

ACC CEB/18/1

10000/150/724

ROME,
JAN. - J

10000/150/724

ROME, REHABILITATION
JAN. - JULY 1944

ADVANCE HEADQUARTERS
ALLIED CONTROL COMMISSION
Public Works and Utilities Sub-Commission
APO 39 4

51972

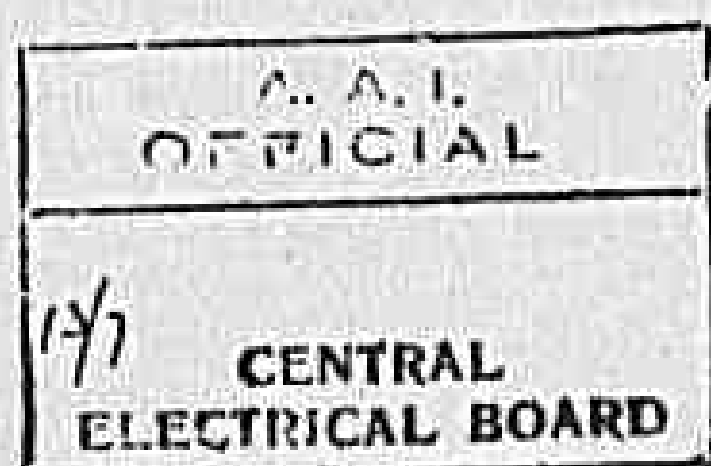
ACC/051/PWU

11 July 44

Subject: Discontinuation of Work on Naples-Rome Transmission Line.

To : A.A.I. Central Electrical Board.
HQ, A.A.I., C.I.F.

The attached correspondence, addressed to this office in error, is passed to you.



W. M. Laffer
for W.M. LAFFER,
Lieut-Colonel,
Chief; Util. & Adm. Div.

312

P.W. or

8 JUL Recd

OSI
R.A.B.

PES

49008

5/5356

HEADQUARTERS
PENINSULAR BASE SECTION
APO 750rec'd
16 Jul
how

7 July 1944

AG 463 BPGDS

SUBJECT: Discontinuation of Work on Naples-Rome Transmission Line.

TO : Allied Control Commission, APO 394, U.S. Army.
Attention Colonel Growdon.

1. Reference is made to your recent conversation with me on this subject.

2. Attached hereto as inclosures #1 and #2 are letters of this Headquarters, dated 16 June 1944, over the signature of the then Commanding General, directed to AAI and to SOS, NATCUSA.

Francis H. Oxx
FRANCIS H. OXX
Colonel, Corps of Engineers
Commanding2 incl:
Incl 1 - Ltr 16 June to AAI.
Incl 2 - Ltr 16 June to SOS.

Lt Col Rapper

This should be forwarded to Col. Growdon as it is in reply to a request made by him.

Hag 10/7

Hag

311

7 July
165

INCLOSURE #1

HEADQUARTERS
PENINSULAR BASE SECTION
APO 782

SECRET

AG 675 BPENG

16 June 1944

SUBJECT: Allocation of Electric Rehabilitation Project.

TO : The Chief Administrative Officer, A.A.I., C.M.F., APO 400.

1. Reference is made to following:

a. Letter Headquarters ACMF (Adm Echelon) dated 8 March 1944, subject as above, allocating the rehabilitation of the Naples-Rome transmission line to the Peninsular Base Section and 1st Indorsement thereon, Headquarters PBS, file number AG 674 BPENG (8 March 1944) dated 2 April 1944, setting forth to you the conditions under which the Commanding General, SOS, NATCUSA, had authorized the Peninsular Base Section to proceed with the rehabilitation.

b. Letter Headquarters AAI (Rear Administrative Echelon) dated 18 May 1944, advising that conditions imposed by the Commanding General, SOS, NATCUSA, were acceptable to you and describing your plan for their fulfillment.

c. Letter Headquarters PBS, file number AG BPENG (30 May 1944), dated 30 May 1944, subject as above, advising you that your plan was acceptable to me and that the work of rehabilitation was under way.

2. It has now been determined that there is presently or will soon be available to Rome for plants in that vicinity approximately 38,000 KW of generating capacity as follows, which is considered by me as more than sufficient for military and essential civilian needs:

a. 10,000 KW of diesel engine capacity (of which 5,000 now under repair will not be available until 17 June 1944).

b. 6,000 KW of steam turbine capacity operated with oil fired boilers.

c. 16,000 KW of steam turbine capacity operated with coal fired boilers.

d. 6,000 KW of hydro-electric capacity which will be available on or about 20 June 1944 upon completion of certain line repairs.

- 1 -

310

SECRET

INCLOSURE #1.

SECRET

3. In view of the foregoing, I have decided that the rehabilitation of the Naples-Rome transmission line is not a military necessity and have issued instructions that it be discontinued.

/s/ Arthur R. Wilson
/t/ ARTHUR R. WILSON
Major General, U.S. Army
Commanding

309

SECRET

INCLOSURE #2

SECRET

HEADQUARTERS
PENINSULAR BASE SECTION
APO 782

AG 674 BPENG

16 June 1944

SUBJECT: Engineer Plan for Rehabilitation of Naples-Rome Transmission Line.

TO : The Commanding General, SOS, NATCUSA, APO 750, U.S. Army.

1. Reference is made to letter Headquarters Peninsular Base Section, file number AG 675, 7 June 1944, subject as above.

2. It has now been determined that there is presently or will soon be available to Rome from plants in that vicinity, approximately 38,000 KW of generating capacity as follows, which is considered by me as more than sufficient for military and essential civilian needs:

a. 10,000 KW of diesel engine capacity (of which 5,000 now under repair will not be available until 17 June 1944).

b. 6,000 KW of steam turbine capacity operated with oil fired boilers.

c. 16,000 KW of steam turbine capacity operated with coal fired boilers.

d. 6,000 KW of hydro-electric capacity which will be available on or about 20 June 1944 upon completion of certain line repairs.

3. In view of the foregoing, I have decided that the rehabilitation of the Naples-Rome transmission line is not a military necessity and have issued instructions that it be discontinued. I have so advised the Chief Administrative Officer, AAI.

/s/ Arthur R. Wilson
ARTHUR R. WILSON
Major General, U.S. Army
Commanding

308

SECRET

INCLOSURE #2

COPY

CONFIDENTIAL

BR CIPHER MESSAGE

POLIO NO: 01220
NILFROM : POWIT
TO : FILPOT
CIG NO :TOO NIL
TOR 18253.11

FUMICINO.

I AGREE TO ARMY DELOUSING RIVER AND CANALS BUT I AM VERY DOUBTFUL IF ANYTHING WILL BE ABLE TO PASS THE BAR ON TIME WITHOUT EXTENSIVE DREDGING. PROVISION OF TUGS TO TOW BARGES WILL BE AN ADDED COMMITMENT BUT AGREE THAT WORK SHOULD GO ON AS A LONG TERM POLICY. HAVE YOU CONSIDERED SHIPPING SARDINIAN COAL TO CIVITAVECCHIA THENCE BY RAIL TO ROME? SHIPPING MUST TAKE A LOW PRIORITY BUT CAN PROBABLY BE DEALT WITH BY THE TIME DELOUSING IS DONE. THERE ARE SOME SEVENTY WRECKS AT THE MOUTH OF FUMICINO CANAL. WOULD LIKE TO DISCUSS WITH DCOT WHEN HE NEXT VISITS NAPLES. YOUR 071700 REFERS.

