessitate repairs to approximately 20 towers and replacing wire and insulators over an equal distance.

4. It is believed that present plans of using Tre Madonne - Forli line to crossing point (Involving repairs to seven towers) are the most feasible.

Clarence S. Wilcox
Major Ord.
Field Engineer

DISTRIBUTION:
Lt Col Lapper
Lt Col Parker
Major Barry
Lt Col Spann
Major Wilcox

7659

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P.W. & D. S/C A.C.
22 JUN 1945 245

57

FIELD REPORT - 19 June 1945

F E R R A R A
S E P

1. The 4000 KVA , 50/10 KV air cooled outdoor type transformer to be moved from San Lucca to Codigoro is expected to be ready for movement 25 June. Oil filtering is now in progress.

2. The 6000 KVA, 50/15/7-5 KV air cooled outdoor type transformer to be moved from Zona Industriale to San Lucca has been removed to crane house and tackle is being put in place. Expected date of movement 26 June 1945.

Clarence S. Wilcox
Major Ord
Field Engineer

DISTRIBUTION:
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Lt Col Parker
Major Barry
Lt Col Spann
Major Wilcox

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22 JUN 1945 245

FIELD REPORT - 18 June 1945

CONFERENCE VENICE
S A D E

1. Object of conference
   a. Provide additional capacity for Bologna.
   b. Utilize 120 KV transformer at Portomaggiore.
   c. Decide on transformer movement in Emilia Region.
   d. Coordinate activities of the SBE, SER, and SEP companies.

2. Discussion.
   a. Present capacity at Bologna limited by 15,000 KVA, 120 KV transformer at Tre Madonne. SBE manager desires that another 15,000 KVA unit be installed. Unit available at Battaglia now being used. Unit, at Camporosso cannot be feasibility moved until railroads are in operation. Bologna system to be augmented by 5000 KVA, 60 KV transformer from Bussolengo which will be in operation within one week. Additional 10,000 to 15,000 KVA can be made available at 50 KV from Portomaggiore by isolating the (120 KV) Nova - Palvello - Portomaggiore line and operating it at 50 KV. This can be done in about two weeks time.
   b. Portomaggiore 15,000 KVA, 120 KV transformer to be repaired, needs bushing and cooling system. At later date, possiblity three months, 15,000 KVA, 120 KV unit from Battaglia can be installed. With 30,000 KVA capacity available at Portomaggiore the Novaline can be operated at 120 KV to supply both Bologna and Forli at 50 KV.
   c. Present transformer movement contemplated in Emilia Region:

From	To	KVA	KV	Date
San Lucca	Codigoro	4000	50/10	June
Zona Industr.	San Lucca	6000	50/15/7-5	June
San Lucca	Portomaggiore	3000	50/15/7-5	June
Bussolengo	Battiferro	5000	60/50	July

   d. Engineer Forli, SADE company, is to be stationed in Bologna to coordinate subsidiary companies. Decision will be reached next week as to whether 6000 KVA, 50/15 KV transformer for FORLI will be moved from Bologna or Ferrara.

Clarence S. Wilcox
Major Ord
Field Engineer

DISTRIBUTION:
Lt Col Lapper
Lt Col Parker
Major Barry
Lt Col Spann
Major Wilcox

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RECEIVED
P.W. & U.S.C.A.C.
21 JUN 1945 245

54

MEETING WITH FF SS = 18 June 1945

The office of the Electrification Dept is Via Nosadella 51, Bologna, and Ing. Mazzoni is Capo Ufficio I.E.S.

It was learned that Major Kubale, in his recent visit, had stated the rehabilitation of the electric services from Florence to Trento was Priority I, and he is moving Lt Chance from Prato to Bologna to accelerate the work.

The FF SS are already working on the below mentioned 120 KV lines:

S.Viola = Grizzana
Crevalcore = Ferrara(For supply to Montecatini factory)
Crevalcore = Piacenza

These lines are not very badly damaged, except for the first 15 Km from S.Viola to Grizzana, where 34 towers are down.

It is anticipated the service may be working by the end of August, taking power from Edison at Rubiera or Parma. The ultimate intention is to take power from the FF SS Power Station at Bressanone , north of Bolzano.

It is understood that the FF SS sub=stations will operate at 120 KV and 42 or 50 cycles.

H.Best
Capt R A

DISTRIBUTION:

Lt Col Lapper
Lt Col Parker
Lt Col Spann
Major Barry
Major Wilcox

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20 JUN 1945 145

53

FIELD REPORT= 17 June '45

RIFREDI = BOLOGNA 120 KV Line

Ferrovie Stato

Contacted Lt Cooper 34 E & M Platoon and Lt Ballantyne 29E&M Platoon located at Rioveggio and Murazzo respectively(MR.L 7020).

Both these Platoons are working on the line under No1 District, and are employing about 280 civilians.

The intention is to repair a 120 KV line from Florence to Bo=logna, and reconnaisance has shown it easiest to "Jumper" the F.S. line to the S A D E line outside Bologna at point X on sketch , and this terminate at Tre Madonne.

This will entail a total of 101 towers to be re=erected, of which 49 are completed and 11 are in hand.

The portion Rifredi = Grizzana will be completed 19 June, and it is understood a mobile sub=station will be installed at Grizza=na to supply the R/R line up to, and including, the tunnel.

Steel for repairs is being obtained from damaged towers between point X and Trebbo. New cable is available in the F.S. stores at Milan.

A.C. are assisting in obtaining spanners in metric sizes and also bolts and nuts.

The line runs through many mine fields and a South African Bomb Disposal Platoon is lifting mines. Their "Flail Tank" was badly damaged recently by a heavy explosion and work is proceeding slowly until it is repaired or replaced.

Lt Cooper who has been in charge of work since the beginning , estimates that under favourable conditions it will require a further 4 months for completion. Favourable conditions includes additional mine clearing facilities from Allied sources.

H G Best Capt RA

DISTRIBUTION:

Lt Col Lapper
Lt Col Parker
Lt Col Spann
Major Barry
Major Wilcox

7655

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MILAN OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB. COM.
ALLIED COMMISSION
APO 394

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20 JUN 1945 745

Tel.12407
Ext.2521

Ref.112/2

18 June 1945

Subject : Trasmission system North Italy

To : Public Work & Utilities S/C
Electrical Division

Attention : Lt. Col. W.M.Lapper

North Italy trasmission situation report for period 31 May through 15 June.

Map Reference : Electricity North Italy, High Voltage trasmission lines - A.C.C.

Line Repairs : situation at 15 June 1945

Central Section:

Line 553	Po crossing completed. This line will be used for 50 cycles from Gorlago to Ligonchio (Edison) ✓
" 551	Repaired (Edison) ✓
" 552	Repaired (Edison) ✓
" 555	Po crossing completed. Line now serviceable between Boretto and Gotto. Work is now proceeding North of Boretto (Edison) ✓
" CONIEL	(Bussolengo-Rubiera section) Edison have commenced work (CONIEL) 705
" 541	Edison plan to have material on location and begin repairs week June 18.

Eastern
~~Extern~~ Section

Line ——	120 KV Vellai-Savio, both circuits repaired (SADE)
" 317	Completed-operating at 10 KV at present.
" 313	Completed. For the Po crossing, this line runs on the FFSS towers.(SADE)

./.

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Line 357 Line repaired with steel in certain places, thereby limiting the output of Doblari slightly.

The wire drawing plant TRAFILERIE E LAMINATOI DI METALLI at VILLA CARCINA (15 Km North of Brescia) has been checked by this office as to inventory of stock and ability to produce. This plant is in good condition and has about 400 Tons of copper stock on hand most of which is in the form of conductors and already allotted to jobs. Edison Soc. expects to get about 20 Tons. for the repairs to 120 KV line N° 541 LIGONCHIO-GALLICANO as they find more conductor is missing than expected.

S.A.D.E. Milan representative Engr. Salce is handling with above Company arrangements for redrawing copper necessary for job around Portomaggiore. The plant can start work as soon as scrap is made avaible, and can produce 12 Tons.per day. Arrangements are being made here for necessary fuel.

George F. Parker
GEORGE F. PARKER
Lt. Col. Inf.
Chief Milan Office
Elec.Div. P.W.&.U. S/C.

Distributed :
1 copy - Lt.Col. Lapper
1 " -Lt. Col. Renton

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18 JUN 1945 245

51

FIELD TRIP - 14 June 1945

Forli - Portomaggiore 50KV line

S E R

1. The Portomaggiore - Argenta line is complete except for six spans of wire. Between Argenta and Cotignola 50 spans of wire have been replaced. Between Cotignola and Forli one tower has been replaced. 82 towers remain to be repaired.

2. Army engineers have designed a 7 foot section to repair tower bases. These standard sections are under quantity production in Army workshops.

3. Mine removal unit has reported to Forli but has not as yet commenced work .

4. Three portable 5/8" punch presses similar to the type used by UNES company are needed.

Clarence S. Wilcox
Major Ord.
Field Engineer

7652

DISTRIBUTION:

Lt Col Lapper
Lt Col Parker
Major Barry
Lt Col Spann
Major Wilcox

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50

FIELD REPORT - 15 June 1945

Predare Hydro Station

Ligonchio " "

Edison Co.

1. Ligonchio Hydroplant.

a. Generating equipment.
(1) One 2,050 KW, 7000 volt ,50 cycle unit operating at 180 head and 1500 liter / sec water capacity.

b. Frequency changer.
(1) 7000 KW 6500 volt 42 or to 50 cycle unit direct connected to 8500 KVA 6000/7000 volt 16 2/3 cycle generator operating at 250 meter head and 3000 liter / sec. water capacity.
(2) A second unit similar to above but out of service because of burnt rotor on frequency changing unit. Expected completion date for repairs is September 1945.

c. Transformers.
(1) Two 10,000 KVA, 60/6 KV,16 cycle Units in service.
(2) Two 9,000 KVA, 60/6 KV,42 cycle units damaged. One has sustained electrical damage, the other war damage. (Machine gunned)
(3) Three 10,000 KVA, 130/70/7KV units not in service. Two units need oil filtering, one has suffered war damage (machine gunning)
(4) One 15,000 KVA,130/7 KV unit damaged by war (machine gunned)

d. Synchronous condenser.
(1) One 15,000 KVA , 6400/7400 volt, 50 cycle unit.
(2) One 9,000 KVA, 6000/7200 volt, 50 cycle unit.

2. Predare hydroplant.

a. Frequency changers.
(1) Two 4200 KW, 7000 volt,42 to 50 cycle units direct connected to turbine operating under 240 meter head with 2500 liter / sec capacity.
(2) Two 6300 KW,6000/7200 volt, 50 to 42 cycle units,one of which is direct connected to turbine operating at 240 meter head with 3800 liter/sec capacity.

b. Motor generator set.
(1) One 42 cycle synchronous motor running an 8,500 KVA, 6000/7000 volt,16 2/3 cycle generator direct connected to turbine operating at 240 meter head using 3800 liters per second water.

7651

c. Transformers.
(1) Two 9000 KVA,50/30/6 KV, 42 cycle units

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(2) Two 9000 KVA, 70/40/6 KV ,50 cycle units
(3) Two 6,000 KVA, 50/30/6 KV , 42 cycle units
(4) Two 6,000 KVA, 70/40/6 KV, 50 cycle units
(5) One 9,900 KVA, 70/7 KV, 16 2/3 cycle unit

Clarence S. Wilcox

Major Ord.

Field Engineer

DISTRIBUTION:

Lt Col Lapper
Lt Col Parker
Major Barry
Lt Col Spann
Major Wilcox

7650

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A. P. O. 394

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RECEIVED
P.W. & U. S/C A.C.
16 JUN 1945 245

VENICE June 13 1945

S. MARCO CALLE GOLDONI 4489 A

PMV/pp

SUBJECT: Weekly report ending June 9 1945

TO: Chief Milano Office, Elect.Div., P.W.& U. S/C Alcom

1.) Reports forwarded during the week :

- 130 kV. Bologna-Forlì Line Report
- Transformer Relocation schedule S.A.D.E.
- Condition report 130 kV. lines SADE and Ponale
- Monthly Progress Report S.A.D.E.
- Rehabilitation of Centrale Bussolengo
- Rehabilitation S.A.D.E.

(To Lt.Col. Lapper only)

- Weekly Generation Report Az. Bolzano - 26 May
- " " " S.A.D.E. - 9 June

2.) Repairs to transmission lines completed during the week :

Date	Line	Length Km.
7 June 1945	50 kV.Rovigo-Ferrara	35
	Total:	Km.35

3.) Maximum daily kW generation by S.A.D.E. Co.:

- Sunday 3 June - 130,300 kW.
- Monday 4 June - 161,800 kW.
- Tuesday 5 June - 153,400 kW.
- Wednesday 6 June - 176,100 kW.
- Thursday 7 June - 167,300 kW.
- Friday 8 June - 163,800 kW.
- Saturday 9 June - 165,700 kW.

7649

P. M. Vannoy, Capt.
Chief Venice Office

VENICE OFFICE
PW&U Sub. Com.
OFFICIAL
DATE 6.13.45
AL COM
Electrical Division

cc. to Lt.Col. Lapper
cc. to Major Knight
File

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P.W. & U. S/C A.C.
13 JUN 1945 245

VENICE June 5, 1945

S. MARCO CALLE GOLDONI 4388 A

PMV/pp

SUBJECT: Weekly report ending June 2 1945

TO: Chief Milano Office, Elect.Div., P.W.& U. S/C Alcom

1.) Reports forwarded during the week :

- Schedule of transmission line repairs S.A.D.E.
  (To Lt. Col. Lapper only)
- Weekly Generation Report S.A.D.E. - 25 May
- " " " S.I.M.A. - 26 May & 2 June (attached)
- " " " Ponale - 2 June (attached)
- " " " S.A.D.E. - 2 June (attached)
- " " " S.I.D.G. - 5, 12, 19 & 25 May (attached)

2.) Repairs to transmission lines completed during the week :

Date	Line	Length Km.
- 29 May 1945	130 kV. Polpet - Sospirolo	35
- 2 June 1945	50 kV. Giais - Udine (right)	45
	Total:	Km.80

3.) Maximum daily kW generation by S.A.D.E. Co.:

- Sunday	27 May	—	126,100 kW.	
- Monday	28 May	—	173,300 kW.	
- Tuesday	29 May	—	167,100 kW.	
- Wednesday	30 May	—	175,900 kW.	
- Thurcday	31 May	—	149,700 kW.	(Holiday)
- Friday	1 June	-	170,600 kW.	
- Saturday	2 June	-	176,100 kW.	

VENICE OFFICE PW&U Sub. Com. OFFICIAL DATE 6645 AL COM. Electrical Division

P. M. Vannoy, Capt.
Chief Venice Office
7648

cc.to Lt.Col. Lapper
cc.to Major Knight

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VENICE OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB COM.
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A.P.O. 394

47

VENICE June 11 1945

S. MARCO CALLE GOLDONI 4183 A

RE[illegible]
P.W. & U. S/C A.C.
13 JUN 1945 245

PMV/pp

SUBJECT: Monthly Progress Report S.A.D.E.

TO: Chief Milano Office - Electrical Division -
P.W. & U. S/C - Alcom

Attached is a report of the status of the hydroelectric plants of the S.A.D.E. as of 7 June 1945. Compared with last month's report it shows that 86,500 kW. additional capacity has been connected to the transmission system. They are now able to generate 4,360,000 kWh a day and carry a peak load of 334,000 kW.

In addition to the connection existing on 7 May to the S.I.M.A. at Bussolengo, they now have a connection with Cisalpina at Marano and with S.I. Piemonte at Vellai.

The transmission line repair has progressed very well. 340 kilometers of 130 kV. Line and 518 kilometers of 50 kV. line were repaired and returned to service during May.

The S.A.D.E. had 383 workmen on rehabilitation during the month in Venezia Region. 30 were engaged in the section known as Venezia Giulia, 153 on transmission lines and substations and 200 in generating plants in the remaining portion of the region. 90 men were working on lines and substations in Emilia Region. An additional force was engaged in repairs of low voltage lines, transformers and secondary systems.

It is impossible to report on the work of Società Industriale Trentina, Azienda Elettrica Consorziale Bolzano and others, because the only contact with them is by courier thru the Provincial Commissioner concerned.

VENICE OFFICE / Electrical Division / P W & U Sub. Com. OFFICIAL DATE 6.11.45 AL COM

P.M. Vannoy, Capt.
Chief Venice Office

cc. Lt. Col. Lapper
cc. Major Knight

7645

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12 JUN 1945 245

VENICE June 7 1945

S. MARCO CALLE GOLDONI 4420 A

PMV/pp

SUBJECT: 130 kV. Bologna - Forlì Line S.A.D.E.

TO: Chief Milan Office - Electrical Division -
P.W. & U. S/C - Alcom

We have received a report of the condition of the 130 kV. Bologna - Forlì Line of the S.A.D.E. as follows :

130 kV. Bologna (Tre Madonne) - Forlì

Length 72 KM. (54 KM Copper 80 sq.m.m. and 18 KM A.C.S.R. 148 sq.m.m.)

173 Towers destroyed

20 Towers damaged

97 Tons of Copper Conductor missing

7000 Insulator units missing.

The S.A.D.E. believes that this line is in such bad condition that it cannot be included in a program of work until late in 1945 or early 1946.

VENICE OFFICE Electrical Division P W & U Sub. Com. OFFICIAL DATE 6.4.45 AL COM

P. M. Vannoy, Capt.
Chief Venice Office

cc. Lt. Col. Lapper

Copy mailed in Rome 7645

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12 JUN 1945 245

45

VENICE June 7 1945
S. MARCO CALLE GOLDONI 4825 A

File 245

PMV/pp

SUBJECT: Reports, Records and Maps of S. A. D. E.

TO: Chief, Electrical Division - P.W. & U. S/C
Hqs., Allied Commission

We are attaching some distribution maps of the S.A.D.E. subsidiary Companies as follows :

1. - S F E Società Friulana di Elettricità - Udine
2. - A D C Azienda di Distribuzione Cellina - Venezia
3. - S A E T Società Anonima Elettrica Trevigiana - Treviso
4. - A E V B Azienda Elettrica Val Brenta - Bassano del Grappa Dept.
5. - A E E Azienda Elettrica Euganea - South Padova Dept.
6. - A E V C Azienda Elettrica Veneto Centrale - Padova Dept.
7. - A E V C Town of Padova
8. - A E V C Town of Vicenza
9. - S E V G Società Elettrica della Venezia Giulia - Isonzo and Gorizia Dept.

Additional maps will be transmitted when received.

Also attached is a self explanatory report in duplicate which gives a few facts and figures of the production and distribution of the S.A.D.E. It is interesting to recall that this is the second invasion thru the properties of the Company?

In 1918 the Austrians held a line generally along the Piave River which isolated a major portion of the production facilities from the high-level load centers.

This time British and American bombing accomplished the same result.

I will be glad to furnish any additional data at your request.

VENICE OFFICE
PW&U Sub. Com.
OFFICIAL
DATE 6.7.45
AL COM
Electrical Division

P. M. Vannoy, Capt.
Chief Venice Office

Incl. Maps 5 R 13/6

7

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

ANNUAL PEAK DEMANDS AND MAXIMUM DAY
CONSUPTION OF THE S. A. D. E. SYSTEM

YEAR	MAX DEMAND KW		MAXIMUM DAY CONSUPTION KWH
1931	152 900		2 522 900
1932	173 000		2 858 000
1933	188 000		3 020 000
1934	187 000		3 245 000
1935	217 000		3 940 000
1936	212 000		3 920 000
1937	250 000		4 460 000
1938	256 000		4 780 000
1939	294 000		5 208 000
1940	305 000		5 700 000
1941	340 000	(1)	6 430 000
1942	360 000		6 800 000
1943	354 000		6 694 000
1944	317 000		5 392 000

(1) Maximum Annual Consumption.

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

MONTHLY PEAK DEMANDS AND MAXIMUM DAY CONSUMPTION OF THE S. A. D. E. SYSTEM 1944 AND 1945

MONTH	PEAK DEMAND KW	MAXIMUM DAY CONSUMPTION KWH
	YEAR 1944	
January	317 000	5 392 000
February	275 000	5 101 000
March	268 000	4 109 000
April	252 000	4 815 000
May	274 000	4 169 000
June	255 000	4 153 000
July	209 000	3 263 000
August	217 000	3 220 000
September	206 000	2 975 000
October	207 000	3 163 000
November	217 000	3 500 000
December	229 000	3 925 000
	YEAR 1945	
January	213 000	3 655 000
February	202 000	3 457 000
March	179 000	2 915 000
April	168 000	2 730 000
May	175 900	2 374 000

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DAILY PEAK LOADS S.A.D.E. SYSTEM

APRIL 1945

Day	Peak kW	Produced KW	Purchased KW
1	121 000	114 700	6 300
2	99 000	87 300	11 700
3	147 000	135 300	11 700
4	158 000	126 000	32 000
5	145 000	115 600	29 400
6	152 000	122 300	29 700
7	137 000	108 400	28 600
8	108 000	101 300	6 700
9	147 000	122 700	24 300
10	168 000	134 000	34 000
11	151 000	124 100	26 900
12	150 000	126 200	23 800
13	145 000	132 800	12 200
14	134 000	108 700	25 300
15	105 000	89 900	15 100
16	141 000	117 600	23 400
17	128 000	105 700	22 300
18	124 000	109 700	14 300
19	121 000	107 000	14 000
20	121 000	107 500	13 500
21	121 000	107 000	14 000
22	94 000	87 000	7 000
23	111 000	97 500	13 500
24	62 000	48 900	13 100
25	76 000	56 900	19 100
26	64 000	45 900	18 100

The following figures were estimated from KWH readings since the KW readings were not available.

27	51 000	41 500	9 500
28	50 200	39 900	10 300
29	40 800	34 700	6 100
30	39 900	32 600	7 300

Note: Allied troops entered the City of Venice 29 April.

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DAILY PEAK LOADS S.A.D.E. SYSTEM

MAY 1945

Day	Peak KW	Produced KW	Purchased KW
1	30 000	26 500	3 500
2	39 000	35 500	3 500
3	72 900	59 700	13 200

The above figures were estimated from KWH readings since the KW readings were not available.

4	82 900	67 900	15 000
5	81 700	66 600	15 100
6	71 400	66 700	4 700
7	97 700	83 000	14 700
8	90 700	78 200	12 500
9	106 600	84 800	21 800
10	97 000	91 300	5 500
11	131 900	118 400	13 500
12	132 600	110 900	21 700
13	102 800	86 300	16 500
14	134 000	111 000	23 000
15	136 800	110 800	26 000
16	146 100	120 800	25 300
17	146 000	120 200	25 800
18	153 200	129 400	23 800
19	154 000	127 300	26 700
20	104 300	100 300	4 000
21	164 900	155 000	9 900
22	171 500	161 300	10 200
23	154 400	143 200	11 200
24	140 800	115 300	25 500
25	163 300	153 200	10 100
26	168 700	154 800	13 900
27	126 100	122 200	3 900
28	173 800	162 300	11 500
29	167 100	155 200	11 900
30	175 900	149 300	26 600
31	149 700	130 100	19 600

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COMPARISONS OF S. A. D. E. SYSTEM = LOADS OF
APRIL AND MAY 1945

	APRIL 1945	MAY 1945
PRODUCTION		
Maximum Day (KWH)	2 180 000	2 276 000
Minimum Day (KWH)	680 000	537 000
Monthly Total (KWH)	44 620 000	48 623 000
Maximum peak demand (KW)	135 300	162 300
CONSUMPTION		
Maximum Day (KWH)	2 730 000	2 374 000
Minimum Day (KWH)	832 000	607 000
Monthly Totals (KWH)	54 821 000	53 917 000
Maximum peak demand of System (KW)	168 000	175 900

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44

VENICE OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB COM.
ALLIED COMMISSION
A.P.O. 394

RECEIVED
W. & U. S/C A.C.
12 JUN 1945 245

VENICE June, 8 1945

S. MARCO CALLE GOLDONI 4499 A

PMV/pp

SUBJECT: Condition Report 130 kV. Lines of S.A.D.E. & Ponale

TO: Chief Milano Office - Electrical Division -
Public Works & Utilities S/C - Allied Commission

We have received a report on the condition of two lines in the Adige Valley between Verona and Trento as follows :

- 130 kV. Mori - Bussolengo (SADE)
  Length 47,5 Km.
  4 Towers damaged
  82 Tons of stranded copper missing size 103 sq.mm.
  (appr. 27 Km.)
  1700 insulator units missing.

- 130 kV. Marco - Bussolengo (Ponale)
  Length 50 Km.
  3 Towers damaged
  85 tons of stranded copper missing size 103 sq.mm.
  (approx.28 Km.)
  2000 insulator units missing

Both lines are double circuit towers with the positions for the second circuit left vacant for future requirements. Due to additional strength of the towers to carry the second circuit it is thought that ACSR conductor may be used to replace the missing copper.

This proposal is now being investigated by the Adriatica and Ponale engineers. If the studies reveal that no mechanical difficulties will result the Ponale line will be repaired first and then the Adriatica line.

We will advise you as soon as a schedule of materials required and completion dates can be made.

P.M. Tavenor, Capt.
Chief Venice Office

VENICE OFFICE
PW&U Sub. Com.
OFFICIAL
DATE 7/6/45
AL COM
Electrical Division

cc.to Lt.Col.Lapper

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43

VENICE OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB COM.
ALLIED COMMISSION
A. P. O. 394

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P.W. & U. S/C A.C.
12 JUN 1945 245

VENICE June 8th 1945
S. MARCO CALLE GOLDONI 4483 A

PMV/pp

SUBJECT: S. A. D. E. Transformer Relocations

TO: Chief Bologna Office - Electrical Division P.W.& U. S/C Allied Commission

Attached is a schedule of transformer movements suggested by the S.A.D.E. to increase the capacity available in Bologna and to replace damaged units at Portomaggiore and Forli. The second item on the list is to be used at Bologna until it is advisable to operate the Paluello-Portomaggiore line at 130 kV. At this time the unit will be transferred to Portomaggiore to feed the 50 kV. network.

At present I am making arrangements to replace two transformers damaged by lightning at Adria and Battaglia. I will be glad to contact Major Mc Kenzie to see what assistance can be given from this region, particularly for the first and second items.

The S.A.D.E. has a 40 ton trailer at Mestre and I think they have an 80 ton trailer at another location. It will be easier to get a prime mover than a truck and trailer combination.

Please advise me of arrangements made or movements completed. Your phonograms come thru very promptly now that we have the line completed between Ferrara and Rovigo.

VENICE OFFICE
PW&U Sub. Com.
OFFICIAL
DATE 6.8.45
AI COM
Electrical Division

P. M. Vannoy, Capt.
Chief Venice Office

cc. Lt. Col. Parker
cc. Lt. Col. Lapper

7637

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

SCHEDULE OF TRANSFORMERS TO BE TRANSFERRE

ELENCO TRASFORMATORI DA PORTARE NELL'EMILIA D

DITTA COSTRUTTRICE (Factory)	LOCALITA' Attuale (Actual location)	LOCALITA' Futura (Future location)	TIPO (Type)	POTENZA (Capacity) KVA.	RA
Ansaldo	Camporosso (Near Tarvisio	Bologna	All'aperto (outdoor)	15.000	119
Brown Boveri	Battaglia	Bologna - Portomaggiore	All'aperto (outdoor)	15.000	1
C. G. E. (2 unità)	Bussolengo	Bologna	All'aperto (outdoor)	5.000	6
O. T. E.	Bergamo (in costruzione)	Forlì	All'aperto (outdoor)	4.000	5
O. T. E.	Ferrara	Portomaggiore	In cabina chiusa (indoor)	3.000	4

Venezia, 1 Giugno 1945

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

TRANSFORMERS TO BE TRANSFERRED TO AEMILIA REGION

MATORI DA PORTARE NELL'EMILIA DALL'ALTA ITALIA

TIPO (Type)	POTENZA (Capacity) KVA.	RAPPORTI (Ratio) KV.	RAFFREDDAMENTO (Cooling system)	PESI (Weigts) Nucleo e cassone tonn. (Core & case)	Olio tonn. (Oil)	Totale tonn. (Total)
'aperto tdoor)	15.000	119/50/15,6	a circolazione olio raffreddamento con acqua (circulating oil)	76.-	20.-	96.-
'aperto tdoor)	15.000	125/50	ad aria soffiata (forced air)	45.-	22.-	67.-
'aperto tdoor)	5.000	64,5/49	circolaz. d'olio raffreddato con acqua (circulating oil)	15,5	10.-	25,5
'aperto atdoor)	4.000	52,00/16,8	naturale (normal)	16,3	6,7	23.-
cabina chiu (indoor)	3.000	49,00/16,4	naturale (normal)	14,3	5,2	19,5

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

Tel.489081
Ext.317

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

WML/ce

26 May 45.

245/PWU.

SUBJECT: Transmission Line Repairs.

TO : Regional Commissioner, Emilia Region.
(att: Regional Engineer)

42

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1. Ref. letter RIX/PU/02.2 dated 22 May 45. The information supplied by Capt. Rogers will be most useful to us and the point raised will be followed up.

2. Lt.Col. Parker, Major Wilcox and Capt.Best will shortly be residing at Bologna for the purpose of reconstruction work in connection with the transmission system and it is recommended that Capt. Rogers keep closely in touch with them in connection with his work in the regional area.

By command of Rear Admiral STONE :

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W.M. LAPPER,
Lieut-Colonel,
Chief Elect.Div.

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6 JUN 1945 245

C O N F E R E N C E 1 JUNE 1945

S. B. E. OFFICE B O L O G N A

Major	McKenzie	(No. 1 Distr.)
Lt	Fallows	(No. 1 Distr.)
Major	Barry	(Elec. Div.)
Major	Wilcox	(Elec. Div.)
Capt	Rogers	(Emilia E.O.)
Eng.	Molé	(SBE)
Eng.	Righi	(SBE)

1. Conference centered about ways and means to ensure rapid delivery of power to Forli area. Present plans of SADE Company include completion of 50 KV transmission lines Rovigo-Ferrara, 5 June 1945 ; Ferrara - Portomaggiore, 12 June 1945 ; Codigoro - Portomaggiore 12 June 1945. Plans were made for construction of 50 KV line - Portomaggiore , Argenta , Cotignola , Forli , also for reconstruction of 50/15 KV sub-station at Forli.

2. Lt Fallows is to represent No.1 District on the program and will have Army aid in mine removal. He will also be able to furnish Six 3 Ton trucks , one are welder, and two acetylens welders. Capt Stephens , Electrical Officer, will represent Emilia regional engineer at Forli. He will maintain necessary liaison with elect. Co. technicians etc.

3. Reconstruction of 50 KV line requires the rehabilitation of 83 Pylons and restringing of 35 tons of new copper conductor. The SER Company have approximately 80 tons of ascrap copper. Possibility of redrawing wire at Brescia is to be investigated. A second source of wire is to dismantle a second line between Gias and Udine and transport both wire and insulators to Forli.

4. It is planned to convert a 5,000 KVA 60/50 KV transformer now located at Bussolengo to 50/15 KV and move it to Forli. Sufficient switch gear is available to operate this sub-station.

Clarence S. Wilcox
Major Ord.
Field Engineer

763

DISTRIBUTION:
Lt Col Lapper
Lt Col Parker
Major Barry
Lt Col Spann
Major Wilcox

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FIELD REPORT 2 JUNE 1945

FORLI' SUB = STATION

S. E. R.

1. Eng. Tazzari of the Romagnola Company was contacted at Forli. He is to provide laborers for repairs to Forli=Cotignola 50 KV line. Lt. Fallows of No.1 District is furnishing transport. Work to commence Monday morning.

2. The Forli Sub=station was very badly damaged by mines. 20,000 KVA 130/50 KV and 25,000 KVA 130/50 KV transformers were completely destroyed. Three 3,000 KVA 50/15 KV transformers were badly damaged. The core from one of these latter may be repair= ed and used in another case. This will be held up pending location of repair works, probably Milan.

3. Crane house and 20 Ton crane were undamaged. Crane house is now being converted to use as sub=station building for 50/15KV transformer. Switching equipment is to be placed outdoors. Present rate of work is very slow only six men on job. Capt. Stevens is to be located at Forli commencing Monday to push work on sub= station and transmission line.

Clarence S. Wilcox
Major Ord.
Field Engineer

DISTRIBUTION:
Lt Col Lapper
Lt Col Parker
Major Barry
Lt Col Spann
Major Wilcox

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3 JUN 1945 245

ADVANCED SECTION
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB-COMMISSION
ALLIED COMMISSION
APO 394

6 Via Cerretani, Florence
Telephone No. 1153
May 31st 1945

SUBJECT: Work progress on transmission lines and generating plants.