MOV 6 ACTION
DSTO 2
TH(A) 2
Q 3

SMC 22103.11
T.T. 22303.11 JT

TO
C.E.B.

308

307

HEADQUARTERS
ROME REGION
ALLIED CONTROL COMMISSION
A.P.O. 394, U.S. ARMY
F.C.U. DIV.

J. L. G.
CRB/mp

27 June 1944
0800 Hrs.

REPORT ON HYDRO ELECTRIC
SITUATION - ROME REGION

Name of Plant	Operating condition
<u>NERA MONTORO</u> (12,000 kw)	Fault on transmission line located. Should be on line before 0800 Hrs. 28 June <i>On line 27 June</i>
<u>VESTA</u> (2,250 kw)	Slight damage to wheel - being re- paired - initial supply (1,500 kw) should be available - 1400 hours 27 June
<u>COMUNACQUA</u> (3,500 kw)	Est. available 1600 Hrs. 27 June

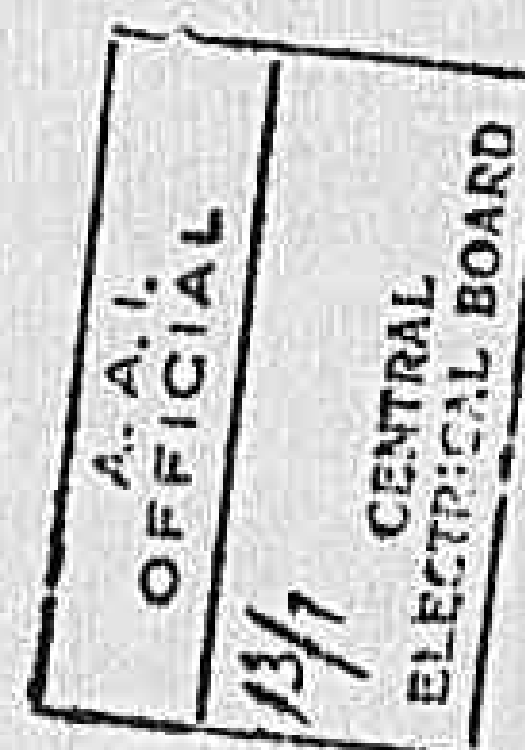
0800 Hrs.

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<u>COMUNACQUA</u> (3,500 kw)	Est. available 1600 Hrs. 27 June

Distribution:

Public Works Sub Commission ACC
 Central Electrical Board AAI
 Col. Medding
 Lt. Col. Cockerton
 Col. Poletti
 Region IV ACC
 Electric Section
 Filer



C. R. Birchett

C. R. BIRCHETT
 Lt. Col. U.S.E.
 Dir. TCU Div.

307

REPORT ON FUEL FOR ROME POWER STATIONS

a.c.



Date : 0800 hrs - June 25, 1944

1) - Requirements

At present rate of production the combined fuel requirements of the two thermal stations in Rome are :

Metric. Tons	
Per day	Per month
380	11,400
56	1,680
20	600
-	22
-	3
-	15

- Coal
 - Diesel Fuel
 - Navy Bunker Oil (for boilers)
 - Diesel Lubricating Oil (Cylinder) ..
 - " " (Bearings) ..
 - Turbine Lubricating Oil

2) - Storage at Plants

Present storage at above rate of consumption is equal to :

Days Supply
3
6
10
6
10
10

- Coal
 - Diesel Fuel
 - Navy Bunker Oil
 - Diesel Lubricating Oil (Cylinder) ..
 - " " (Bearings) ..
 - Turbine Lubricating Oil

3) - Specifications

Specifications of material now being used are :

- Coal - anything that will burn
 - Diesel Fuel Oil

Free of water and other impurities

1) - Requirements

At present rate of production the combined fuel requirements of the two thermal stations in Rome are :

	Metric. Tons	
	Per day	Per month
- Coal	380	11,400
- Diesel Fuel	50	1,580
- Navy Bunker Oil (for boilers)	20	600
- Diesel Lubricating Oil (Cylinder) ..	-	22
- " " (Bearings) ..	-	3
- Turbine Lubricating Oil	-	15

2) - Storage at Plants

Present storage at above rate of consumption is equal to :

	Days Supply
- Coal	3
- Diesel Fuel	6
- Navy Bunker Oil	10
- Diesel Lubricating Oil (Cylinder) ..	6
- " " (Bearings) ..	10
- Turbine Lubricating Oil	10

3) - Specifications

Specifications of material now being used are :

- Coal - anything that will burn

- Diesel Fuel Oil

Free of water and other impurities

Spec. gravity

Low heat value

Flame point

Viscosity at 15 ° c. not to exceed 30° Engler

Sulphur -

88 to 92 at 15° c.
10,000 cal/kg.
75° to 110° c. 306

./.

TO:
Central Electric Board

TO:
Central Electrical
Board A.A.I.

Pag. 2

- Boiler Fuel Oil

Water and impurities - max 2%
 Viscosity at 50° - less than 20° Engler
 " " 100° - " 30°
 Flame point - " 54° c.
 High heat value - 10.000 cal/kg.
 Sulphur - less than 3.5%

- Diesel Lubricating Oil

Type - Acidity	CYLINDER		BEARINGS	
	Mineral	Neutral	Mineral	Neutral
Flame point	245° c. of	10° c.	215° c. of	5° c.
Ignition point	285° c. of	10° c.	250° c. of	5° c.
Viscosity at 10° c. ..	Gliding		Gliding	
" " 50° c. ..	14° to 22°	Engler	7° to 10°	Engler

- Turbine Lubricating Oil

Free of water and other impurities.- Viscosity at 50° c. - 4° Engler; Viscosity at 100° c. - 1.4° Engler; Viscosity at 0° c. Gliding.- Flame point - 180° c. - Mineral acidity and alkalinity - zero.- Organic acidity in oleic acid, max 0.1% ash content max .02%.-

4) - Present action

Reserve stocks of coal allocated to this Division by MRS exhausted.- Coal stocks located by this Division near Littoria re moved to Power Plants.- Coal now being delivered to Power Plants from stocks located near Collesferro, the total supply at this loca tion is estimated to be 1500 tons.- The coal stored in old fort at Gaeta is in a location where it is extremely difficult to load on trucks at required rate, however it is expected that initial deli= veries will be made from this source on 28 June.-

Diesel oil is now being transported from Naples by civilian trucks.-

Transportation difficulties are severe and considerable per centage of civilian trucks are immobilized because of break-downs.-

5) - Reference

Reference is made to messages from PPS to CAS Rome and Naples

Type - Acidity	CYLINDER		BEARINGS	
	Mineral	Neutral	Mineral	Neutral
Flame point	245° c.	of 10° c.	215° c.	of 5° c.
Ignition point	285° c.	of 10° c.	250° c.	of 5° c.
Viscosity at 10° c. ..	Gliding		Gliding	
" " 50° c. ..	14° to 22° Engler		7° to 10° Engler	

- Turbine Lubricating Oil

Free of water and other impurities.- Viscosity at 50° c. - 4° Engler; Viscosity at 100° c. - 1.4° Engler; Viscosity at 0° c. Gliding.- Flame point - 180° c. - Mineral acidity and alkalinity - zero.- Organic acidity in oleic acid, max 0.1% ash content max .02%.-

4) - Present action

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Diesel oil is now being transported from Naples by civilian trucks.-

Transportation difficulties are severe and considerable per centage of civilian trucks are immobilized because of break-downs.-

5) - Reference

Reference is made to messages from PBS to CAS. Roma 303d replies.- Copies are attached.-

./.