TO : Lt.Col. Lapper
Electrical Division P.W. & U. S/C
H.Q. Allied Commission

Herewith information on work progress on transmission lines and generating plants:

Tavarnuzze - Chiusi 120 KV line - In service at 60 KV. Some foundations need repairs. Cement is not available to complete this work.

Castelnuovo - Chiusi 60 KV line - In service. Earthing of towers suspended for lack of transportation.

Tavarnuzze - Pontedera 30 KV line - Completed.

Pescia - Pontedera 30 KV line - Repaired from Pescia as far as Altopascio. Work suspended for lack of transportation.

Livorno - Pontedera 30 KV line - Completed.

Gallicano - Ligonchio 60 KV line - (Valdarno property) This line is a double circuit copper wire 50 sqmm between Gallicano and Corfino; is a single circuit copper wire 80 sqmm between Corfino and Ligonchio.
- One circuit is repaired between Ligonchio and Castelnuovo; two circuits are repaired between Gallicano and tower No. 48 (3 Kms north of Gallicano).
- 3 kms of the line are not repaired. In this section:
  - the line goes across a mine field 1½ Km long;
  - 3 towers are on the ground, not in the mine field;
  - 5 days work are scheduled to clear the mines;
  - 10 days work after mine clearing are scheduled to complete one circuit;
  - to repair both circuits the transport of 5 tons conductor and 100 insulators is required.

Gallicano - Ligonchio 120 KV line (Edison property - one circuit copper wire 128 sqmm.
- Repaired between Ligonchio and tower No. 133 (Castelnuovo).

7631

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Repaired between Gallicano and tower No. 158 (1.5 km north of Gallicano).
- 4 kms of the line are not repaired. In this section:
  - the line goes across a mine field 3½ kms long;
  - 3 towers are on the ground, in the mine field;
  - much conductor is missing (only Edison may supply the conductor of this size).

Gallicano - Ligonchio 60 KV line (Edison property) - Double circuit between Ligonchio and Poggio, 80 sqmm; between Poggio and Gallicano 50 sqmm.
- The two circuits are repaired from Ligonchio to a point south of Castelnuovo.
- The two circuits are repaired from Gallicano to tower No. 189 (1.5 km north of Gallicano).
- 3.5 kms are not repaired. In this section:
  - the line goes across a mine field 3.5 kms long;
  - 4 towers are on the ground in the mine field;
  - some conductors are missing.

Rifredi - Bologna 120 KV line - (information received from Eng. Salmi, State Railways).
Line repaired from Rifredi as far as tower No. 220 (Castiglione de' Pepoli). In the section Grizzana - Bologna it is reported by Lt. Cooper that 70 towers are on the ground and the line goes across big mine fields.

REHABILITATION OF GENERATING PLANTS.

Corfino Plant - One group 2,400 KVA in service
One group 1,750 KVA commenced service
One group 2,400 KVA commenced assembling

Gallicano Plant - Work in progress to repair the penstock. The job will be completed in 3 months.
Clearing of débris continuing.
Construction of building to protect the 6,000 KVA group commenced.
The second 6,000 KVA group will be ready by December next.

Castelnuovo plant - Repairs of the pressure tunnel in progress.
Clearing of débris and repairs to the building in progress.

Lima Plant - One group 2,000 KW in service.
- The 1,500 KW group may be in service 15 days after the case (ready at Follonica) and the turbine (ready at Castelnuovo) are transported to Lima.

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- The other 2,000 KW group may be in service by June 30th, provided that all the parts that are now in Florence are hauled to Lima.

Piano della Rocca Plant - The excitor of the second group is under repair.

Leghorn Plant - The repairs to the boilers will be completed next month.
- It is urgent to have one truck available. If transport is not supplied work will have to be suspended in two weeks, with great damage to the work done in four months time by 80 workers (when one truck has been at the disposal of the Valdarno Co.)
- Cement is needed for the roofing of the plant.

Sestaione Plant - Clearing of débris and masonry work are in progress. Cement is lacking.

Sperando Plant - Roofing not yet completed. The turbine is ready; insulating material is lacking to repair the generator.

Laterina Plant - The group is assembled, but not yet ready for service.

E.J.BARRY
Major C.E.
Officer in charge

ADVANCED SECTION
OFFICIAL
DATE
ELECTRICAL DIVISION

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

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MILAN OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB.COM.
ALLIED COMMISSION
A P O 394

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5 JUN 1945 245

June 2, 1945

Memorandum for : Lt. Col. W.M. Lapper
Chief Elec.Div. P.W.&.U. S/C.

After returning here on Friday 25 May 1945 I sent Maj Wilcox message reference to his transfer to Bologna and went over to see him on Saturday to find that he had gone to Rome to settle a transportation problem.

His trip apparently was prompted in response to a message from Rome requesting the return of the weapons carrier to Florence. It was my understanding when in Rome that he would take his transportation to Bologna and use it there.

Will to go to Bologna Monday 4 June with Capt. Best and remain there for a few days to coordinate the work with Maj. Barry.

Has there been any settlement yet with regards to the amount of transportation for Maj. Wilcox and Capt. Best in Bologna and when it might be available.

Had a meeting with MRS today. They plan to do quite a bit of work on the electrical phase of rehabilitating the railway service. Will work out with them a scheme of power supply so the Electrical Companies can make necessary repairs in addition to those made by FF.SS.

7628

What are the prospect of Majors Hamilton and Vellero becoming available for Bologna. While Capt. Best is going to Bologna now, I trust that he can soon return to Milan for the work here is very important and absolutely necessary. There are many matters refered here from other regions.

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Lt. Col. Bennett from Turin was in here on Thursday.

One of the main job that S.I.P. has is the repairs at Cislago substation.

Have been investigating the possibility of operating a mine removal school up around Parma where it is believed conditions are more favorable from stand point of food and transportation. Also Edison Co. will recommand personnel for the work and would like to see the school set up in the northern area.

George F. Parker
GEORGE F. PARKER
Lt. Col. Inf.
Chief Milan Office
Elec. Div. P.W.&.U. S/C.

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MILAN OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUBCOM.
ALLIED COMMISSION
A P O 394

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P.W. & U. S/C A.C.
JUN 1945 245

Subject : Trasmission system North Italy
To : Public Works & Utilities S/C
Electrical Division
Attention : Lt. Col. W.M. Lapper
Date : 1st June 1945

The following is a preliminary report on certain trasmission-lines in North Italy.
Reference for line-numbers : Map - Electricity North Italy, High Voltage Transmission Lines - A.C.C..-

Line Repairs = Situation at 31 May 1945

Central Section :

Line	557	repaired across Po river and now working (Edison)
"	553	work in hand at Po crossing. Estimated date of completion - 1 week - (Edison)
"	700	no work in hand at Po crossing (Emiliana)
"	555	no work in hand, 40 km damaged South of Mori, small damage near Guidizzolo, also damage at Po crossing. Edison consider about 2 months will be required to make necessary repairs to this line. They plan to repair Po crossing section immediately. They do not propose to commence work until July on the other sections, as the line passes over valuable crops. One circuit will be canabalised to repair the other. (Edison)
"	250	Line completed and supplying Ferrara at 50 kV.
"	533	(Bussolengo - Rubiera section).2 conductors at the Po crossing and two towers elsewhere on this section are down. Estimate 20 days for repair.

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Line 533 — Edison may carry out this work as they consider S.A.E.'s rate excessive.(C.O.N.I.E.L.)
" 255 — (Rubiera-Tavernuzze section).Over 50 towers are down, but S.A.E. state they could repair this line in 2 months if given the contract.
" 540 — In the meantime 3 towers are reported stolen near Abetone. (C.O.N.I.E.L.)
" 326 (— Has been repaired and is now of a temporary nature and Montecatini consider it necessary to remake a number of joints before the next winter (Montecatini)
" 554 (— Progress is slow as minelifting is proceeding slowly. Repairs have been carried out on 2 spans at each end of the minefield area. 14 more spans require mine clearing (Edison)
" 559 (— across the Po are operating

South-Eastern Section

S.A.D.E. propose to repair 120 kV line No. 317 and feed Portomaggiore at 50 kV.

Romanola Company propose to repair lines 304 and 306 at 50 kV and distribute at 15 kV from Forlì to Cesena and Rimini.

For this work about 70 tons. of copper, located in Forlì area, will require to be redrawn.

Arrangements are in the hand for this at Milan, where a wire drawing firm is equiped with an electric furnace.

New Lines Under Construction :

Montecatini have 2 lines under construction which they plan to complete.

Tel-Bolzano 120 kV.- This line is complete except for small amount of conductor which Montecatini hope to recover.

Vara-Battiglio-Power-station 120 kV. - This line is in the early stages of construction and Montecatini plan now to work on a short section across the mountains which has to be completed in the Summer weather. This work will consist of only a few

762

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tower foundations. When line completed will relieve overloaded lines in Valley west of Lake Maggiore.

Edison supply to FF.SS.

Edidon Company are investigating the possibility of supplying energy at 16 cycle to the FF.SS. in Genoa area, as the FF.SS. sources of supply are insufficient.

For this purpose they plan to use Predare, Ligonchio and Teglia power-stations.

Line repairs will include the 2 lines Ligonchio-Aulla which pass through a minefield near Ligonchio.

This arrangement would tie in with the FALCK line from Milan to TEGLIA and GENOA.

More information on this plan as soon as details available and after meeting with State Railway Director here in Milan.

Transformer Moves

A number of transformers require moving in order to carry out repairs and effect replacements.

Arrangements are being made to obtain the necessary transportation.

George F. Parker

GEORGE F. PARKER
Lt.Col. Inf.
Chief Milan Office
Elec.Div. P.W.&.U. S/C

7624

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VENICE OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB COM.
ALLIED COMMISSION
A P O 394

28
36

Venice, May 28 1945

RECEIVED
P.W. & U. S/C A.C.
2 JUN 1945 245

PMV/pp

SUBJECT: Weekly report ending May 26 1945

TO: Chief Milano Office, Elect.Div., P.W.& U. S/C Aloom

1.) Reports forwarded during the week :
Weekly Generation Report - Ponale Co.
week ending 19 May (To Lt.Col.Lapper & Maj. Knight)
Weekly Generation Report - S.I.M.A. Co.
weeks ending 5, 12 and 19 May (To Lt.Col.Lapper & Maj.Knight)

2.) Repairs to transmission lines completed during the week :

Date	Line	Length Km.
20 May 1945	130 kV. Vellai-Marghera (right)	71
23 May 1945	130 kV. Paluello-Portomaggiore (25 Km. Cocconile-Portomaggiore operating at 10 kV, 32 Km. Paluello-Cocconile operating at 50 kV.)	57
24 May 1945	130 kV. Polpet-Fadalto	15
25 May 1945	130 kV. Pelos-Polpet	38
	Total: Km.	181

3.) Maximum daily kW generation by Sade Co.:

Sunday	20 May - 100,300	kW.
Monday	21 May - 155,000	kW.
Tuesday	22 May - 161,300	kW.
Wednesday	23 May - 143,200	kW.
Thursday	24 May - 115,300	kW.
Friday	25 May - 153,200	kW.
Saturday	26 May - 154,800	kW.

762
P.M. Vannoy, Capt.
for Chief Venice Office

cc. to Lt.Col. Lapper
cc. to Maj. Knight

ELECTRICITY GENERATING STATIONS
(Centrali di produzione dell'Energia Elettrica)

WEEKLY GENERATION REPORT
(Relazione Settimanale sulla Produzione)

Name of Company (Società) Ponale Co.

Address of Company Verona - Via Oberdan, 10

Name of Station (Centrale)	Units generated kWh (energia prodotta)	Max load KW (carico massimo)	Stato di riserva (Serbatoio)
Hydro Stations (Idroelettriche)			
Riva	97,650	8000	
		17/5 - 11,30	

Begin of the week:
26,200,000 m^3

End of the week:
27,200,000 m^3

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Address of Compan; Verona - Via Oberdan, 10

Name of Station (Centrale)	Units generated kWh ~~x 10~~ (energia prodotta)	Max load KW (carico massimo)	State reservoir x 10 (condizione del serbatoio)
Hydro Stations (Idroelettriche)			
Riva	97,650	8000	
		17/5 - 11,30	
			Begin of the week: 26,200,000 m^3
			End of the week: 27,200,000 m^3
+Thermal St. (include Diesel) (Termiche (incl. quelle Diesel)			7622
T O T A L (totale)			

Report for Midnight Saturday May 19 1945
Relazione alla mezzanotte del Sabato
Signed (Firmato) Roberti

+(Complete the data on back for Thermal Stations)
(Per le Centrali Termiche completare i dati a tergo)

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T[illegible] ELECTRICITY [illegible]ERATING STATIONS
(Centrali Termiche per la Produzione dell'Energia)

[illegible] BY FUEL REPORT
(Relazione settimanale sul Combustibile)

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust.in magazzino al principio della settimana) TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn)	Fuel in stock at end of week (combust.in magazzino a fine settimana) TONS (Tonn.)
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				

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

Name of Thermal Station (Centrale Termica)		Beginning of week (combust.in magazzino al principio della settimana TONS (tonn)	Receiving the week (combust. consegnato durante la settimana) TONS (tonn)	Burning the week (combust.) impiegato durante la settimana TONS (Tonn)	Stock at end of week (combust.in magazzino a fine settimana) TONS (Tonn.)
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				

Report for Midnight Saturday _____ 1945
Relazione alla mezzanotte del Sabato

Signed (Firmato) _____

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BEST COPY POSSIBLE

ELECTRICITY GENERATING STATIONS
(Centrali di produzione dell'Energia Elettrica)

WEEKLY GENERATION REPORT
(Relazione Settimanale sulla Produzione)

Name of Company (Società) S.I.M.A. = Società Idroelettrica Medio Adige

Address of Company Bussolengo

Name of Station (Centrale)	Units generated kWh x 10 (energia prodotta)	Max load KW (carico massimo)	Units of reservoir kWh x 10 (energia erogata)
Hydro Stations (Idroelettriche)			
Bussolengo	338,520	9,500	—
Chievo	—	—	—

+Thermal St.(include Diesel)
(Termiche (incl.quelle Diesel)

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

Hydro Stations (Idroele[illegible])	(Energia prodotta)	massimo)	[illegible]
Bussolengo	338,520	9,500	—
Chievo	—	—	—
+Thermal St. (include Diesel) (Termiche (incl. quelle Diesel)			762
TOTAL (totale)	338,520	9,500	—

Report for Midnight Saturday 19th of May 1945
Relazione all mezzanotte del Sabato
Signed (Firmato) R u b e r t i

+(Complete the data on back for Thermal Stations)
(Per le Centrali Termiche completare i dati a tergo)

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THERMAL ELECTRICITY GENERATING STATIONS
(Centrali Termoelettriche per la Produzione dell'Energia)

WEEKLY FUEL REPORT
(Relazione Settimanale sul Combustibile)

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust. in magazzino al principio della settimana) TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn)	Fuel in stock at end of week (combust. in magazzino a fine settimana) TONS (Tonn.)
	Coal carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil. Nafta				

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

(Relazione Settimanale sul Combustibile)

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week combust.in magazzino al principio della settimana TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn)	Fuel in stock at end of week (combust.in magazzino a fine settimana) TONS (Tonn.)
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				

Report for Midnight Saturday _____ 1945
Relazione alla mezzanotte del Sabat

Signed (Firmato) _____

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

ELECTRIC GENERATING STATIONS
(Centrali di produzione dell'Energia Elettrica)

WEEKLY GENERATION REPORT
(Relazione Settimanale sulla Produzione)

Name of Company (Società) S.I.M.A. = Società Idroelettrica Medio Adige

Address of Company: B u s s o l e n g o

Name of Station (Centrale)	Units generated kWh x 10 (energia prodotta)	Max load KW (carico massimo)	State of reservoir m x 10 (condizione del Serbatoio)
Hydro Stations (Idroelet.)			
Bussolengo	460,680	10,500	—
Chievo	—	—	—

+Thermal St. (include Diesel)
(Termiche (incl. quelle Diesel)

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

Name of Station (Centrale)	Units generated kWh x 10 (energia prodott.)	Max load kW (carico massimo)	State of reservoirs x 10 (condizione dei Serbatoi)
Hydro Stations (Idroelet.)			
Bussolengo	460,680	10,500	—
Chievo	—	—	—
+Thermal St. (include Diesel) (Termiche (incl. quelle Diesel)			
			7629
TOTAL (totale)	460,680	10,500	—

Report for Midnight Saturday 12th of May 1945 1945
Relazione alla mezzanotte del Sabato

Signed (Firmato) Ruberti

+(Complete the data on back for Thermal Stations)
(Per le Centrali Termiche completare i dati a tergo)

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THERMAL ELECTRICITY GENERATING STATIONS
(Centrali Termiche per la Produzione dell'Energia)

WEEKLY REPORT
(Relazione Settimanale sul Combustibile)

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust.in magazzino al principio della settimana) TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn)	Fuel in stock at end of week (combust.in magazzino a fine settimana) TONS (Tonn.)
	Coal carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				

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Name of Thermal Station (Centrale Termica)		Beginning of week (combust.in magazzino al principio della settimana) TONS (tonn)	In the week (combust. consegnato durante la settimana) TONS (tonn)	Used in week (combust.) impiegato durante la settimana TONS (Tonn)	End of week (combust.in magazzino a fine settimana) TONS (Tonn.)
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				

Report for Midnight Saturday_____ _____ 1945
Relazione alla mezzanotte del Sabat

Signed (Firmato) _____

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

ELECTRICITY GENERATING STATIONS
(Centrali di produzione dell'Energia Elettrica)

DAILY GENERAL REPORT
(Relazione Settimanale sulla Produzione)

Name of Company S. I. M. A. = Società Idroelettrica Medio Adige
(Società)
Address of Company Bussolengo

Name of Station (Centrale)	Units generated kWh (energia prodott.)	Max load kW (carico massimo)	State of reservoir x 10 (grado di riempimento del serbatoio)
Hydro Stations (Idroelett.)			
Bussolengo	432,320	14,000	—
Chievo	—	—	—

Name of Station (Centrale)	Units generated kWh (energia prodotta)	Max load kW (carico massimo)	Reservoir (Serbatoio)
Hydro Stations (Idroelet.)			
Bussolengo	432,320	14,000	--
Chievo	--	--	--

THERMO-ELECTRICITY GENERATING STATIONS
(Centrali Termoelettriche per la Produzione dell'Energia)

WEEKLY FUEL REPORT
(Relazione Settimanale sul Combustibile)

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust.in magazzino al principio della settimana) TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (tonn)	Fuel in stock at end of week (combust.in magazzino a fine settimana) TONS (tonn.)
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				

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

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust.in magazzino al principio della settimana) TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn)	Fuel in stock at end of week (combust.in magazzino a fine settimana) TONS (Tonn.)
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				

Report for Midnight Saturday _____ 1945
Relazione alla mezzanotte del Sabat

Signed (Firmato) _____

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25 MAY 1945 RAS

HEADQUARTERS=EMILIA REGION
ALLIED MILITARY GOVERNMENT
APO 394
Public Works and Utilities

35

22 May 1945

Reference: RIX/PU/02.2

Subject : Transmission line repairs

To : Lt Col Parker
Advance Section, Electrical Division
Public Works and Utilities Sub~Commission
Allied Commission

1. The attached is a fairly accurate analysis of the transmission situation in the provinces of Forli and Ravenna and outlines the work and materials necessary. I would recommend that you give this matter your consideration since the electrical situation in this area is acute.

2. I realize that the Valdarno tie~in has priority, but I would like to stress the importance of repairing these lines.

E.H.ROGERS
Capt. C.E.
Electrical Officer

COPY TO

1) ELEC . SECT, PWandU S/C
1) FILE

7618

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FIELD REPORT

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26 MAY 1945 245

34

Location: 50 KV Rovigo - Ferrara Line
Company: S. A. D. E.
Date: 16 May 1945

1. Work in Progress: None

2. Materials Needed: Gasoline

3. Completion Date : 30 May 1945

4. Remarks: 7 Towers damaged or destroyed.
10 KM of conductor has been stolen
Before liberation the Ferrara - Padova 130 KV FFSS line had been removed from service due to 30 KM of conductor being stolen. The Po River crossing of the 50 KV line had been destroyed due to a bomb hit on the south tower of the crossing. Provisionally the SADE had used the FFSS crossing at this point, which is still intact. The above damage only recounts that which must now be repaired to place the line in operation.

VENICE OFFICE
PW&U Sub. Com.
OFFICIAL
DATE 5.22.45
Electrical Division

P. M. Vannoy
Capt., C. E.

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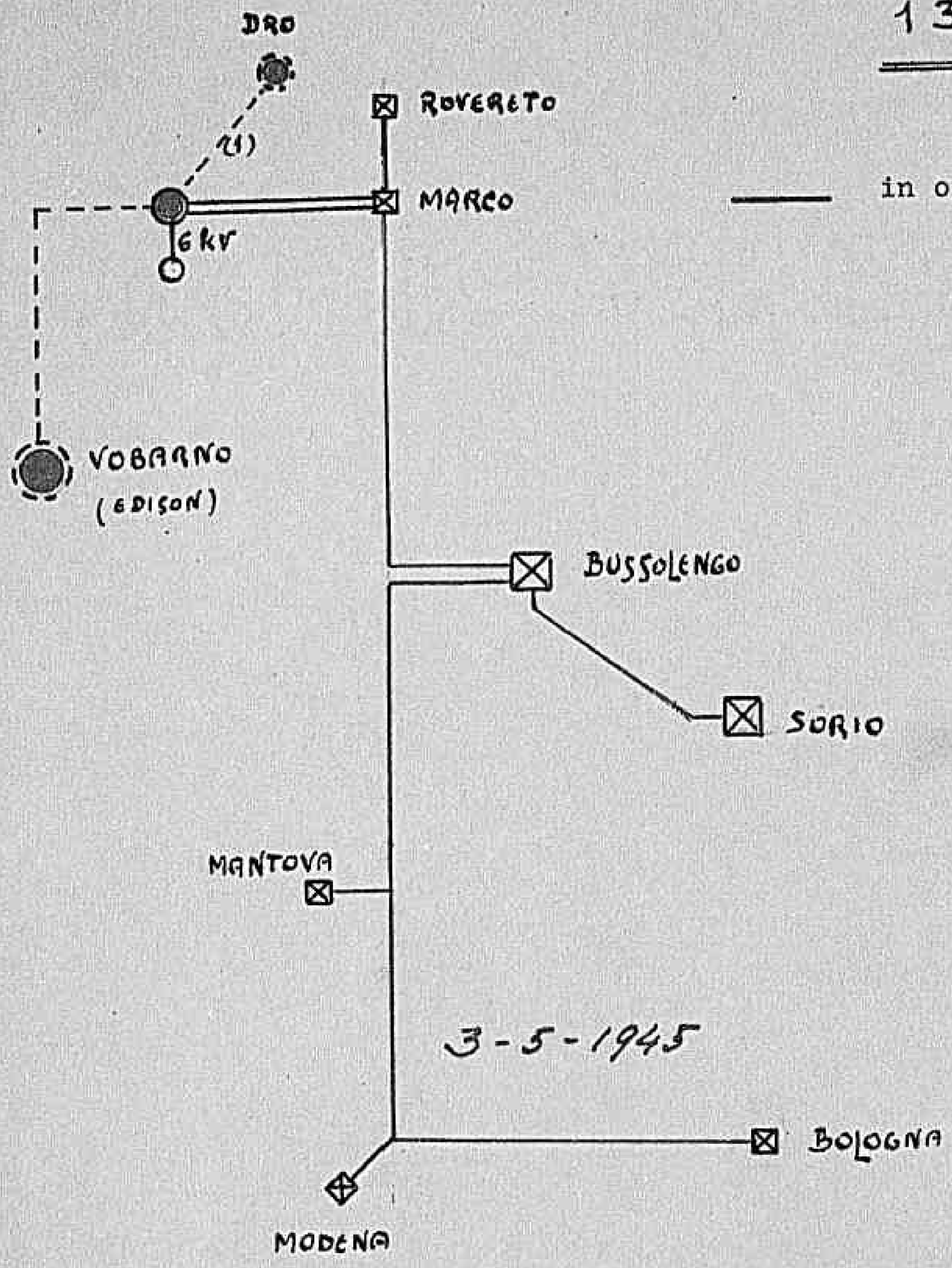
Lt. Col. Lapper
Lt. Col. Parker
Major Knight
File

7617

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SOC. AN. DI ELETTRICITÀ PONALE

130 kV



—— in operation as at May 17.45

(1) Line Sade property=plant SIT property.
Rovereto : subatation Ponale property=destroyed
Mantova : substation Edison property=destroyed

7615

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33

FIELD REPORT

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P.W. & U. S/C A.C.
26 MAY 1945 245

Location: 50 KV Lines Portomaggiore - Ferrara
Portomaggiore - Bologna
Portomaggiore - Codigoro
Portomaggiore - Argenta

Company: S. A. D; E.

Date: 15 May 1945

1. Work in Progress: None

2. Materials Needed: Transportation and Gasoline

3. Completion Date: Not determined.

4. Remarks: Portomaggiore - Ferrara
1 tower damaged
90 Conductor spans broken
3.5 KM conductor stolen

Portomaggiore - Bologna
2 towers damaged
50 conductor spans broken
2 KM conductor stolen.

Portomaggiore - Codigoro
2 towers damaged
40 conductor spans broken
2 KM conductor stolen

Portomaggiore - Argenta
2 towers damaged
50 conductor spans broken
4 KM conductor stolen

The repair of these lines will insure electric energy to an area heavily hit by the war; and provide two sources of power at 50 KV between the Venezia area and Bologna.

7615

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AL COM
Electrical Division

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Major Knight
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26 MAY 1945 245

32

FIELD REPORT

Location: Codigoro Substation 50/10 KV
Company: S. A. D. E.
Date: 15 May 1945

1. Work in Progress: Clearing debris and salvaging damaged materials.

2. Materials Needed: 3000 or 4000KVA Transformer 50/10 KV from Venezia Area.
Transportation for transformer and gasoline.

3. Completion Date: 2 weeks after obtaining transportation.

4. Remarks: The 50 KV line from Paluello - Pontelungo - Adria - Codigoro is already repaired and is operating at 50 KV as far as Adria. Due to damaged transformers at Codigoro the line from Adria to that point is operating at 10 KV. Telephone lines are good from the Venezia area to Codigoro and on 15 May will be repaired for operation to Portomaggiore.

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PW&U
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OFFICIAL
DATE 5.22.45
AL COM
Electrical Division

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Lt. Col. Parker
Major Knight
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Field Report

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P.W. & U. S/C A.C.
26 MAY 1945 245

Location: 130 KV Paluello (near Padova) - Portomaggiore Line

Company: S. A. D. E.

Date: 15 May 1945

1. Work in Progress: None

2. Materials Needed: Transportation and gasoline.

3. Completion Date: Not determined.

4. Remarks: 2 towers damaged.
40 conductor spans broken.
2 KM Conductor stolen.
No repairs to this line are necessary North of the Po River. When completed it will be operated at 50 KV as one of several sources of power for Portomaggiore substation. Therefore, when required for 130 KV operation it will be available and ready. Formerly, this line connected to FFSS 130 KV line to Imola and also to an FFSS 130 KV line to Ferrara. Due to the fact that the FFSS line parallel to this one from the Venezia Region to the South has been stripped of conductor in about 10 or 15 KM of its length, this line will be an important link in a future 130 KV system along the Adriatic coast.

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VENICE OFFICE
PW&U
Sub. Com.
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DATE 6.22.45
AL COM
Electrical Division

P. M. Vannoy
Capt., C. E.

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Lt. Col. Lapper
Lt. Col. Parker
Major Knight
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Declassified E.O. 12356 Section 3.3/NND No. 785019

FIELD REPORT

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P.W. & U. S/C A.C.
26 MAY 1945 245

Location: Portomaggiore Substation 130/50/10 KV
Company: S. A. D. E.
Date: 15 May 1945

30

1. Work in Progress: Clearing debris and salvaging damaged materials.

2. Materials Needed: 3000 KVA Transformer 50/10 KV from Ferrara. Transportation and Gasoline.

3. Completion Date: 3 weeks after transportation is obtained.

4. Remarks: Two 15000 KVA Transformers 130/50 KV are apparently only superficially damaged but will require untanking and oil treatment. These transformers must be taken to Ferrara for the work since much of the equipment for transformer repair at Portomaggiore has been damaged.
In the meantime, the station can operate at 50 KV with the provisional transformer requested in Par. 2 above.

VENICE OFFICE
PW&U
Sub. Com.
OFFICIAL
DATE 5.22.45
AL COM
Electrical Division

P. M. Vannoy
Capt., C. E.

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Lt. Col; Lapper
Lt. Col. Parker
Major Knight
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25 MAY 1945 245

29

VENICE OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB COM.
ALLIED COMMISSION
A P O 394

CSW/pp

Venice May 18 1945

Subject: Weekly report ending May 12 1945

To Chief Milano Office, Elec. Division
P.W.&U. S.C.=Allied Commission

1) Reports were forwarded pertaining to electrical generating and transmission facilities of the following Companies of the Venezie Region:

Società Adriatica di Elettricità
Società Idroelettrica dell' Isarco
Soc.An.Elettricità Ponale
Soc.An.Idroelettrica Cismon
Soc.Idroelettrica Medio Adige

2) The SADE Company completed repairs to the following transmission lines;

Date	Line	Km.
6 May	135 kv Udine Redipuglia FF.SS.	29
	50 kv Bassano Marano	26
7 May	50 kv Opicina Pola (right)	100
8 May	50 kv Opicina Pola (left)	100
	50 kv Opicina Rozzol	9
	50 kv Legnago Lendinara	26
	50 kv Monfalcone Opicina (left)	23
9 May	130 kv Nove Fadalto (left)	4
	50 kv Villa Opicina Opicina Ca. (F.F.S.S.)	2
10 May	50 kv Ferrara Bologna	42
	50 kv Vlaska Pola	29
11 May	50 kv Pedesalto Bassano	37
12 May	50 kv Oderzo Monastier (left)	19
	Total Km.	446

3) Maximum daily kW hydroelectric generation by SADE Co. is as follows:

6 May	71,400 kW.
7 May	83,000 kW.
8 May	78,200 kW.
9 May	84,800 kW.
10 May	91,300 kW.
11 May	118,400 kW.
12 May	110,900 kW.

7611

4) The SADE Co. weekly generation report is inclosed herewith.

2 incl.
SADE Generation report 5 May
SADE Generation report 12 May
cc.to Lt.Col.Lapper – Maj.Knight

Clarence S.Wilcox
Major ord.
Chief Venice Off.