Pag. 3

6) - Requested action

- a) - That ACC Hdqtrs through necessary channels secure release of one month's supply of all items listed in paragraph (1) in the total amount indicated, except that 5000 tons of Navy Bunker Oil be included.-
- b) - That arrangements be made by ACC Hdqtrs for transfer of these supplies to Rome by rail at earliest possible moment.-
- c) - That this Division be advised of action taken.-

C. R. Birchett

C.R. BIRCHETT
 Lieut. Colonel, C.E.
 Director, TCU Division

Distribution :

AAI
 Rome Area Commander
 59 Area Commander
 Regional Commissioner, Rome Region ACC
 D.W., AAI
 CE No III District
 ACC Hdqtrs
 ACC Region IV
 Central Electric Board

c) - That this Division be advised of action taken.-

C.R. Birchett

C.R. BIRCHETT
Lient. Colonel, C.E.
Director, TCU Division

Distribution :

AAI
Rome Area Commander
59 Area Commander
Regional Commissioner, Rome Region ACC
D.W., AAI
CE No III District
ACC Hdqtrs
ACC Region IV
Central Electric Board
File

Inclosures

Copies of cables ACC to CAS Rome and replies.-

304

INCOMING MESSAGE

FROM: PENBASE

CLASSIFICATION: CONFIDENTIAL

PRECEDENCE PRIORITY

REF. NO.
DATE TIME GRP. 18150B
DATE TIME REC. 181943B

TO:

CAS ROME FOR JOHNSON, FOR ACTION
PENBASE ROME FOR CORNISH, FOR INFORMATION
CITE: BPGDS

HAVE MESSAGE FROM DEP CHIEF ADM OFFICER, ALLIED ARMIES IN ITALY STATING DAILY FUEL REQUIREMENTS FOR ROME TO BE 290 TONS COAL, 56 TONS DIESEL OIL AND 108 TONS FUEL OIL. PENBASE 1943. MESSAGE FURTHER STATES ALLIED MILITARY GOVT HAS LOCATED SUFFICIENT ITALIAN CARGO AND TANK TRUCKS TO HAUL REQUIRED FUELS FROM NAPLES AND THAT ALLIED MILITARY GOVT HAS BEEN DIRECTED TO CLOSE CONTRACT WITH COMPANIES OWNING THESE TRUCKS IN ANTICIPATION OF FURNISHING OF THESE SUPPLIES FROM STOCKS AVAILABLE IN NAPLES. COAL PRESENTLY AVAILABLE IN NAPLES. REPRESENTATIVE OF THIS HQ VISITING GAETA TODAY TO INVESTIGATE AND VERIFY EXISTENCE AND AVAILABILITY OF 8000 TONS COAL THERE. WILL ADVISE YOU RESULTS OF INVESTIGATION SO THAT HAUL OF COAL MAY BE MADE FROM GAETA RATHER THAN NAPLES INITIALLY UNTIL COAL STOCKS THERE ARE EXHAUSTED. REQUEST THAT CONTRACT BE CLOSED AND NECESSARY ARRANGEMENTS MADE BY ALLIED MILITARY GOVT WITH CARGO AND TANK TRUCKS TO ACCOMPLISH NECESSARY HAUL OF BULK LIQUID FUELS FROM NAPLES. PLEASE ADVISE THIS HQ OF PROGRESS MADE AND DATE WHEN IT IS EXPECTED WHEN HAUL OF COAL AND LIQUID FUELS WILL COMMENCE.

CABLE TO PENBASE

CONTRACTS CLOSED AND ROAD HAULAGE OF COAL FROM STOCKPILE LOCATED IN LITTORIA BEGUN. MOVEMENT OF DIESEL OIL IN DRUMS FROM NAPLES BY FLAT BED TRUCKS BEGUN TODAY. DIESEL SUPPLY NOW SUFFICIENT FOR 3 DAYS OR 4 DAYS. MOVEMENT OF FUEL OIL WILL COMMENCE AS SOON AS TRUCKS CAN BE PLACED ON ROAD.

Copy to Elec. Sec.
" " Capt. Webb
" " Trans. Sec.

USE MORE FOR JOHNSON, FOR ACTION
 PENBASE ROLE FOR CORNISH, FOR INFORMATION
 CITE: BFGDS

HAVE MESSAGE FROM DEP CHIEF ADM OFFICER, ALLIED ARMIES IN ITALY
 STATING DAILY FUEL REQUIREMENTS FOR ROME TO BE 290 TONS COAL, 56
 TONS DIESEL OIL AND 168 TONS FUEL OIL. PENBASE 1943. MESSAGE
 FURTHER STATES ALLIED MILITARY GOVT HAS LOCATED SUFFICIENT ITALIAN
 CARGO AND TANK TRUCKS TO HAUL REQUIRED FUELS FROM NAPLES AND THAT
 ALLIED MILITARY GOVT HAS BEEN DIRECTED TO CLOSE CONTRACT WITH COM-
 PANIES OWNING THESE TRUCKS IN ANTICIPATION OF FURNISHING OF THESE
 SUPPLIES FROM STOCKS AVAILABLE IN NAPLES. COAL PRESENTLY AVAILA-
 BLE IN NAPLES. REPRESENTATIVE OF THIS HQ VISITING GAETA TODAY TO
 INVESTIGATE AND VERIFY EXISTANCE AND AVAILABILITY OF 8000 TONS
 COAL THERE. WILL ADVISE YOU RESULTS OF INVESTIGATION SO THAT HAUL
 OF COAL MAY BE MADE FROM GAETA RATHER THAN NAPLES INITIALLY UNTIL
 COAL STOCKS THERE ARE EXHAUSTED. REQUEST THAT CONTRACT BE CLOSED
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 CARGO AND TANK TRUCKS TO ACCOMPLISH NECESSARY HAUL OF BULK LI-
 QUID FUELS FROM NAPLES. PLEASE ADVISE THIS HQ OF PROGRESS MADE
 AND DATE WHEN IT IS EXPECTED WHEN HAUL OF COAL AND LIQUID FUELS
 WILL COMMENCE.

CABLE TO PENBASE

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 CATED IN LITTORIA BEGUN. MOVEMENT OF DIESEL OIL IN DRUMS FROM
 NAPLES BY FLAT BED TRUCKS BEGUN TODAY. DIESEL SUPPLY NOW SUFFICIENT
 FOR 3 DAYS OR 4 DAYS. MOVEMENT OF FUEL OIL WILL COMMENCE AS SOON AS
 TRUCKS CAN BE PLACED ON ROAD.

Copy to Elec. Sec.
 " " Capt. Webb
 " " Trans. Sec.