ELECTRICITY GENERATING STATIONS
(Centrali di produzione dell'Energia Elettrica)

ELECTRICITY GENERATION REPORT
(Relazione Settimanale sulla Produzione)

Name of Company (Società) SOCIETA' ADRIATICA DI ELETTRICITA'

Address of Company VENEZIA - S. Marco, 4423 A -

Name of Station (Centrale)	Units generated kWh x 10³ (energia prodotta)	Max load kW (carico massimo)	State of reservoir kWh x 10³ (condizioni del Serbatoio)
Hydro Stations (Idroelettriche)			
Fadalto	111.000		
Nove	509.000		
S. Floriano	212.000	48.000	S. Croce 50;3
Castelletto	109.000		Morto 0,7
Caneva	1.918.000		
Livenza	553.000		
Malnisio	614.000		
Giais	238.000		
Partidor	159.000	7.600	
Pedesalto	64.000	300	
Sorio	1.289.000	10.400	
Doblari	49.000	300	Podiselo (no report)

+Thermal St. (include Diesel)

7610

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Name of Station (Centrale)	kWh x 10 (energia prodotta)	KW (carico massimo)	kWh x 10 (addizione al Serbatoio)
Hydro Stations (Idroelettriche)			
Fadalto	111.000		
Nove	509.000		
S. Floriano	212.000		S. Croce 50;3
Castelletto	109.000	48.000	Morto 0,7
Caneva	1.918.000		
Livenza	553.000		
Malnisio	614.000		
Gisis	238.000		
Partidor	159.000	7.600	
Pedesalto	64.000	300	
Sorio	1.289.000	10.400	
Doblari	49.000	300	Podiselo (no report)
+Thermal St. (include Diesel) (Termiche (incl. quelle Diesel)			7610
TOTAL (totale)	5.825.000	66,600	51,0

Report for Midnight Saturday 5 May 1945
Relazione alla mezzanotte del Sabato
Signed (Firmato) [signature]

+(Complete the data on back for Thermal Stations)
(Per le Centrali Termiche completare i dati a tergo)

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T[illegible] AL [illegible]OL[illegible] [illegible]Y [illegible]ATING STATIONS
(Centrali Termiche per la Produzione dell'Energia)

[illegible]LY FOR REPORT
(Relazione settimanale del Combustibile)

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust. in magazzino al principio della settimana) TONS (tonn).	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn)	Fuel in stock at end of week (combust. in magazzino a fine settimana) TONS (Tonn.)
Marghera	Coal Carbone	1.320	-	-	1.320
	Oil Nafta	-	-	-	-
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				

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

Name of Thermal Station (Centrale Termica)		Beginning of week (combust. in magazzino a principio della settimana TONS (tonn).	In the week (combust. consegnato durante la settimana) TONS (tonn)	Week (combust.) impiegato durante la settimana TONS (Tonn)	End of week (combust. in magazzino a fine settimana) TONS (Tonn.)
Marghera	Coal Carbone	1.320	-	-	1.320
	Oil Nafta	-	-	-	-
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				

Report for Midnight Saturday 5 May 1945
Relazione alla mezzanotte del Sabato

Signed (Firmato) [signature]

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

ELECTRICITY GENERATING STATIONS
(Centrali di produzione dell'Energia Elettrica)

WEEKLY GENERATING REPORT
(Relazione Settimanale sulla Produzione)

Name of Company (Società) SOCIETA' ADRIATICA DI ELETTRICITA'

Address of Company VENEZIA - S. Marco, 4423 A -

Name of Station (Centrale)	Units generated kWh x 10 (energia prodotta)	Max load kW (carico massimo)	State of Reservoir kWh x 10 (condizioni dei Serbatoi)
Hydro Stations (Idroelett.)			
Fadalto	1.498.000		
Nove	1.877.000		
S. Floriano	117.000	97.000	S. Croce 63,4
Castelletto	135.000		Morto 0,5
Caneva	1.550.000		
Livenza	416.000		
Malnisio	764.000		
Giais	455.000	10.600	
Partidor	275.000		
Pedesalto	192.000	300	
Sorio	1.588.000	10.200	(S. Caterina 5,7
Pelos	30.000	-	(Comelico (empty)
Doblari	49.800	300	(Podiselo (no report)
+Thermal St. (include Diesel) (Termiche (incl. quelle Diesel)			

7609

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(Centrale) Hydro Stations (Idroelet.)	(energia prodotta)	(carico massimo)	(condizioni di Scroppino)
Fadalto	1.498.000		
Nove	1.877.000		S. Croce 63,4
S. Floriano	117.000	97.000	Morto 0,5
Castelletto	135.000		
Caneva	1.550.000		
Livenza	416.000		
Malnisio	764.000		
Giais	455.000	10.600	
Partidor	275.000		
Pedesalto	192.000	300	
Sorio	1.588.000	10.200	S. Caterina 5,7
Pelos	30.000	=	Comelico (empty)
Doblari	49.800	300	Podiselo ((no report)
+Thermal St.(include Diesel) (Termiche (incl.quelle Diesel)			7609
T O T A L (totale)	8.946.000	118.400	69,6

Report for Midnight Saturday 12 May 1945 19
Relazione all mezzanotte del Sabato

Signed (Firmato) [signature]

+(Complete the data on back for Thermal Stations)
(Per le Centrali Termiche completare i dati a tergo)

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

THERMAL ELECTRICITY GENERATING STATIONS
(Centrali Termiche per la Produzione dell'Energia)

WEEKLY FUEL REPORT
(Relazione Settimanale sul Combustibile)

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust.in deposito al principio della settimana) TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn).	Fuel in stock at end of week (combust.in magazzino a fine settimana) TONS (Tonn.)
Marghera	Coal Carbone	1.320	-	-	1.320
	Oil Nafta	-	-	-	-
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal				

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

(Relazione Settimanale sul Combustibile)

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust.in magazzino al principio della settimana) TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn)	Fuel in stock at end of week (combust.in magazzino a fine settimana) TONS (Tonn.)
Marghera	Coal carbone	1.320	-	-	1.320
	Oil Nafta	-	-	-	-
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				

Report for Midnight Saturday 12 May 1945 - 1945
Relazione alla mezzanotte del Sabato

Signed (Firmato) [signature]

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ELECTRICITY GENERATING STATIONS
(Centrali di produzione dell'Energia Elettrica)

ELECTRICITY GENERATION REPORT
(Relazione Settimanale sulla Produzione)

Name of Company (Società) SOCIETA' ADRIATICA DI ELETTRICITA'

Address of Company VENEZIA - S. Marco, 4423 A -

Name of Station (Centrale)	Units generated kWh x 10 (energia prodotta)	Max load KW (carico massimo)	State of reservoir kWh x 10 (condizione del Serbatoio)
Hydro Stations (Idroele.)			
Fadalto	2.827.000		
Nove	2.132.000		
S. Floriano	189.000	104.200	S. Croce 64,1
Castelletto	254.000		Morto 1,0
Caneva	1.716.000		
Livenza	472?000		
Malnisio	812.000		
Giais	478.000	10.700	
Partidor	270.000		
Pedesalto	645.000	4.200	
Sorio	1.575.000	10.300	
Pelos	33.000		(S. Caterina 5,9 (Comelico 0,4
Doblari	49.000	300	(Podiselo (no report)
+Thermal St. (include Diesel) (Termiche (incl. quelle Diesel)			

7603

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

Hydro Stations (Idroele.)	(Energia prodotta)	(carico massimo)	(condizioni di Serbatoio)
Fadalto	2.827.000		
Nove	2.132.000		S. Croce 64,1
S. Florianp	189.000	104.200	Morto 1,0
Castelletto	254.000		
Caneva	1.716.000		
Livenza	4722000		
Malnisio	812.000		
Giais	478.000	10.700	
Partidor	270.000		
Pedesalto	645.000	4.200	
Sorio	1.575.000	10.300	
Pelos	33.000		S. Caterina 5,9 Comelico 0,4
Doblari	49.000	300	Podiselo (no report)
+Thermal St. (include Diesel) (Termiche (incl. quelle Diesel)			
TOTAL (totale)	11.452.000	129.700	71,4

7608

Report for Midnight Saturday 19 May 1945 1945
Relazione all mezzanotte del Sabato
Signed (Firmato)

+(Complete the data on back for Thermal Stations)
(Per le Centrali Termiche completare i dati a tergo)

V. Tab.

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

THERMAL ELECTRICITY GENERATING STATIONS
(Centrali Termiche per la Produzione dell'Energia)

MODULO F
(Relazione Settimanale sul Combustibile)

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust.in magazzino al principio della settimana TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn)	Fuel in stock at end of week (combust.in magazzino a fine settimana) TONS (Tonn.)
Marghera	Coal Carbone	t.320.	=	=	t.320
	Oil Nafta	=	=	=	=
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal				

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

Name of Thermal Station (Centrale Termica)		Fuel in stock at beginning of week (combust.in magazzino al principio della settimana) TONS (tonn)	Fuel delivered during the week (combust. consegnato durante la settimana) TONS (tonn)	Fuel used during the week (combust.) impiegato durante la settimana TONS (Tonn)	Fuel in stock at end of week (combust.in magazzino a fine settimana) TONS (Tonn.)
Marghera	Coal Carbone	1.320.	=	=	1.320
	Oil Nafta	=	=	=	=
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				
	Coal Carbone				
	Oil Nafta				

Report for Midnight Saturday 19 May 1945 1945
Relazione alla mezzanotte del Sabat

Signed (firmato) _____

V Fds.

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

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RECEIVED
P.W. & U. S/C A.C.
25 MAY 1945 645

VENICE OFFICE
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB COM.
ALLIED COMMISSION
A P O 394

28

Venice, May 22 1945

CSW/pp

SUBJECT: Weekly report ending May 19 1945

TO: Chief Milano Office, Electr.Div., P.W. & U. S.C. Alcom

1.) Reports forwarded during the week:
Sade Co. weekly generation report
Field report: Codigoro Substation
" " : Rovigo-Ferrara 50 kV. line
" " : Portomaggiore substation
" " : Paluello-Portomaggiore 130 kV. line
" " : Portomaggiore 50 kV. Lines
" " : Ponale Co.

2.) Repairs to transmission lines completed during the week:

Date	Line	Length Km.
14 May 1945	50 kv Opicina Mattuglie pair	70
	50 kv Mattuglie Fiume	10
16 May 1945	50 kv Battaglia Rovigo	25
	130 kv Lago Morto Marghera	74
19 May 1945	130 kv Sospirolo Vellai (left line)	17
	Total Km.	196

3.) Maximum daily kW generation by Sade Co.:
Sunday 13 May - 86,300 kW.
Monday 14 May -111,000 kW.
Tuesday 15 May-110,800 kW.
Wedn. 16 May -120,800 kW.
Thursd.17 May -120,200 kW.
Friday 18 May -129,400 kW.
Saturd.19 May -127,300 kW.

Clarence S.Wilcox
Major ord.
Chief Venice Office

VENICE OFFICE
U.S. ARMY
GENERAL
A.P.O.
Electrical Division
5.22.45

7607

cc. to Lt.Col.Lapper
cc. to Maj. Knight

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

Field report
Location : VERONA
CO. : PONALE
Date 17 May 1945

1) Informations from eng.Roberti, Ponale Co.Verona relative to the follo=
wing Companies:

A) Ponale Co.

The Riva and Ponale plants are undamaged=present condition of transmission lines is shown on attached sketch.The Bussolengo plant is connected to Bo= logna and Sorio by 130 kv lines.Other Ponale lines are damaged.Transportation is necessary to start repairs in Adige Valley.

B) SIMA Co.

Considerable damage to diversion dam gates and canal headworks gates.
Slight damage to the canal.At present time available flow in canal is approximately 40 cubic meters per second.
No damage to the Bussolengo plant.
Two penstocks had been damaged at the Chievo plant so that now only one unit could operate.
Two transformers had been removed,one from each plant,by the germans and transported to Bresciana.
Two out of three 130 kv lines connecting Bussolengo and Chievo are intact.

C) AEM Verona

The diversion dam on the Adige R. has been completely destroyed.The Basso Acquar and Tombetta plants are badly damaged,no rehabilitation program is contemplated.

D) Cartiera Fedrigoni

The paper mill plants Basso Acquar are supplied from the above diversion dam.
The paper mill has been destroyed.

E) Cartiera Verona

The Verona paper mill has been destroyed.

F) Valeggio Co.

The Brentino and Prevaldessa plants are in service.The 40 kv line Brentino to Verona is also in service.

Clarence S.Wilcox
Major ord.
Chief Venice Office

VENICE OFFICE
PW&U
Sub. Com
OFFICIAL
DATE 5.22.45
AI COM
Electrical Division

distribution:
Milano Office
Lt.Col.Lapper
Maj.Knight
file

1 encl.

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

INCOMING MESSAGE

HEADQUARTERS ALLIED COMMISSION

P.W. & U.

Originator's Reference: 1285
Date/Time of Origin: MAY 16NFT

Message Centre No: E/1699
Date Time Rec'd: MAY 211025B
Precedence: ROUTINE

FROM: LOMBARDIA REGION FOR POLETTI SIGNED LAPPER
TO: ALCCM ROME (ATT MAJ LAUGHLIN ACPWU)

RESTRICTED

RESTRICTED.

1. Please note and circulate following information.

Damage to electric plant in PIEMONTE. CASTIGLION 25000. Repair end June.

2. INVERSO PENRSE 2500 destroyed PONTE 600 destroyed FUNGHERA 7500 repair 1 year. Normal load 380000 last year 200000 present 140000. All damage by partisan.

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21 MAY 1945 245

HEADQUARTERS
21 MAY 1945
A.C.

DIST

ACTION: PW & U S/C
INFO: A/President
Chief Commissioner
Econ Sec
File 2
Floet

ACTION

7604

RESTRICTED

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

INCOMING MESSAGE

HEADQUARTERS ALLIED COMMISSION

PWU 26

Originator's Reference:

Date/Time of Origin: MAY NFT

Message Centre No: E/1333

Date Time Rec'd: MAY 190830B

Precedence: ROUTINE

FROM: AMG LIGURIA REGION FOR PWU FOR PARKER PARNE

TO : ALCOM HQ CITE ACPWU

RESTRICTED (23)

RESTRICTED

Ref your 7755 of 16 May. In clear. Subject is power plants. Verificatin(?) power plant taken over by French. Generating group VALLE ROIA S DALMAZZO plant 35,000 KW LE MESCE plant 2200 KW confine plant 8400 KW. 60 KW north VENTIMIGLIA locate on FIUME ROIA.

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P.W. & U. S/C A.C.
19 MAY 1945 245

Dist

Action - P.W. & U
Info - A/President
Chief Commissioner
Econ Sec
File 2
Float

HEADQUARTERS
19 MAY 1945
C.

7605

RESTRICTED

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

2450

FILE

55

25

LIGURIA REGION AMG

7755 16 MAY 43 PRIORITY

RESTRICTED PD

SUBJECT IS POWER PLANTS PD

PARA TO AMG LIGURIA REGION FOR REGIONAL ENGINEER FROM TO ALCON CATO ACTNU PARA

PARA ONE PD REFERENCE CABLE OF MAY FOURTEEN LAPPEN TO LAUGHLIN PD

PARA TWO PD PLEASE VERIFY QUOTE POWER STATIONS TAKEN OVER BY ENGLISH UNQUOTE PD

PARA THREE PD OUR INFORMATION IS POWER STATIONS TAKEN OVER BY FRENCH

23

26 refers

Distribution by hand :

A/President
Chief Commissioner
Economic Section

7603

PUBLIC WORKS

317

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INCOMING MESSAGE

HEADQUARTERS ALLIED COMMISSION

Telegram 23

Originator's Reference: .....

Date/Time of Origin: MAY 14NFT

Message Centre No: E/886

Date Time Rec'd: MAY 152120B

Precedence: ROUTINE

FROM: LT COL LAPPER, LIGURIA

TO : MAJOR LAUGHLIN PUBLIC WORKS AND UTILITIES SUBCOMMISSION HQ ALCOM ROME

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16 MAY 1945 245

RESTRICTED.

Power stations damaged in LIGURIA.

AIROLE 6000 EBVERA 6000 GENOA 50,000.

Power stations taken over by English.

LEMESCE 2200 SODALMAZZO 35,000 CONFINE 8400.

All others OK. Please circulate information.

ACTION

chief Eng

25 copies

DIST

ACTION: PW & U S/C
INFO: A/President
Chief Commissioner
Econ Sec
File 2
Float

HEADQUARTERS
15 MAY 1945
A. 7602

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22

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16 MAY 1945

HEADQUARTERS
15TH ARMY GROUP
Engineer Section
C M F

File No : 2550/1/RE

14 May 1945

SUBJECT : Electric Power Supply

TO : HQ Allied Commission
Electrical Division
Public Works and Utilities Sub-Commission

Herewith recce reports on BOLOGNA power supply including details of plant at FARNETA, LIGONCHIO and PREDARE.

D. Hamilton Baptiste

for Brigadier
Chief Engineer

7601

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21

RECEIVED
P.W. & U. S/C A.C.
14 MAY 1945 245

ENGINEER SECTION (BR)
A.F.H.Q.
C.M.F.
Tele. No. Freedom 972

ENG/2290

11 May 45

SUBJECT: Electricity Supply.

TO : Electrical Division,
P.W & U Sub Commission,
HQ Allied Commission ROME,
(Attn: Lt.Col. LAPPER)
Lt.Col. RENTON)

Herewith consolidated Sitrep pertaining to Electricty Supply situation.

A.G.J.DAVY, 7600
Capt.R.E.,
for Brigadier,
Director of Works.

CONSOLIDATED SITREP - 11 MAY 45

I. Ex 170 CE Works - Date of origin 4 May.

1. Group of Stations CANEVA - NOVE - FADALTO Generating 100,000 KW.

2. MESTRE only slightly damaged. 1 Set 15,000 KW O.K. when fuel arrives. Others to follow.

II. Ex 170 CE Works. Date of origin 7 May.

Situation in LIGURIA.

1. Further station in S.STEFANO GROUP O.K.
RIMAGNA - 1,400 KW.

2. The main switching and transmission station ARQUATA SCRIVIA, connecting LIGURIA to the northern grid system is in order and it is believed that the H.T. lines to MORTARA and CISLUGA are undamaged. At present however no power is being received from the north.

3. H.T. Transmission

(a) One of the two 120 KV lines from the BUSCA group (N.W. of CUNEO) to CAIRO MONTENOTTE is damaged but should be in operation in one week.

(b) The 60 KV lines from the BUSCA Group to CAIRO MONTENOTTE are damaged. Extent not yet known.

(c) Both 75 KV and 60 KV lines from the BEVERA (G.R.P.) (FRANCO-ITALIAN Border) are cut. Extent of damage not known but thought to be extensive.

(d) It is believed that the 75 KV lines from the S.STEFANO Group (E of GENOA) to S.COLOMBANO is damaged as there is no power being transmitted from the a/m group.

4. Power available.

At present there is approx 50,000 KW available from the BUSCA Group but within a week this should rise to approx 100,000 KW.

The demand at present is as follows: 7594

GENOA and District	Domestic	15,000 KW
	Industrial)	15,000 KW

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1. Further station in S.STEFANO GROUP O.K.
RISERGHA - 1,400 KW.

2. The main switching and transmission station ARQUATA SCRIVIA, connecting LIGURIA to the northern grid system is in order and it is believed that the H.T. lines to MORTARA and CISLUGA are undamaged. At present however no power is being received from the north.

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At present there is approx 50,000 KW available from the BUSCA Group but within a week this should rise to approx 100,000 KW.

7594

The demand at present is as follows:

GENOA and District	Domestic	15,000 KW
	Industrial) Trams)	15,000 KW
	Railway	2,000 KW
		10,000 KW
SAVONA and District.		

5. Internal Distribution at GENOA.

Very little damage - mostly confined to dock area. Trams are running as normal and a proportion of the Elect Rlys.

III. Ex HQ 5 Army. Date of origin 7 May.

Power Stations VERONA - LAKE GARDA Area.
Additional Information and confirmation

DRO - reported undamaged 1 May and producing 40,000 KW
FIES - Believed undamaged. No communication at present.
DRO & FIES supply area L.GARDA - TRENTO.

BUSSOLENGO. One transformer removed by Germans, otherwise undamaged. Only one generator out of three working

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present. Normally produces 40,000 KVA
BUSSOLENGO station has only recently been completed and contains the central switchboard for the VERONA - L.GARDA area. The Germans have removed some of the switches and controls but a supply of spares has been kept hidden and repairs can soon be effected.

CHIEVO. Slight bomb damage to canal and penstock. Repairs can be effected in about two weeks. Otherwise no damage. Normally produces 30,000 KVA.

CART. DI VERONA - Destroyed

CART. FEDRIGONI I - Destroyed

TOMBETTA Canal broken but otherwise undamaged. There are plenty of materials available for repair.

SORIO ISALTO I This is a very old station and has not been used for sometime. It is undamaged however and could be operated if necessary.

SORIO ISALTO II This is a comparatively new station and is undamaged. It produces 12,000 KVA. Normally supplies railway to PADOVA.

Water supply for BUSSOLENGO AND CHIEVO is carried by canal from the ADIGE river near ALA. Canal and dam have been damaged but sufficient uncontrolled water is coming down canal to run one generator.

General.

The power situation in the area is good, helped of course by the fact that the electric railways are not operating. The town supply in VERONA is adequate.

IV Ez 59 Area. Date of origin 8 May

1. Load VENICE 20,000 KW

2. Load VERONA 8,000 KW from SORIO

3. SORIO generating 10,000 KW (8,000 KW to VERONA 2,000 to [illegible] GROUP)

4. ALA Dam badly damaged; BUSSOLENGO producing 10,000 KW on uncontrollable water.

5. All lines in ORBETELLO Valley - MORI, out of service - severe

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GARR. FABRIGONI I - Destroyed

TOMBETTA Canal broken but otherwise undamaged. There are plenty of materials available for repair.

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IV Ex 59 Area. Date of origin 6 May

1. Load VENICE 20,000 KW

2. Load VERONA 8,000 KW from SORIO

3. SORIO generating 10,000 KW (8,000 KW to VERONA 2,000 to [illegible] GROUP)

4. ALA Dam badly damaged; BUSSOLENGO producing 10,000 KW on uncontrollable water.

5. All lines in CHESTELLO Valley - MORI, cut of service - severe battle damage.

6. MILAN load 260,000 KW (160,000 KW from EDISON Group and 100,000 from AZIENDA ELECTRICA)

7. 120 KV line PARMA - MILAN carrying limited load due to battle damage.

8. 120 KV line PARMA - BOLOGNA in service.

V. Ex ADW (E & M) 10 May

Load on TORINO 150,000 KW from S.I.P. and 40,000 KW from AZIENDA MUNICIPALE.

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12 MAY 1945 245

ENGINEER SECTION (HR)
A.F.H.Q.
C.M.F.
Tele No. Freedom 972.

20

SUBJECT: Electricity Supply.

ENG/2290.

TO : Electrical Division,
P.W. & U. Sub Commission,
HQ Allied Commission, ROME.
(Attn. Lt. Col. Lapper)
Lt. Col. Renton).

10 May 45.

Reference telephone conversation Lt. Col. RENTON - Capt. DAVY, herewith Sitrep pertaining to Electricity Supply situation at 2200 hrs, 8 May 45.

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

7597

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0 245 0

19

AMG VENEZIE REGION

7264 10 MAY 45 ROUTINE

RESTRICTED FD
SUBJECT TO ELECTRICITY SITUATION FD
PARER TO AMG VENEZIE REGION FROM MJ ALCOA CITE ACPOW PARER 18
PARA ONE FD REFERENCE YOUR ROGER TWELVE SLANT ONE ZERO ZERO DATED
EIGHT MAY FD
PARA TWO. FD COLONEL LAPPIN ARRIVES ABOUT MIDDLE OF NEXT WEEK

7596

PUBLIC WORKS
614

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

INCOMING MESSAGE

HEADQUARTERS ALLIED COMMISSION

PWD 18

Originator's Reference: RXII/100

Date/Time of Origin: MAY 050930B

Message Centre No: E/25

Date Time Rec'd: MAY 081120B

Precedence: PRIORITY

FROM: AMG VENEZIE REGION

TO : HQ AICOM ATTN PUBLIC WORKS AND UTILITIES

RESTRICTED

RESTRICTED

Societa ADRIATICA di Elettricita report all stations and transmission lines functioning except CROCE DEL GALLO reported destroyed. All provinces receiving normal supply. 120 KVA transmission line DOBLARI VILLA OPICINA and 60 KVA transmission line PIAVA MANFALCONE reported badly damaged. Stations reported OK. TRISTE receiving supply from PIAVE SAN CROCE group. Full report in fiew days. Please report if Colonel LAPPER coming north for conference.

ACTION

Dist

Action - PW & U SC
Info - A/President
Chief Commissioner
Econ Sec
File 2
Float

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P.W. & U. S/C A.C.
10 MAY 1945 245

19 orders

HEADQUARTERS
A M 7595

RESTRICTED

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Rel. 478.906 HEADQUARTERS ALLIED COMMISSION V.M/mm
APO 534
Public Works and Utilities Sub-Commission

U

REFERENCE : 245/PWU 10 May 1945

SUBJECT : Electrical Situation in North Italy as of 1200 Hours Today.

TO : Distribution.

General.

AFHQ, Venezia Region reports that with minor exceptions, all generating and transmission facilities of the Societa' Adriatica di Elettricita' are intact. This represents approximately 657,000 kilowatts of installed capacity.

The following is the approximate break-down of generating capacity reported to date:

	Unharmed	Damaged
Hydro	657,700 KW	77,300 KW
Steam	187,400 KW	50,000 KW
Total	845,100 KW	127,300 KW

AFHQ, Venezia Region further reports that all provinces of Venezia Region are receiving normal electricity supply. These provinces are: Belluno, Rovigo, Padova, Pola, Rovigo, Trieste, Treviso, Udine, Verona, Vicenza. Up to now favorable reports of available electricity have been received of all important North Italy cities except Torino from which no information received.

W.M. HARPER
Lieut-Colonel,
Chief Electrical Div.

Distribution:
Chief Engineer AFHQ
AFLMA
Deputy CP. H/S (Lt. Brig D.L. Anderson)
Director P.W. & U. H/Q
Chief Electrical Division, P.W. & U. H/Q (2)
North Italy Electricity Situation File.

7594

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

P.O. + U. S/C

Subject: Electricity Situation - LIGURIA.

172 C.E. Works:
C. M. F.

Ref: CE/161.

Date: 7 May 45.

LIGURIA AREA.

Herewith preliminary report on Electricity situation in LIGURIA.

Cook
Lt. Col.
for Brigadier,
Chief Engineer.

/KB

Enc.

Copies to: No 1 District
No 3 District

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P.W. & U. S/C A.C.
10 MAY 1945

APPENDIX 'A'

9836

16

Report on Electrical Situation in LIGURIA.

1. The following elec stations are in working order.

BUSCA Group.

(a)	Casteldelfino	28,000 kw
(b)	Sampeyre	35,000 kw
(c)	Brosasco	38,000 kw
(d)	Acceglio	14,000 kw
(e)	P. Marmora	8,200 kw
(f)	S. Damiano	15,000 kw
(g)	Dronero	9,000 kw
(h)	Moline	2,600 kw

BEVERA Group.

(a)	Le Mesce	2,200 kw
(b)	S. Dalmazzo	35,000 kw

S. COLOMBANO Group.

(a)	Salsominore	14,000 kw
(b)	Bardi	4,600 kw
(c)	Tigliolo	500 kw
(d)	Chiesuola	500 kw
(e)	Borzonasca	700 kw
(f)	Lagon	860 kw
(g)	Caroso	6,400 kw
(h)	S. Michele	7,500 kw

S. STEFANOM Group (420).

(a)	Isola	10,000 kw
(b)	Seluanizza	5,000 kw
(c)	Rimagna	1,400 kw
(d)	Rigoso	2,400 kw
(e)	Arlia	2,400 kw
(f)	Marra	4,700 kw
(g)	Bosco	2,100 kw

2. All Thermal stations are in working order, except Concenter (GENOA), but are not operative due to shortage of fuel. Repairs necessary at GENOA Power Station estimated to take four months with spares required from MILAN.

3. The main switching and trans station, ARQUATA SCRIVIA, connecting LIGURIA to the northern grid system is in order and it is believed that the high tension lines to MORTARA and CISLUGA are undamaged. At present however no power is being received from the north.

4. HT Transmission.

(a) One of the two 120 kv lines from the BUSCA Group to CAIRO MONTE[illegible] damaged but should be in operation in one week.

(b) The 60 kv [illegible]

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(g) Dronero 9,000 kw
(h) Moline 2,600 kw

BEVERA Group.

(a) Le Mesce 2,200 kw
(b) S. Dalmazzo 35,000 kw

S. COLOMBANO Group.

(a) Salsominore 14,000 kw
(b) Bardi 4,600 kw
(c) Tigliolo 500 kw
(d) Chiesuola 500 kw
(e) Borzonasca 700 kw
(f) Lagon 860 kw
(g) Caroso 6,400 kw
(h) S. Michele 7,500 kw

S. STEFANOM Group (420).

(a) Isola 10,000 kw
(b) Seluanizza 5,000 kw
(c) Rimagna 1,400 kw
(d) Rigoso 2,400 kw
(e) Arlia 2,400 kw
(f) Marra 4,700 kw
(g) Bosco 2,100 kw

2. All Thermal stations are in working order, except Concenter (GENOA), but are not operative due to shortage of fuel. Repairs necessary at GENOA Power Station estimated to take four months with spares required from MILAN.

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(b) The 60 kv lines from the BUSCA Group to CAIRO MONTENOTTE are damaged. 7592
Extent not yet known.

(c) Both 75 kv and 60 kv lines from the BEVERA Group are cut. Extent of the damage not known but thought to be extensive.

(d) It is believed that the 75 kv lines from the S. STEFANOM Group to S. COLOMBANO is damaged as there is no power being transmitted from the a/m group.

5. Power available.

At present there is approx 50,000 kw available from the BUSCA Group but within a week this should rise to approx 100,000 kw.

The demand at the present time is as follows:

GENOA and District	Domestic	15,000 kw
	Industrial) Trams)	15,000 kw
	Railway	2,000 kw
SAVONA and District		10,000 kw

6. Internal Distribution at GENOA.

Very little damage - mostly confined to dock area. Trams are running as normal and a proportion of the elec railways.

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ENGINEER SECTION (ER)
A.F.H.Q.
C.M.F.
Tele. No. Freedom 972.

RECEIVED
P.W. & U. S/C A.C.
10 MAY 1945 245

ENG/2290

15

SUBJECT : Electricity Supply.

TO : Electrical Division,
PW & U Sub Commission,
HQ Allied Commission, ROME.

(attn: Lt. Col Lapper
Lt. Col Renton)

Reference telephone conversation Lt. Col RENTON - Capt DAVY, herewith Sitrep pertaining to Electricity Supply situation at 1030 hrs 6 May 45.

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

STRUCK AT 10.15 HRS. 6 MAY 45.

SOURCE 5th. ARMY.

RIVA Power Station giving 40,000 KW and undamaged.
PANALE " " " 2,000 KW " "
Both stations supplying power to factories along N.W. side of Lake GARDA, also via intact 135 KW transmission line RIVA - ROVERTO - VERONA - MANTOVA - MODENA - BOLOGNA to these towns.

30 E & M II DIST.

PO. HT Crossings.

3 sets of towers on each bank standing at PIACENZA. One set has all conductors spanning river but spans down further back. Other two sets have conductors ~~lost~~ ~~also~~ hanging down in water.

RLYS.

It is reported by recce party that there is a large quantity of rolling stock in the vicinity of GENOA.

S.C.E.D.

With only about ¼ of N.ITALY covered by reports to date, and the large capacity stations in the lower ALPS not reported on, we already know that ¾ of the estimated total power required to run N.ITALY is undamaged and in our hands. From AIOCM intelligence ratio of damaged to undamaged plant is __ 40%. From own intelligence ratio is __ 25%.

Expected ratio ~~40~~ 60% 90%.

Transmission lines are NOT extensively damaged.
It is unlikely that there will be any power shortage in N.W. ITALY.

Maj Lapping.

7593

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

RECEIVED
P.W. & U. S/C A.C.
7 MAY 1945 245

ENGINEER SECTION (BR)
A.F.H.Q.
C.M.F.
Tele. No. Freedom 972

14

SUBJECT: Electricity Supply

ENG/2290

TO : Electrical Division,
PW & U Sub Commission,
HQ Allied Commission, ROME.

5 May 45

(Attn: Lt-Col Lapper)
Lt-Col Renton)

Confirming telephone conversation Lt-Col RENTON - Capt DAVY, herewith Sitrep pertaining to Electricity Supply situation at 1200 hrs 4th May. Information on the Adriatica Group is expected in the next few days and will be transmitted to you.

7589

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

Encl:

SITREP SX ADV (ENS) 1200 HRS 4 MAY 45. SHEET 1.

1. GENOA Network. Report from CISLI (Compagnia Impresse Elettriche Liguri) Subsidiary of Societa Edison.

The following stations operating more or less normally, with outputs shown:-

CASTELLETTO	50 cycle	12000 KW
SAUCHIERE		14000 "
BUSSALORO	50 cycle	12000 "
SALETTO (ARNEGLIO)	16 2/3 cycle	14000 "
PONTE HADRERA	50/16 2/3 cycle	7000 "
SAN DANIANO	50 cycle	14000 "
DRUENTO		5000 "
MOLINI		2000 "
MOLARE		1500 "
BELLI (BARDI)		1500 "
RUFFINATI-SAISSELLONE		6000 "
GARBO		6400 "
SAN MICHELE		7000 "
TICINOLO		350 "
CHIESOLA		150 "
PONTEMASCA I Inf.		200 "
do. II Grp		200 "
LAGO		1000 "

2. GENOA - STEAM STATIONS. - not damaged, but not working due to lack of coal.

MEDITERRANEA (GENOA)	16000 KW
SAVONA	6000 "

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PONTE MALLERA	5⅓/16 2/3 cycle	7000 "
SAN DALMAZZO	50 cycle	14000 "
DRONERO		5000 "
MOLINE		2000 "
MOLARE		1500 "
BELLI (BAVEI)		1500 "
RUFFINATI-SALSOMINORE		6000 "
CARUSO		6400 "
SAN MICHELE		7000 "
TIGLIOLO		150 "
GILLESTOLA		150 "
PORZONASCA I Inf.		200 "
do. II Sup		200 "
LAGO		1000 "

2. ~~GENOA~~ - STEAM STATIONS. - not damaged, but not working due to lack of coal.

CHIAVARI (GENOA)	10000 KW
SAVONA	8000 "

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3. GENOA. Load 1st May 60000 KW
Peak: 30 April 70000 "

With a little repair load is expected to reach 120,000 KW.