303

COPY OF CABLE

20 JUNE 1944

TO: (ACTION): CAS ROME (GENERAL JOHNSON), ACC
 (INFORMATION)/PENBASE ROME AND AAI (COAL COMMISSION)
 FROM: PENBASE; DATE-TIME SIGNED: 201012B
 DATE-TIME REC'D: 201135B; REFERENCE NR: PENBASE 19539
 CITE: BPSUP, BPGDS

SUBJECT IS COAL? REFERENCE MADE TO OURAD PENBASE-19343 TO FIRST 2 ADDRESSES ONLY PD EXISTENCE AND AVAILABILITY OF 8000 OF COAL AT GAETA VERIFIED. COAL NOW UNDER AMG GUARD. ASSUMPTION HERE THAT ACC WILL REQUISITION AND WILL HAUL WITH TRUCKS PROCURED BY AMG IN ROME. QUANTITY AT GAETA SHOULD SUPPLY ROME NEEDS UNTIL OR NEARLY UNTIL RAILROAD LINE 86 COMPLETE TO ROME. AT THAT TIME PENBASE WILL RELEASE COAL FROM NAPLES FOR SHIPMENT BY RAIL OR BY RAIL AND AMG TRUCKS TO TOME. GENERAL JOHNSON PLEASE ADVISE PENBASE IN ADVANCE WHEN YOU EXPECT GAETA STOCK PILE TO BE EXHAUSTED AND DATE YOU EXPECT IT WILL BECOME NECESSARY TO START SHIPMENTS FROM NAPLES STOCKPILE.

CABLE TO PENBASE

23 JUNE 1944

COAL NECESSARY FOR POWER USES BEING MOVED LOCALLY DISCOVERED STOCK PILES FOR ELECTRIC POWER DEVELOPMENT. ANTICIPATED COAL MOVEMENT FROM GAETA WILL BEGIN NEXT WEEK. WILL ADVISE WHEN THIS BEGINS AND ESTIMATED DATE OF COMPLETION.

Copy to Elec. Sec.
 " " Trans. Sec.

HEADQUARTERS
ALLIED MILITARY GOVERNMENT - 5th ARMY
(TCU DIVISION)

CRB/vo
RA (44)

File:

Rome, 15th June 1944

Subject: Fuel for Power Plants Rome
To: Local Resources Board
Col. Giffen ACC Naples.

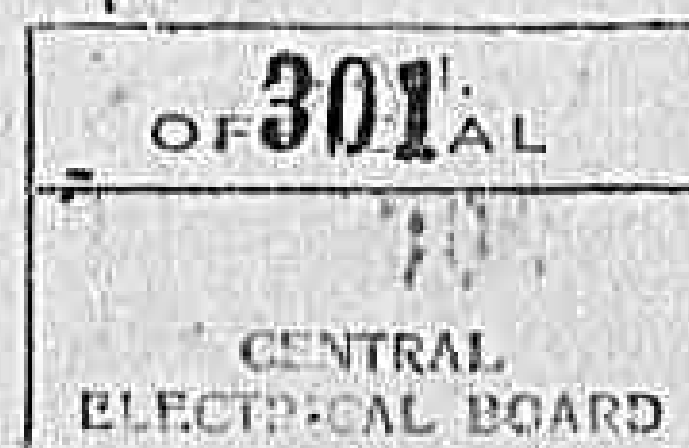
1. Fuel for local electric power is critically short there being only a 5 days supply on hand now. Gen. Tate, 64 Fifth Army has determined that all power which can be given the Rome area will be developed. Steps are being taken to obtain coal from Naples and all other sources.
2. Authority after the fact is requested to move 2000 tons of coal from Gaeta to Rome fuel dumps for Power generation.
3. Col. Groden has approved this action for his Central Electric Board.

C.R.B.
C.R. BIRCHETT

Lient. Colonel, C.E.

Director, T.C.U. Division

Copy to : Electric Section
Central Electric Board
G.4 - CAS ✓



A.A.I.
CENTRAL ELECTRICAL BOARD
APO 400

REF: CEB/18/1

13 June 1944

REPORT ON THE ELECTRIC POWER SUPPLY IN ROME

1. An inspection of the power generating facilities in ROME was made on Tuesday 6 June 1944.

2. So far as observed, no power facilities in ROME had been destroyed by enemy action, but some facilities had suffered bomb damage.

3. The power generating facilities in ROME are as follows:-

(a) The Rome Coy.

3 No. 10,000 KW steam turbine generating units,
boiler capacity to generate 15,000 KW.

N.B. One boiler has been damaged by bombing, but is believed to be repairable within a very short period. If repaired, this boiler would permit the generation of 5,000 KW of additional power.

(b) A.G.E.A.

1 No 5,000 KW diesel electric generating set
2 No. 5,000 KW steam turbine generators
1 No. 3,000 KW steam turbine generator.
Boiler capacity to generate approx. 18,000 KW.

N.B. These two steam stations are in close proximity, and it is possible to pipe the steam from the A.G.E.A. station to the S.R.E. station. The second 5,000 KW diesel generating set has been slightly damaged but is believed to be readily repairable.

SUMMARY. The total generated capacity immediately available in ROME is 33,000 KW.

4. The normal electric power demand for ROME is approx. 100,000 KW. The available capacity is approx. one third of normal requirements, which is believed to be ample to meet the military and essential civilian needs.

5. It is believed.....

300

-2-

5. It is believed that under present conditions the load in ROME will not exceed 425,000 KWH per day, or 14,000,000 KWH per month, and that the load factor will be less than 60%. On this basis the following fuel supply would be required monthly :-

Coal	-	5,000	tons approx.
Fuel Oil	-	2,000	" "
Diesel Oil	-	900	" "
Heavy Lub. Oil	-	12	" "
Light Lub. Oil	-	3	" "

H.B. Sardinian coal can be used for most, if not all, coal requirements. Coal can be substituted for fuel oil.

6. The power problem in ROME consists entirely of providing a supply of fuel. It is not known what, if any, arrangements have been effected at this date. The existing fuel supply at the rate of consumption estimated on 6 June 44 will be exhausted before June 20.

7. There are many hydro electric plants with which to supply ROME now in Allied possession. The condition of these plants is not now known. All transmission lines leading from hydro electric plants to ROME will require repair, but it is not believed that they have suffered other than little damage.

JAMES P. CROWDEN,
COLONEL CE,
Vice Chairman, AAI - C.E.B.

2299

A.A.I.
CENTRAL ELECTRICAL BOARD
APO 400

REF: CFB/13/1

13 June 1944

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2. So far as observed, no power facilities in ROME had been destroyed by enemy action, but some facilities had suffered bomb damage.
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 - (a) The Rome Coy.

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Boiler capacity to generate approx. 18,000 KW.

N.B. These two steam stations are in close proximity, and it is possible to pipe the steam from the A.G.E.A. station to the S.R.E. station. The second 5,000 KW diesel generating set has been slightly damaged but is believed to be readily repairable.
- SUMMARY. The total generated capacity immediately available in ROME is 33,000 KW.
4. The normal electric power demand for ROME is approx. 200,000 KW. The available capacity is approx. one third of normal requirements, which is believed to be ample to meet the military and essential civilian needs.
5. It is believed.....