4. The following stations in CUNEO province are O.K. -

SAN DALMAZZO	50 cycle	24000 KW
	16 2/3 "	10000 "
COMBINE	50 "	8000 ") Occupied by French.
IE LEVICE	50 "	2000 ") and disconnected from Italian Grid.

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5. The following in CUNEO province are destroyed.

AIROLE	6000 KW
BEVERA	5000 KW

6. TRANSMISSION LINES.

CASTELDELFINO, SAMPEYRE and DRONERASCO connected with GENOA through CAIRO MONTENOTTE Substation by 2 x 120 KV and 1 x 60 KV lines.

ACCEGLIO, PONTE MARMORA, SAN DAMIANO and MOLINE Plants connected with CAIRO MONTENOTTE Substation and GENOA.

MOIANE connected with CAIRO substation by 2 x 60 KV lines.

7. SPEZIA - STEAM STATION O.K. 10,000 KW. 500 Tons coal in stock.

8. Stations in PARMA province.

BOSCO DI CORNIGLIO	42 cycle	4000 KW	Station O.K. Reservoir not working (on summer output)
MARRA " "	42 cycle	4000 KW	" " " " "
IDOLA DI PALANZANO	42 cycle	8000 KW	Station and Reservoir O.K.
RICCIO	42 cycle	2000 KW	" " " "
SELVANIZZA	42 cycle	4000 KW	" " " "
ARLIA	42 cycle	2500 KW	Station O.K. Reservoir not working (summer output)

9. GENOA Grid and EDISON GRID connected via 2 x 120 KV line of which only one is working.

10. Substations Destroyed.

SANTA VIOLA

SAN GIUSEPPE (BORGO PANOCE)

11. MODENA and PARMA supplies, more or less normal.

12. LEGNONNI, FARNESINA, BOLOGNA area all functioning normally.

13. The following O.H. lines are damaged:-

PIACENZA - LODI - 60 KV

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MODANA connected with CAIRO substation by 2 x 60 KV lines.

7. SPEZIA - STEAM STATION O.K. 10,000 KW. 500 Tons coal in stock.

8. Stations in PARMA province.

BOSCO DI CORNIGLIO	42 cycle	4000 KW	Station O.K. Reservoir not working (on summer output)
MARRA " "	42 cycle	4000 KW	" " " " "
ISOLA DI PALANZANO	42 cycle	8000 KW	Station and Reservoir O.K.
FIGORO	42 cycle	2000 KW	" " " "
SELVANIZZA	42 cycle	4000 KW	" " " "
ARLIA	42 cycle	2500 KW	Station O.K. Reservoir not working (summer output)

9. GENOA Grid and EDISON CHIM connected via 2 x 120 KV line of which only one is working.

10. Substations Destroyed.

SANTA VIOLA
SAN GIUSEPPE (BORGO PANIGALE)

11. MODENA and PARMA supplies, more or less normal.

12. LEGNOCHIL, FARNETTA, PRODANE in BOLOGNA area all functioning normally.

13. The following O.H. lines are damaged:-

PIACENZA - LODI	-	60 KV
PARMA - CORIAGO	-	120 KV
COLORNO - ACOLA	-	60 KV
BUSSETO - BUSSOLENGO	-	120 KV
BUSSOLENGO - RUBIERA	-	230 KV

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14. Damage to FERRARA - BOLOGNA line. 1 Tower down and 43 breaks in line.

15. Thermal Station at PONTE LAGOSCURO destroyed.

16. MEDIA. No supply and all lines damaged.

Maj J. Langlands

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RECEIVED
P.W. & U. S/C A.C.
7 MAY 1945 R45

ENGINEER SECTION (BR)
A.F.H.Q.
C.M.F.
Tele. No. Freedom 766

13

SUBJECT: Electric Power Supply.

ENG/2290.

TO : Electrical Division,
P.W.U. Sub Commission,
H.Q., Allied Commission,
ROME.
Attention: Lt.Col.LAPPER.
Lt.Col.RENTON.

4 May 45

Reference conversation Lt.Col.RENTON - Capt.DAVY.

Herewith copies of latest sitreps pertaining to electricity supply situation.

S.J.VAN DER SPUY,
Major, S.A.E.C.,
for Brigadier,
Director of Works.

Encl: Sitrep 3 May
4 May) 0930 hrs
4 May) 1000 "

7585

SITREP FROM A.D.W.(E & M) 3 MAY 45. ENG/2002.

1. Spoke with manager of Bologna power coy who states he had conversation with a director of the Edison Group, who states in general the whole group is working or can work in a short time. There is no very serious damage.

2. At present rate of progress Rifredi-Bologna Line (66KV) will take five to six months to complete. (1 sect 543 E & M Coy employed).

(a) In a few weeks this section will lose the only linesman power it possesses and 10 electricians !!

3. Yesterday 8,000 KW was being supplied to Bologna from Farnetta and Selvanissa Hydro Power Stations via Reggio Emilia Medina - Crevalcore.

(Farnetta installed capacity 33,600 KW.)
(Selvanissa " " 5,026 KW.)

Farnetta is only supplying approx 4,000 KW due to low water.

4. The following power stations have been destroyed -

MUSCHIOSO	7,000 KW.	(Medina Province).
Strettara	4,550 KW	(" ").
San Michele	2,825 KW	(" ").
Verona	?	Verona "
Sorio I.	4,900	" "
Sorio II.	11,200	" "

5. Bussoleno is working (thought to be large new power station in Toriono Province). KW output not known.

6. Bologna - Ferrara H.T.Line.

Approximate damage 2 Pylons down and 45 breaks in conductor. (Very light damage.)

7. It is estimated that 10,000 KW could be supplied from N.Italy (Bologna to Florence if required in a short time). (Note - this is reverse power flow we estimated on sending to N.ITALY not ~~necessary !!~~). *receiving is)*

8. The following materials are required for 543 E & M Coy to assist rehabilitation on Bologna -Rifredi Line.

2 x 140 fthms. 3" cordage.
12 x 3 fall.3" blocks.
12 x 14 Rachets & Posts.

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Strettara - 4,550 KW -	(" ").	
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Verona ?	Verona "	
Sorio I. (4,900) II. (11,200)	" "	

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8. The following materials are required for 543 E & M Coy to assist rehabilitation on Bologna -Rifredi Line.

2 x 140 fthms. 3" cordage.
12 x 3 fall.3" blocks.
12 x 14 Rachets & Posts.

24 each 7/8" } square shank drills.
1" }
1-1/8" }

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If above can be obtained,time of completion BOLOGNA - RIFREDI Line cut to 3 months.

A.G.J. DAVY,
CAPTAIN RE,
for Brigadier,
Director of Works.

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

SITREP ex ADW (Br Inc) 5 Army via ADW (E & M) 0930 hrs. - 4 May45.

1. SORIO SALTO II Power Stn working output 12,000 KW (VERONA).

BASSO ACQUA 1,020 KW - destroyed by enemy. (")

TOMBETTA 4,800 KW P. Stn O.K. but canal damaged. Can be repaired by local engineers when cement becomes available.

CHIEFO 30,000 KW Hydro Stn OK
BUSSOLENGO 40,000 KW " " "
} both not operating owing to no water. Water held by dam at Ala above BRENTINA. In contact and hope to release water today.

2. Both RIVA 58,600 KW and POMALE 1,400 KW+ thought to be working, but not certain.

3. FO H.T. crossings all O.K. No pylons down but odd spans here and there.

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

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Sit rep ex SO. E & M II Dist 1000 hrs 4th May 45.

1. At present 50,000 Kw in Genoa. Will be raised to 70,000 Kw in 1 week when second line from Cairo Mantenotte 8,500 Kw is completed.

2. Concenter thermal station will take 4 - 5 months to repair.

3. Savona 17,000 Kw thermal station is OK but not working as they only have 700 tons coal. But it is not really required at present.

4. Edison Group report believes that most of the hydro stations are OK.

5. So far no electric trains running out of Genoa but the railway track is believed OK.

6. Sampierdarena 17,000 Kw thermal station is OK, but not working.

7. 60 Kv O/H line from the West into Genoa is extensively damaged. 7584

8. Power and light available in La Spezia.

9. Water supply normal in Genoa and Spezia.

10. 1 Cement works in Genoa OK. Has enough coal to produce 10,000 tons of cement.

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Tel. 478.906

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

VSR/mm

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REFERENCE : 245/PWU

7 May 1945

SUBJECT : Electrical Situation in North Italy as of 0900 Hours Today.

TO : Distribution.

General:

Captain Davy (AFHQ) yesterday reported that Riva (58,600 KW) and Fenale (1,400 KW) stations north of Lake Garda are OK, and also that transmission line between Riva, Rovereto, Verona, Mantova, Modena and Bologna is operating. No reports yet received covering situation in Torino and Venezia areas.

W.M. LAPPER
Lieut-Colonel,
Chief Electrical Div.

Distribution:

Chief Engineer AFHQ
AFLRB
Deputy VP. H/S (Att. Brig. D.L. Anderson)
Director P.W. & U. S/C
Chief Electrical Division, P.W. & U. S/C (2)
North Italy Electricity Situation File.

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

Tel. 478.906

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

VSR/ma

REFERENCE : 245/PWU

5 May 1945

SUBJECT : Electrical Situation North Italy as of 1500 Hours Today.

TO : Distribution.

General:

First definite information about Verona electrical situation received from Lt.Col. George Drury, AFHQ, who reports SORIO II (11,200 KW) near Verona operating, and two other plants operable as soon as water is released from reservoir. Several lines crossing Po are reported down at point of crossing, although towers are still standing.

W.M. LAPPER
Lieut-Colonel
Chief Electrical Div.

Distribution:

Chief Engineer AFHQ
AFLRS
Deputy VP. E/S (Att. Brig. D.L. Anderson)
Director P.W. & U. S/C
Chief Electrical Division, P.W. & U. S/C (2)
North Italy Electricity Situation File.

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Tel. [illegible].906 HEADQUARTERS ALLIED COMMISSION V8R/ms
AFO 394
Public Works and Utilities Sub-Commission

REFERENCE : 245/PWU 3 May 1945

SUBJECT : Electrical Situation North Italy as of 1500 Hours Today.

TO : Distribution.

10

General:

Telephone report from Milano states plenty of power available; neither demand nor sources known here. Ferrara without power; four to five days needed to repair Bologna - Ferrara transmission line. Of stations north of spring battle line, following is known concerning nameplate generating capacity:

	Undamaged		Damaged	
Hydro	279,582	KW	74,585	KW
Steam	28,400	KW	50,000	KW
Total	307,482	KW	124,385	KW

In connection with these figures, the following considerations are submitted:

a) The plants included in the above totals are within 100 kilometers of the Ligurian Sea. There is no specific information yet on the plants in the Alps which constitute the greatest block of generating capacity in Italy.

b) The figures above for hydro plants are nameplate capacities. In dry seasons the actual outputs may be much less than the nameplate capacities:

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c) Some of the plants operate at 16.5 cycles for railway service and it is not yet known whether the outputs can be converted to 42 or 50 cycles.

W.M. LAPPER
Lieut-Colonel
Chief Electrical Div.

Distribution:

Chief Engineer AFHQ
AFLRS
Deputy VP. M/S (Att. Brig. D.L. Anderson)
Director P.W. & U. S/C
Chief Electrical Division, P.W. & U. S/C (2)
Major Barry
North Italy Electricity Situation File.

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HFT 245

Col. LAPPER

Have had these reports by phone from Frank Crowther. Insofar as the repair programs of the Valdarno plants are concerned. I am giving Ed a copy with the suggestion that he look into them. I think that they should take second priority to line construction, but I think that these plants should be rebuild pronto.

3 May 1945

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ADVANCED SECTION
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB-COMMISSION
ALLIED COMMISSION

6 Via Cerretani, Florence
Telephone nº 1153
May 2nd 1945

SUBJECT: Field trip Genoa area.

TO : Electrical Division
(attent. Col. Lapper)
Public Works & Utilities Sub-Commission
Allied Commission

Herewith data collected with detail of contacts made by Major Wilcox:

Contacts: C.I.E.L.I. Direction
Eng. Balsamo, General Manager - Genoa
Eng. Ghisleri, Technical Direction
Eng. Genesio, Load Dispatcher
(phone nº 581522)

General Plants in service:

Name of Plant		Power installed	Present output
Casteldelfino	50 cycles	28,000 KW	12,000 KW
Sampeyre	" "	17,500 "	14,000 "
Brossasco	" "	35,000 "	12,000 "
Acceglio	16 "	14,000 "	14,000 "
Ponte Marmora	50/16"	7,500 "	7,000 "
San Damiano	50 "	14,000 "	14,000 "
Dronero	" "	8,000 "	5,000 "
Moline	" "	2,500 "	2,000 "
Molare	" "	5,500 "	1,500 "
Bardi	" "	4,600 "	1,500 "
Salsominore	" "	14,000 "	8,000 "
Caroso	" "	6,400 "	6,400 "
San Michele	" "	7,000 "	7,000 "
Tigliolo	" "	500 "	150 "
Chiesuola	" "	500 "	150 "
Borzonasca I	" "	1,000 "	200 "
Borzonasca II	" "	1,000 "	200 "
Lago	" "	1,000 "	1,000 "

GENOVA Steam Plant - May be operating at 50 cycles and 42 cycles. Has power installed of 50,000 KW (two 25,000 KW generators). Suffered slight damages to the electric installations. Consumption

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Kg 0.6 coal per KWH. No coal in store at present. Time required to be repaired 4 months.

SAMPIERDARENA Steam Plant - Power installed 10,000 KW. Not damaged. Consumption Kg. 1.1 coal per KWH. No coal in store.

SAVONA Steam Plant - Not damaged. Power installed 8,000 KW. Consumption Kg. 1.2 coal per KWH. No coal in store.

Present load (May 1st 1945) in Genoa 60,000 KW. 120,000 KW are expected to be available with little repairs to the transmission lines. Load April 30th 1945 was 70,000 KW.

The following plants located in Italy and the property of the C.I.E.L.I. Co. have been occupied by French Army and (connected normally to the grid) are now disconnected:

San Dalmazzo di Tenda	50 cycles	24,000 KW
" " " "	16 "	10,000 "
Confine	50 "	8,000 "
Le Mesce	50 "	2,000 "

The following plants have been destroyed by the Germans since october 1944:

Airole	8,000 KW
Bevere	5,000 "

TRANSMISSION LINES

Casteldelfino, Sampeyre and Borsasco plant are connected with Genova through Cairo Montenotte sub-station with two circuits, one operated at 120 KV, the other one operated at 60 KV.

Acceglio - Pontemarmora - San Damiano - Moline plants are connected with Cairo Montenotte and Genoa through two circuits operated at 60 KV.

Molare plant is connected with Cairo Montenotte through two circuits operated at 60 KV.

Salsominore, Bardi, Tigliolo, Lago, Chiesuola, Caroso, Borzonasca, San Michele, are connected with Genoa through one circuit operated at 30 KV. 120 KV line connecting the above plants to Genoa is damaged in one point, in locality Cicogna. The repairs will be made as soon as the mines are cleared.

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LA SPEZIA Province

Generating plants.

LA SPEZIA Steam Plant: power installed 10,000 KW. Not damaged. Consumption Kg. 1.2 coal per KWH. Coal in store at present Tons 500.

Hydraulic plants:

Bosco	4,000 KW	without reservoir Summer reduced output 42 cycles
Marra	4,000 "	without reservoir. Summer reduced output 42 cycles
Isola	8,000 "	with reservoir - 42 cycles
Rigoso	2,000 "	with reservoir - 42 cycles
Selvanizza	4,000 "	with reservoir - 42 cycles
Arlia	2,500 "	without reservoir. Summer reduced output 42 cycles

All the hydraulic plants are connected tp the Isola sub-station with 30 KV line. From Isola the power, at 60 KV, is sent to Santo Stefano Magra. Froam Santo Stefano Magra to Genoa one 60 KV line is o.K.

The Genoa grid is connected with the Edison (Milano) grid through two 120 KV lines, one operating, the second one damaged.

ADVANCED SECTION
A.M.G.O.T.
SUB-COMM
OFFICE
FILE
A.C.
ITALIAN DIVISION

A. Crowther
Major R.E.
Officer in charge

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

ADVANCED SECTION
ELECTRICAL DIVISION
PUBLIC WORKS & UTILITIES SUB-COMMISSION
ALLIED COMMISSION

6 Via Cerretani, Florence
Telephone nº 1153
May 2nd 1945

To: Lt-Col. Lapper
Electrical Division
Public Works & Utilities Sub-Commission
Allied Commission
A.P.O. 394

Enclosed herewith for your information are: one translation copy of Genova City electrical supply and two copies translation of work program to repair the hydroelectric plants in Garfagnana and Sestaione power house.