-2-

5. It is believed that under present conditions the load in ROME will not exceed 425,000 KWH per day, or 14,000,000 KWH per month, and that the load factor will be less than 60%. On this basis the following fuel supply would be required monthly :-

Coal	-	5,000	tens approx.
Fuel Oil	-	2,000	" "
Diesel Oil	-	900	" "
Heavy Lub. Oil	-	12	" "
Light Lub. Oil	"	3	" "

N.B. Sardinian coal can be used for most, if not all, coal requirements. Coal can be substituted for fuel oil.

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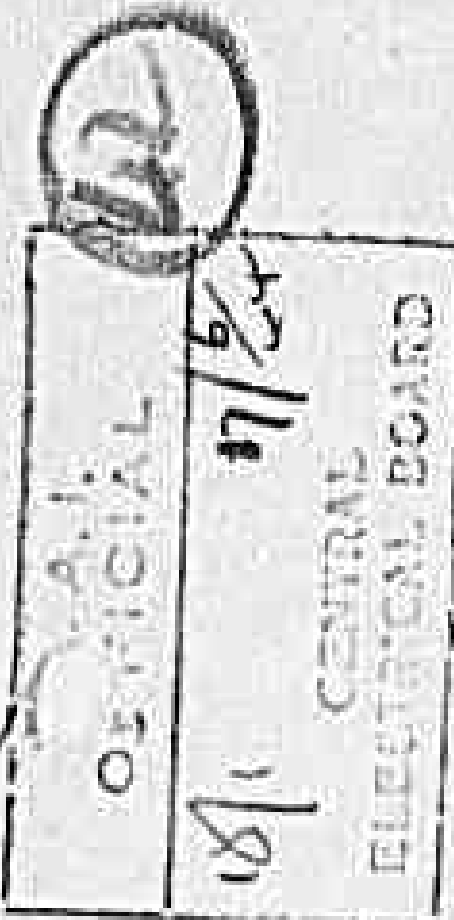
JAMES P. GROWDON,
COLONEL CE,
Vice Chairman, AAI - C.E.E.

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297

SECRET

WATER SUPPLY - ROME.



The water supply to Rome is from two systems, the MARCIA system through seven mains, and the A.G.E.A. system through four aqueducts.

Under normal conditions the MARCIA system delivers 4600 litres per second, and the A.G.E.A. system 2030 litres per second, making a total of 6630 litres per second which equals approximately 126,000,000 English gallons per 24 hours.

MARCIA SYSTEM.

At the time of writing the source of the MARCIA supply is still in enemy hands who have already destroyed four of the mains, one by demolition of a bridge over the fiber carrying the main.

This has reduced the supply at present from 4600 l.p.s. to 2000 l.p.s. the destruction of the remaining mains must therefore be envisaged before the enemy withdraw.

A.G.E.A. SYSTEM.

One aqueduct of this system has been damaged, repairs in hand, and expected to be completed by 11/12 June. A power line to Electric pumping plant has also been damaged, repairs expected to be completed 13/14 June. 60 KW Electric power required to operate pumps.

The normal delivery from A.G.E.A. of 2030 litres per second is at the moment reduced to 5425 litres per second.

At time of writing therefore, the volume of water being delivered to Rome is 2000 plus 5425 = 5425 litres per second which equals approximately 55,000,000 gallons per 24 hours or just over 50% of normal supply.

With the repairs to the A.G.E.A. system completed, this quantity should be increased at June 14 to 4030 litres per second which equals approx 72,500,000 English gallons in 24 hours or 4/7 the normal supply.

The present population of Rome is variously estimated from 2,000,000 to 2,240,000. Even if the latter figure were taken this would apparently give a per capita gallonage as follows:-

(a)	Normal.	56
(b)	At present.	29
(c)	When repairs to A.G.E.A. are completed.	32

and even the lowest of these figures should be...

At the time of writing the source of the MACIA supply is still in enemy hands who have already destroyed four of the mains, one by demolition of a bridge over the Tiber carrying the main.

This has reduced the supply at present from 4600 l.p.s. to 2000 l.p.s. The destruction of the remaining mains must therefore be envisaged before the enemy withdraw.

A.G.E.A. SYSTEM.

One squireduct of this system has been damaged, repairs in hand, and expected to be completed by 11/10 June. A Power line to Electric pumping plant has also been damaged, repairs expected to be completed 18/14 June. 60 KW Electric power required to operate pumps.

The normal delivery from A.G.E.A. of 2030 litres per second is at the moment reduced to 1425 litres per second.

At time of writing therefore, the volume of water being delivered to Rome is 2000 plus 1425 = 3425 litres per second which equals approximately 65,000,000 gallons per 24 hours or just over 50% of normal supply.

With the repairs to the A.G.E.A. system completed, this quantity should be increased at June 14 to 4030 litres per second which equals approx 72,800,000 English gallons in 24 hours or 4/7 the normal supply.

The present population of Rome is variously estimated from 2,000,000 to 2,250,000. Even if the latter figure were taken this would apparently give a per capita gallonage as follows:-

(a)	Normal.	56
(b)	At present.	29
(c)	When repairs to A.G.E.A. are completed.	39

and even the lowest of these figures should be ample for essential needs as the present industrial demand is small.

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Unfortunately these figures are most misleading as the distribution system in Rome is peculiar. With two small exceptions which can be ignored, there are no reservoirs, the only storage being in Roof Tanks of unknown total capacity. The water except in the lowest parts of the city, being pumped by separate Electric Motors installed in each large building house and blocks of flats to these Roof Tanks. Normally approximately one third of the total water consumption of a city is consumed in 8 hours out of the 24, and with the absence of reservoirs, unless the hourly draw off equals the hourly intake which can never happen, a great proportion of the water must run to waste which in fact it is now doing. The city mains are all fitted with release valves to permit of this overflow.

The provision of large reservoirs to conserve this water would be an immense undertaking and quite outside the scope of practical politics.

SECRET

Cont'd Sheet No.2.....

Sheet No. 2.

SECRET

At present the inhabitants draw water from stand pipes in the street except that some of the larger buildings when Electric Power is available are able to pump some water to their Tanks. Owing to both Electric Power and water being intermitted many buildings are without water.

CONCLUSIONS.

1. If the remaining Arcels pipe lines are destroyed with the unsatisfactory distribution system the Water Supply position will be aggravated.
2. Unless the Fuel necessary for Power Stations, as recommended in previous report on Electricity is forthcoming, this will also make the water supply position precarious especially of the high buildings for sanitary purposes.

RECOMMENDATIONS.

- | | Design in
Work |
|---|-----------------------|
| 1. Construct temporary bridge over Tiber to carry main.
preparation. | XXXXXXXXXX |
| 2. Repair Power line to pumping plant A.G.B.A. system.
in hand | XXXXXXXXXX |
| 3. Repair damaged Aqueduct A.G.B.A. System. Work in hand. | |
| 4. Provide 800 KW for pumping plant A.G.B.A. System. Arrangements in
hand to give priority of power when repairs in line complete. | |
| 5. Investigate possibility of operating electric pumps installed in
large building off peak load times. Will be done. | |
| 6. Investigate number and capacity of wells within City limits to
augment supply if necessary. Investigation in hand. | |

Further report to follow.

W.L. Medding
W.L. MEDDING.
Colonel., C.E.
Engineer.

A.E. Cockington

A.E. COCKINGTON.
Lt. Col., R.E.
C.R.E. 104 Works.

C.R. Duckett
C.R. DUCKETT.

RECOMMENDATIONS.

- | | | |
|----|--|-----------------------|
| | | Design in
Work |
| 1. | Construct temporary bridge over Tiber to carry main.
preparation. | XXXXXXXXXX |
| 2. | Repair Power line to pumping plant A.G.E.A. system.
in hand | |
| 3. | Repair damaged Aqueduct A.G.E.A. System. | Work in hand. |
| 4. | Provide 600 KW for pumping plant A.G.E.A. System. Arrangements in
hand to give priority of power when repairs in line complete. | |
| 5. | Investigate possibility of operating electric pumps installed in
large building off peak load times. Will be done. | |
| 6. | Investigate number and capacity of wells within City limits to
augment supply if necessary. Investigation in hand. | |

Further report to follow.

W.L. Medding
W.L. MEDDING.
Colonel., C.E.
Engineer.

W. L. Medding

A.E. COCKERTON.
Lt. Col., R.E.
C.R.E. 104 Works.

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C.R. Medding
C.R. MEDDING.
Lt. Col., C.E.
Director TCU Div.

Distribution.

A.A.I. (3 Copies)
Home Area Commander.
59 Area Commander.
SCAC AMG 5th Army.
D.W. A.A.I.

C.E. No. III District.
A.C.C. (9 Copies)
A.C.C. Region IV
Central Electric Board.
C.S. 5th Army.

11 Jan 44

SECRET

Wt. 9533/63727P 490M (Pads of 100) 5/43 MP 710428 51-6736

ARMY FORM C 2136 (Large) MESSAGE FORM

Call	Srl. No.	Priority	Register No.
			460
Transmission Instructions			
Date-Time of Origin.			Office Date Stamp
10 21			

ABOVE THIS LINE FOR SIGNALS USE ONLY.

FROM (r) AMI

Originator

For Action.

WESTERN ARMY

TO

(W) For Information (INFO)

Message Instructions GR

Originator's No.

040 300

URGENT (.) GENERAL FOR GENERAL DATA FROM GENERAL
ARMY (.) IS CONCERNED REGARDING ELECTRIC POWER
SITUATION IN AREA (.) IT TOLD MEET AND DISCUSS
COOL SECTION ARE LEFT TO CLARIFY THE MATTER WITH
YOU (.) CLARIFY ALL COOL AND ELECTRIC OIL UNIT
TURNED TO MEET FOR YOUR (.) WILL BE AS
CHARGE OF THE MAINTENANCE (.) THEREFORE
THAT YOU WILL IN CONSULTATION WITH AGO BRUCE PUGH
IMMEDIATE NOTIFICATION ON FORM ORIGINATOR NO
YOU OBLIGATION TO BE COMPLETED

040 300/4/100

040 300
040 300
040 300
040 300
040 300

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A.A.I.
OFFICIAL

TO

(V) For Information (INFO)

Message Instructions. GR

P207 - AUG

Originator's No.

UAG 803

URGENT (.) INFORMATION FOR DESTROY THE GUY COUNTRY
 AMERICAN (.) AN ASSIGNED REGARDING ELECTRIC POWER
 SEVERAL IN THIS (.) IS OLD WHEN THE VALUE OF
 COAL SECTION HERE LEFT TO DECREASE THE MATTER AND
 YOU (.) OBVIOUSLY ALL COAL AND OIL OIL UNIT
 TOWARD TO WILL FOR POWER GENERATION WILL AS AT
 SEVERAL OF THE SEVERAL (.) THAT THEREFORE
 THAT YOU WILL IN COMMUNICATION WITH ALL THESE SUCH
 IMMEDIATE RESTRICTIONS ON POWER CONSUMPTION AS
 YOU CONSIDER TO BE NECESSARY

STATIONERY (4)
 FILE 501/4120

MYSTER

1/1

40

40

40

40

40

40

40

40

291

A.A.I.
 OFFICIAL

18/1

2/124

CENTRAL

1/1

This message may be sent
 AS WRITTEN by any means
 except

WIRELESS.

Signed.

If liable to be intercepted or to fall
 into enemy hands this message must
 be sent IN CIPHER

Signed.

Originator's Instructions,
 Degree of Priority.

Time

THI or TOR

System Op.

Time Cleared

SECRET

Col. Browdon
JPH (38)

SUBJECT: Allocation of Electrical Rehabilitation Project.

4.

G-4

30 May 1944 DSB/rak

1. Attached for approval, signature by the AG and dispatch is letter to AAI accepting its plan for the supply of food and payment of wages for civilian labor and payment of invoices for locally procured materials and supplies required in connection with the rehabilitation of the Naples-Rome transmission line.

2. Attached for reference are copies of related correspondence.

DSB/Engr.



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SECRET

SECRET

(37)

HEADQUARTERS
PENINSULAR BASE SECTION
APO 762

DBB/rak

AG 675 DPSSG (30 May 44)

30 May 1944

SUBJECT: Allocation of Electrical Rehabilitation Project.

TO : Chief Administrative Officer, A.A.I. Adm. Echelon, APO 400.

1. Reference is made to letter, Headquarters A.A.I. (Rear Adm. Echelon), dated 18 May 1944, subject, "Allocation Electrical Rehabilitation Project".
2. The plan as submitted by you for the supply of food and payment of wages for civilian labor and the processing and settlement of invoices for locally procured materials and services required in connection with the rehabilitation of the Naples-Rome power line is acceptable.
3. The design is complete, materials and supplies are being assembled and the work of rehabilitation is under way.

For the Commanding General:

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SECRET

ENGINEER SERVICE
PENINSULAR BASE SECTION
A. P. O. 762

CC/rhf

29 May 1944

MEMORANDUM:

SUBJECT : Power Supply to Rome.

1. Memorandum for Electric Power Committee on Power Supply to Rome, dated 1 February 1944 by Colonel Grawdon, stated that between 5000 and 7000 Kw could be delivered at 9Kv at Rome over the 60 Kv transmission line Naples - Minturno - Rome (Pénestina) now being rehabilitated by PBS.

2. A study of available equipment has disclosed that a 9 Kv step voltage regulator, 6.7 percent buck and boost, can be obtained from Arenella Substation. This has a current carrying capacity equivalent to 10,000 Kva. It is not required at Arenella Substation since this substation operates in parallel with Foggiorale and Agnano Substations which are not provided with regulators.

3. It is proposed to:

a. Install this step voltage regulator at Rome together with a 10,000 Kva outdoor type transformer from Agnano Substation which has an available tap ratios of 60.25/56.5/56.85 - 9.95/9.66/9.35 Kv unless a suitable transformer is found in serviceable condition at Rome. (Approximately 100,000 Kva of serviceable 60/9 Kv transformers exist in Naples.)

b. Maintain a minimum system voltage of 58000 volts at Naples during maximum load periods by operating Capuano tied to the system for power factor correction and/or carrying load. This system voltage is necessary to maintain 9000 volts in Naples.