A.Crowther Major
A.Crowther, Major R.E.
757

5 enclosures as per above.

ADVANCED SECTION
OFFICE
ELECTRICAL DIVISION

GENOVA CITY=ELECTRIC POWER SUPPLY.

No hydro generating plants are located in Genova.
The electric power is supplied through main transmission lines, connected with the North and South Italy electric grid.
Two steam plants are located in Genova:one,so called "Concenter" whose name plate capacity is 45.000 KW.The coal stores are now empty.The units and boilers are in operating condition.The switches & substation are badly damaged by bombing.The above plant is modern,was built up in 1936.=
The second one,Genova Sampieraderena,Via Pacinotti,where no coal is available.Its power is 10.000 KW,old plant (1900=1918).The abo= ve is undamaged.
A little hydro plant (a spare plant) belongs to the Acquedotto Galliera De Ferrari,in operating condition, 3000 kw.
Normally the power supply is given:
a) through trasmission lines incoming from La Spezia
b) through transmission lines incoming from Arquata Scrivia,Edison grid.
c)through lines incoming from the Alpi Marittime,Val Maira,Val Varaita,San Dalmazzo di Tenda.
All the electric facilities are in good condition at 28 April, according with the informations received.
The Germans have,till now,distroyed two plants:Bevero & Airole, located between Colle di Tenda e Ventimiglia (Roja Valley)
The overhead transmission lines are O.K.At 28 Apr. only the lines incoming from Arquata Scrivia are damaged and not operating,but the damages are reduced and the above lines are expected to be repaired next week.
The City distribution facilities are O.K.
The average power required for Genova is about 70.000 kw and 210 to 220 millions of KWH pro year.
During the dry season the hydro generation was helped with the steam generation.
The public lightning facilities are distroyed about 50%.
FIRST HELP REQUIRED:tires and petrol for the lorries for the lines repairs and for trips to Milan and Torino where materials (cables, batteries,compound,aluminum and copper wires,etc.) seems to be available in the factories.

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Tel. 478.906

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

VSR/lam

2 May, 1945

References 245/PWU

SUBJECT : Electrical Situation North Italy as of 1700 Hours Today

TO : Distribution.

General.

Electric plants in Genova area generating a peak load of 90,000 KW, of which 70,000 KW are being supplied Genova, La Spezia receiving 2,500 KW from another group of plants. Electricity supplied to Milano; exact amount unknown but trams are operating.

Details

Major Clarence Wilcox, this Headquarters has visited Genova and La Spezia, and has learned the following through Eng. Balsamo, General Manager of the Edison Company in Genova:

Plants east and west of Genova are generating total of 98,100 KW. Genova peak load on 30 April was 70,000 KW. Detailed outputs of plants follows:

Name of Plant	Province	Present output KW
Bardi	Aosta	1,500
Bormonasca I	Genova	200
Bormonasca II	Genova	200
Brossasco	Cuneo	12,000
Caroso	Genova	6,400
Casteldelfino	Cuneo	12,000
Chiavacola	Genova	150
Dronero	Cuneo	5,000
Lago	Genova	1,000
Molare	Alessandria	1,500
Moline	Cuneo	2,000
Ponte Marmora	Cuneo	7,000
Sampeyre	Cuneo	14,000
San Damiano	Cuneo	14,000
San Michele	Genova	7,000
Tigliolo	Genova	150
Vallemaggiore	Piacenza	14,000
	Total	98,100

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In addition, the following plants are reported in good condition but are not feeding Genova at the present time. It was believed in Genova that they had been disconnected by Allied military authorities:

Name of Plant	Province
Confine	Cuneo
Le Masse	Cuneo
San Dalmazzo	Cuneo

Additional capacity is expected within a few days following transmission line repairs.

Major Wilcox obtained the following data from the Edison Company representative in La Spezia concerning the plants now operating in that area:

Name of Plant	Province
Arlia	Apuania
Bosco	Parma
Isola di Palanzano	Parma
Marra	Parma
Rigoso	Parma
Vinca	La Spezia

The present load in La Spezia is 2500 KW; the supply can be increased to 5,000 KW following transmission line repairs; the pre-war was about 9,000 KW.

Major Wilcox visited the steam-electric plants listed below:

Name of Plant	Province	Remarks
Concentre-Genova	Genova	50,000 KW capacity. Operable but bomb damaged. 4 months repairs needed. No coal.
La Spezia	La Spezia	10,000 KW capacity. Operable now. 500 tons coal, sufficient for few days operation.

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Name of Plant	Province	Remarks
Sampierdarena-Genova	Genova	10,000 KW capacity. Operable now. No coal
Savona	Savona	8,000 KW capacity. Operable now. No coal.

W.M. LAPPER,
Lieut-Colonel,
Chief, Electrical Division.

Distribution

Chief Engineer AFHQ
AFLRS
Deputy VP. E/S (Att. Brig. D.L. Anderson)
Director P.W. & U. S/C
Chief Electrical Division, P.W. & U. S/C (2)
Major Barry
North Italy Electricity Situation File

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

Tel. 476.906 HEADQUARTERS ALLIED COMMISSION VBR/lan
APO 394
Public Works and Utilities Sub-Commission

Reference: 245/PWU 1 May, 1945

SUBJECT: Electrical Situation North Italy
as of 1500 Hours Today.

TO : Distribution.

General.

Genova steam plants operable (total generating capacity 55,000 KW although switchgear is bomb damaged. Also, no fuel on hand. Transmission lines feeding Genova from north are expected to be repaired quickly. Electric power available but quantity unknown.

Details.

An Italian civilian engineer, reliable informant, reported two steam-electric generating stations in Genova, Concentro (45,000 KW) and Sampierdarena (10,000 KW as operable but they lack fuel. Switchgear at Concentro damaged by bombing.

Transmission lines between Genova and Arquata, 25 kilometers to the north were damaged but repaired. Electric company asked for gasoline and tires to enable their trucks to travel north to obtain repair materials. Two plants Airole (11,400 KW) and Bevera (5,000 KW) on French border near sea reported damaged by enemy. This office still awaiting report of officer sent to Genova. Investigation will be made of report that transmission line and telephone communication intact between Milano and Ligonchio (80 kilometers west of Bologna).

W.M. LAPPEN,
Lieut-Colonel,
Chief, Electrical Division.

Distribution:
Chief Engineer AFHQ
Deputy V.P. S/S (Att. Brig. D.L. Anderson
Director P.W. & U. S/C
Chief Electrical Division P.W. & U. S/C (2)
Major Barry
Bologna File

7569

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

Tel. 489.081
Extn. 317

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

VSR/lam

6

REFERENCE: 245/PWU

30 April 1945

SUBJECT : Electrical Situation, North Italy as of 1500 Hours Today

TO : Distribution.

General.

Work on transmission lines in Serchio Valley north of Florence up to schedule and will make 6900 kilowatts additional available in Florence area by end of May. Survey being made of transmission lines to determine this power can be sent to Bologna quickly. Work on Florence - Bologna transmission line progressing slowly.

Investigating report that three plants having total of 56,720 KW installed capacity are O.K. in Florence - Bologna area. Verona reportedly has sufficient electricity to meet present needs; large substation in Verona looks badly damaged from air. Survey underway of Genova area.

Details.

An employee of one of the Ligonchio generating stations has communicated with Florence, and has stated that Ligonchio No.1 (2720 KW), Ligonchio No.2 (14,000 KW) and Fredare (42,000 KW) are intact, but that transmission lines are damaged. These plants located about 80 kilometers west of Bologna, and were connected both to Bologna and Florence.

W.M. LAPPER
Lt.Colonel,
Chief Electrical Division

Distribution:

Chief Engineers AFHQ
Deputy V.P. E/S (Att. Brig. D.L. Anderson)
Director P.W. & U. S/C
Chief Electrical Division P.W. & U. S/C (2)
Major Barry
Bologna File

7569

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

TELE : 48C081.
Extn : 317.

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

VSB/sg

5

REFERENCE : 245/PWU.

29 April 1945

SUBJECT : Electrical Situation, North Italy as of 1500 Hours Today.

TO : Distribution.

General : Many reports continue to arrive, stating that electric generating stations in North Italy are undamaged; no reports yet received stating that any damage has occurred.

Condition of transmission lines unmentioned in information received to date. Reports from North still unverified.

15th Army Group has arranged for survey of electric facilities southwest of Bologna, and accurate information of that area expected within two days.

Check being made of electric plants and lines in 8th Army area and results expected in two days.

Check of situation in Genoa area starts today or tomorrow.

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

Distribution :

Chief Engineer AFHQ.
Deputy V.P. E/S (Att. Brig.D.L. Anderson).
Director P.W.& U. S/C.
Chief Electrical Division P.W.& U. S/C (2).
Major Berry.
Bologna File.

7567

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

General Office File

Tel.478.906 HEADQUARTERS ALLIED COMMISSION VSH/lam
APO 394
Public Works and Utilities Sub - Commission

4

28 April 1945

245/PWU

SUBJECT : Electrical Situation, North Italy as of 1500 Hours Today.

TO : Distribution

General: Persistent reports not yet verified that electric facilities in North are not badly damaged. Some plants previously reported safe are still inaccessible because of local enemy pockets.

Two Electrical Officers of Allied Commission on four day inspection covering Bologna, Ferrara, Farneta, Modena. Survey of Genoa area will be made as soon as possible.-

W.M. LAPPER,
Lieut-Colonel,
Chief, Electrical Division.

Distribution :

Chief Engineer, AFHQ
Deputy V.P. E/S (Att.Brig.D.L. Anderson)
Director, P.W. & U. S/C
Chief Electrical Division, P.W. & U. S/C
Major Barry
Bologna File

7566

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

Tel. 478.906 HEADQUARTERS ALLIED COMMISSION VSR/lam
INTER OFFICE MEMO

245/PWU 27 April 1945

3

SUBJECT : Electrical Situation, North Italy as of 1300 Hours Today.

TO : Distribution.

1. General: No wide spread damage of electric facilities yet indicated, although reports are still incomplete.

2. Details.

BOLOGNA

Bologna now receiving 4,000 KW from Farnetta Generating Station after transmissiion line repairs by 5th Army Engineers. Question now being considered whether it is more advisable to use military personnel to continue repairing Florence - Bologna transmission line, or to use them on lines easier to repair. Meanwhile, additional personnel has been placed on line. Unconfirmed reports state two sozeable plants, Farneta (33,600 KW) and Predare (42,000 KW) undamaged. These plants located approximately 80 kilometers west of Bologna.

DOMODOSSOLA

The Milano Patriot radio has reported that Italian Patriots have liberated the town of Domodossola, and that the electric generating stations in the area are safe. The report of the liberation is considered reliable.

The condition of the generating stations is not definitely known. Within 10 kilometers of Domodossola are 7 generating stations having a total capacity of 109,846 KW. Further to the north in connecting valleys are 9 other plants having a total capacity of 244,057 kilowatts. The area is not readily accessible, and Domodossola is on the only highway loading to the plants.

Domodossola is on the Toce River, approximately 100 kilometers north west of Milano, and connected to Novara and Milano by a heavy network of electric transmission lines.

DISTRIBUTION
Chief Engineer, AFHQ
Deputy V.P. E/S(Att.Brig.D.L. Anderson)
Director, P.W. & O. S/C
Chief Electrical Div.P.W.&O. S/C (2)
Major Barry
Bologna File

VINAL S. RENTON
Lt.Colonel Infantry
Operation and Transm. Dept.
Electrical Division

4362

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

Tel.489081
Extn. 317

CCB/mc

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

2

27 April 45

245/PWU
SUBJECT : Electricity - Bologna.
TO : Chief Engineer, AFHQ .

1. Ref. telephone conversation Col. Edgar - Lt. Col. Lapper.

2. A copy of the report on the electricity situation in Bologna is attached.

For the Chief Commissioner.

7564

W.M. LAPPER,
Lieut-Colonel,
Chief, Elec. Div.

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

RECEIVED
P.W. & U. S/C A.C.
3 MAY 1945 245

ENGINEER SECTION (BR)
A.F.H.Q
C.M.F.
Tel. No. FREEDOM 972

SUBJECT : Electric Power Supply — ENG/2010

TO : H.Q. Allied Commission — 30 Apr 45
(Public Works & Util. Sub. Commission)
(Electrical Division)
Attn. Lt.Col. Lapper - Lt.Col. Renton

Herewith for your information and retention are copies of initial reports from H.Q. 15 Army Group on "Details of Plant at BOLOGNA", "REFREDI - BOLOGNA 120 KV Transmission Line" and "Power Transformer at SPERANDO".

These reports are dated 25th April, and more concise information will be passed to you as received.

Confirming telephone conversation it is reported that in addition to the Power Station at LIGONCHIO - PREDARE - FARNETTA - GENOA are undamaged but no more detailed reports have been received to date. An unconfirmed report states "trams are running in MILAN".

A.G.J.DAVY,
Capt. R.E.
for Brigadier,
Director of Works.

756

X
25 Apr 1945 R.
(15 Apr)

DETAILS OF PLANT IN BOLOGNA

1. No power is being delivered to BOLOGNA from outside sources, there is however a small power station (BATTIFERRO) at MR 882514 BOLOGNA town plan.

(a) One AEG steam turbine alternator set

KVA 3000
V 3300
RPM 2520
Freq 42

This set was installed in 1910 and according to the engineer in charge can only produce 500 KW of which 150 KW are required for auxiliaries. It was stated that if more than 500 KW are taken the outer turbine bearing overheats. At present the power is allocated as follows:

Water pumping	150 KW
Hospitals	100 KW
Military use	50 KW

(b) 2 No Babcock and Wilcox boilers, 190 lbs per sq in pressure coal fired, the steaming capacity is not known but the engineer in charge stated that it was necessary to use both boilers when the turbo-alternator set worked at full rated capacity. At present the fuel consumption is approximately 4½ lbs per KWh and there is enough fuel for approx 10 days.

(c) One horizontal hydro turbine-alternator

KVA	400
V	3300
Freq	42

The plant is undamaged but the canal feeding it has been breached.

(d) 1 No Brown-Boveri Synchronous Condenser

KVA	6000
V	3300
RPM	840
Freq	42

7562

Undamaged.

(e) 1 No Brown-Boveri Synchronous Condenser

KVA	6000
V	3550

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in charge can only produce 500 KW of which [illegible] auxilieries. It was stated that if more than 500 KW are taken the outer turbine bearing overheats. At present the power is allocated as follows:

Water pumping	150 KW
Hospitals	100 KW
Military use	50 KW

(b) 2 No Babcock and Wilcox boilers, 190 lbs per sq in pressure coal fired, the steaming capacity is not known but the engineer in charge stated that it was necessary to use both boilers when the turbo-alternator set worked at full rated capacity. At present the fuel consumption is approximately 4½ lbs per KWh and there is enough fuel for approx 10 days.

(c) One horizontal hydro turbine-alternator

KVA	400
V	3300
Freq	42

The plant is undamaged but the canal feeding it has been breeched.

(d) 1 No Brown-Boveri Synchronous Condenser

KVA	6000
V	3300
RPM	840
Freq	42

7562

Undamaged.

(e) 1 No Brown-Boveri Synchronous Condenser

KVA	6000
V	3350
RPM	630
Freq	42

Undamaged.

(f) 1 No Transformer

KVA	6000
KV	50/3

Tank holed by demolition charge and two legs damaged.

2/.....

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(g) 1 No Transformer

KVA 10000
KV 50/15

Tank holed by demoliton charge and one leg damaged.

(h) 2 No Transformers, each

KVA 6000
KV 50/15

Undamaged

(i) 3 No Transformers, each

KVA 6000
KV 50/3

Undamaged

(j) 1 No transformer

KVA 4000
KV 15/3

Undamaged

2. THE MADONNE susbstation MR 846436 BOLOGNA Town Plan

(a) 1 No Transformer, three windings

KVA 15000 / 15000 / 16000

KV 119/ 58.185-56.68-55.176-53.671-52.166-50.661-49.357
/18.303-17.556-16.804-16.052

(b) 1 No 120 KV Circuit Breaker

This substation has suffered damage by bombing but the transformer which is indoors appears to be undamaged and the circuit breaker is only slightly damaged. 7561

25 April 45

J. Hartill
Capt RE
Att Engineer Branch
HQ 15 Army Group

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