4. Under this arrangement a load of 10,000 Kw at 0.90 power factor can be delivered to the distribution system at Rome at 8400 volts (which is the nominal voltage of that system). The overall voltage variation on the 8400 volt bus at Rome will not exceed 7%. (The average daily variation in Naples on the 9 Kv buses is approximately 12%.)

G. COOLEY,
Lt. Colonel, Corps of Engineers,
Construction Branch.

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(39)

ENGINEER SERVICE
PENINSULAR BASE SECTION
A. P. O. 782

GC/rhf

29 May 1944

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G. COOLEY,
Lt. Colonel, Corps of Engineers,
Construction Branch.

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20th May 1944.

PRIORITY FOR RECONSTRUCTION OF PLANT AT ROCCHETTA AL VOLTURNO
(CAMPOBASSO) TO SUPPLY ELECTRIC POWER TO ROME.

In the expectation of an early occupation of Rome by the Allied Forces, the hydro-electric plant feeding that city being likely to be pulled down by the Germans during their retreat, it is anticipated that the supply of electric power will be made from thermic stations in Naples, and perhaps also from that portion of Sila plants which may be spared from the supply to Southern Italy.

The Volturno Autonomous Corporation owns in the area of Rocchetta al Volturno (85 km North of Naples and 135 km South-East of Rome, in straight lines) a power station to be reconstructed, which is operated by soproces of almost constant regimen (Volturno) under a fall of 190 m, the installed capacity being 20,000 kW, with an average daily output of 250,000 kWh and an average daily power of 15,000 kW.

The plant and the building were destroyed by the Germans, but the hydraulic part is practically uninjured, and this will reduce the time for reconstruction to the period strictly required for building the machinery.

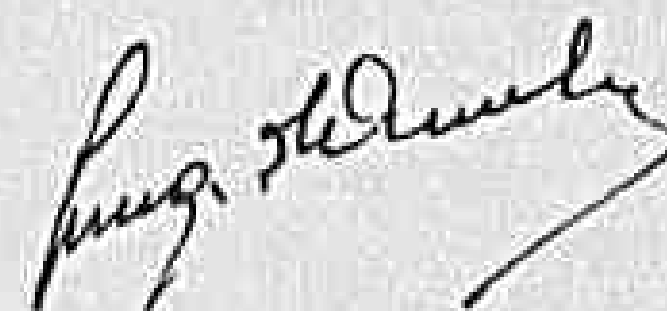
The installation is near to transmission lines connected to Rome systems.

Owing to the importance of the supply to Rome, and also due consideration being given to the industrial reconstruction in Italy being now a part of the programme of the Allied Control Commission (according to recent information), it is believed that the restoration of the working of Rocchetta al Volturno plant, in order to meet the requirements of the Allied Forces in Rome, has become a very urgent matter and the supply of the necessary machinery should be given an absolute priority.

-2-

While a 1000 kW unit is being prepared in Naples to supply the power required for working the reconstruction yard, the preparation in the U.S.A. of at least two turbine-alternator units, of the capacity of 10,000 kW each, together with transformation and control apparatus, should be requested at once.

(sgd.) Prof. Ing. Luigi D'AMELIO.



TO

Central Electrical Board

HEADQUARTERS
ALLIED ARMIES IN ITALY
(Rear Adm. Echelon)
APO 400



ALH/rjs
18 May 1944

SUBJECT: Allocation Electrical Rehabilitation Project.

TO : Commanding General, Peninsular Base Section, APO 782.

1. Reference your 1st Indorsement, AG 674 BYERO (8 March 1944) dated 2 April 1944 to letter above subject this headquarters 8 March 1944.

2. The conditions set forth by you are acceptable. The following plan is submitted as complying with those conditions:

A. Food. AGC will provide the normal civilian ration plus the supplementary ration for heavy labour for civilian workmen employed under the direction of the PBS for the rehabilitation of the NAPLES/ROME transmission line. This food will be delivered to the PBS at the AGC food warehouse in NAPLES or at other warehouses that may be mutually agreeable.

B. Wages. Civilian workmen as required by the Peninsular Base Section will be employed and paid by the Italian State Railways. They will be paid at the following rates:-

	Basic Daily Wage	Air Raid Wage	Mission Allowance	Total
Inspector	104	22	63	189
Works Assistant	62	22	50	134
Foreman	67	22	50	139
Worker	43	22	32	97
Labourer	40	22	32	94

Civilian workers will be paid in the field each week.

C. Contract Cost of Materials Procured Locally.

(1) Requisitioned material. The Engineer, PBS, will advise the AGC (P & U Sub-Commission) as to specific material to be requisitioned for use in the reconstruction of the NAPLES/ROME transmission line. The AGC will thereupon requisition such material.

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ial and make it immediately available to the Engineer, PBS.

(2) Purchased Material and Services. The CG, PBS, or a representative designated by him is authorized to procure by contract and by open market purchase for the account of the Italian State, all materials and services which in his sole opinion are necessary and required for the rehabilitation of the NAPLES/ROME trans-mission line. He will certify on each invoice for such materials and services that the same have been received and that the prices stated in the said invoices are correct, of which he shall be the sole judge. When so approved, all such invoices will be transmitted to the Director General of the Italian State Railways who will pay them promptly.

3. Your confirmation that the above plan complies with your conditions and that you are prepared to initiate the desired rehabilitation is requested.

A. L. HAMBLEN
Brigadier General, U.S.A.
DEAC

cc: GEB
ACC
AFHQ
CG SOG NATO

Note Col. Burns - forwarded to PBS - c/s
recommending approval 21 May 1944

U.S. SECRET
Equals British MOST SECRET

HQ ACMF (Adm. Echelon)
APO 400

ALH/jra
8 March 1944

SUBJECT:- Allocation Electrical Rehabilitation Project.

TO:- Commanding General, Peninsular Base Section, APO 782, U.S. Army.

1. In conformity with the provisions of radio instructions (Freedom to Flambo - 44768 - Sigs No: 4632 131/Q2) and pursuant to action of the ACMF Central Electrical Board at its meeting on 14 February 1944, the rehabilitation of the electric transmission line from the Capuano Steam Plant in Naples to the Prenestina substation in Rome is allocated to the Commanding General, Peninsular Base Section.
2. The double circuit Volturno line from the Doganella plant to the crossing of the S.M.E. Liri line, the double circuit S.M.E. Frattamaggiore line to Minturno and the F.F.S.S. single circuit line from Minturno to Rome are to be repaired and connected to form a single circuit 60 kv line from the Capuano Steam Plant, Naples to the Prenestina Substation, Rome.
3. So far as practicable the material required to repair the lines, Capuano to Minturno, is to be obtained by cannibalizing the Volturno line in sections not yet repaired. Similarly material required to repair the F.F.S.S. line, Minturno to Rome, should be procured, so far as practicable, from stock now in possession of the F.F.S.S. and by cannibalizing parts of the S.M.E. 150 kv. Pescara-Frattamaggiore line. The Minturno-Rome line should be constructed with the same insulation and clearance as the original line.
4. In all rehabilitation work the maximum amount of material from damaged and unnecessary lines should be used. The Central Electrical Board will undertake to locate and provide required materials not under the control of Commanding General, Peninsular Base Section, by salvage and cannibalization of other Italian systems including Sicily and Sardinia. Wherever work is done or materials are salvaged in areas not under control of Commanding General, Peninsular Base Section, the Central Electrical Board will inform the proper area authority and arrange for such assistance from that area authority in providing materials and expediting the work as is practicable. When new material or equipment is required which becomes a part of the electrical system, the Commanding General, Peninsular Base Section, should consult the Central Electrical Board as to the source of supply. Items required to be issued from British or American military stocks should be procured and authorized in accordance with existing instructions of the respective supply services.
5. Minimum use should be made of Allied military units. Maximum use will be made of Italian commercial firms and civil labor. In connection with payment of services and supplies furnished from Italian resources attention is invited to AFHQ Administrative Memo, No. 95, dated 27 December 1943. Every effort will be made by direct action between Commanding General, Peninsular Base Section and Allied Control Commission to assure that, to the maximum extent practicable, the project is financed both as to labor and materials by the Italian Government.

-2-

6. The Commanding General, Peninsular Base Section, is requested to take the necessary steps to secure authority for the use of Allied Stores and equipment including accommodation stores and food as may required for the prompt accomplishment of his allocated task.

7. The rehabilitation should provide only reasonable safety and continuity of operation. Special safety features such as double insulator strings and duplicate switches may be omitted. State safety codes and regulations may be disregarded.

8. The ability to transmit power to Rome within 30 days after the occupation thereof is desired.

(sgd) A.L. HAMBLIN
Brig. Gen'l.
for

Major General,
Chief Administrative Officer.

SECRET

AG 674 BPENG (8 Mar 44) 1st Ind.
HEADQUARTERS, PENINSULAR BASE SECTION, APO 782, 2 April 1944

TO: The Chief Administrative Officer, A.A.I. Adm. Echelon, APO 400.

1. Authority has been granted to me in SOS Radio L-12818 (paraphrase attached) by the Commanding General, SOS, NATOUSA, to proceed with the rehabilitation of the west coast transmission line from Naples to Rome under the following conditions:

a. Work to be undertaken is to be only that which I consider a military necessity.

b. Rehabilitation beyond the scope of military necessity as determined by me is to be considered an ACC/AMG responsibility in which I am not to participate.

c. ACC/AMG is to furnish food for civilian labor and pay civilian wages, all contract costs and for materials procured locally.

d. Minimum essential tentage, bedding and housekeeping equipment required for the use of civilian labor in the field are to be issued from Peninsular Base Section stocks.

2. If the foregoing conditions are acceptable to you, it is requested that you submit a plan for the fulfillment of those listed under paragraph 1 c. If this plan is satisfactory to me, I am authorized to proceed with the work.

ARTHUR R. WILSON
Major General, U.S. Army

SECRET

HEADQUARTERS
PENINSULAR BASE SECTION
APO 782

Paraphrase of Radio L-12818 (PBS 21157), Cite SSCDS-217 S. SSQMC, SSSIG, SSENG, SSORD, from CG SOS NATOUA to CG PENBASE for action, CG NATOUA for information, classification SECRET, precedence OPERATIONAL PRIORITY, dated 28 March 1944.

Subject is power line rehabilitation Naples to Rome; reference PENBASE 10254, 5 March and SOS radio L-3901, CITE SSENG 116, dated 9 March. You are to inform ACMF Adm Ech that you are authorized to undertake the rehabilitation of West Coast transmission lines from Naples to Rome under the following conditions only:

- a. The work you will undertake is to be only that which you consider to be a military necessity.
- b. Rehabilitation beyond the scope of military necessity as determined by CG PBS is the responsibility of ACC/AMG in which CG PBS does not participate.
- c. ACC/AMG will furnish food for civilian labor, pay civilian wages, pay contract costs and purchase materials locally available. When ACMF Adm Ech accepts the foregoing conditions and submits a satisfactory plan acceptable to you for their fulfillment, you are authorized to ~~proceed~~ proceed with the work. You are authorized to issue minimum essential tentage, bedding and housekeeping equipment required for use of civilian employees in the field. 6-Signal Corps K-43 Line trucks, 4-motorized air compressors, 4-truck mounted or crawler type cranes are authorized for issue to 345 Engr General Service Regt. As available in depot stocks with miscellaneous small tools as needed. Issues of Ord equipment in excess of TO/E are not authorized. You are to submit additional requirements to this headquarters for approval.

ACTION - ENG
INFO - QM, Sig. G-4, Ord, HQ ACC, BPA, CG, Secy.

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(33)

2nd Ind.

HEADQUARTERS, ALLIED ARMIES IN ITALY, APO 400, 17 May 1944.

TO:- Commanding General, Peninsular Base Section, APO 782.

1. The conditions set forth in 1st Indorsement, above, are acceptable.
2. The following plan is submitted, covering para 1(c) of 1st Ind.

(a) Food. ACC will provide the normal civilian ration plus the supplementary ration for heavy labour for civilian workmen employed under the direction of the PBS for the rehabilitation of the NAPLES/ROME transmission line. This food will be delivered to the PBS at the ACC food warehouse in NAPLES or at other warehouses that may be mutually agreeable.

(b) Wages. Civilian workmen as required by the Peninsular Base Section will be employed and paid by the Italian State Railways. They will be paid at the following rates:-

	<u>Basic Daily Wage</u>	<u>Air Raid Wage</u>	<u>Mission Allowance</u>	<u>Total</u>
Inspector	104	22	63	189
Works Assistant	62	22	50	134
Foreman	67	22	50	139
Worker	43	22	32	97
Labourer	40	22	32	94

Civilian workers will be paid in the field each week.

(c) Contract Cost of Materials Procured Locally.

(i) Requisitioned material. The Engineer, PBS, will advise the ACC (PW & U Sub Commission) as to specific material to be requisitioned for use in the reconstruction of the NAPLES/ROME transmission line. The ACC will thereupon requisition such material and make it immediately available to the Engineer, PBS.

(ii) Purchased Materials and services. The CG, PBS, or a representative designated by him is authorized to procure by contract and by open market purchase for the account of the Italian State, all materials and services which in his sole opinion are necessary and required for the rehabilitation of the NAPLES/ROME transmission line. He will certify on each invoice for such materials and services that the same have been received and that the prices stated in the said invoices are correct, of which he shall be the sole judge. When so approved, all such invoices will be transmitted to the Director General of the Italian State Railways who will pay them promptly.

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3. Please note your acceptance of this plan by indorsement hereon.

Major General,
Chief Administrative Officer.

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2nd Ind.

HEADQUARTERS, ALLIED ARMIES IN ITALY, A. P. O. 400, 17 May 1944.

TO: Commanding General, Peninsular Base Section, A. P. O. 782.

1. The conditions set forth in 1st Indorsement, above, are acceptable.
2. The following plan is submitted, covering para 1(c) of 1st Ind.

(a) Food. ACC will provide the normal civilian ration plus the supplementary ration for heavy labour for civilian workmen employed under the direction of the PBS for the rehabilitation of the NAPLES/ROME transmission line. This food will be delivered to the PBS at the ACC food warehouse in NAPLES or at other warehouses that may be mutually agreeable.

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3. Please note your acceptance of this plan by indorsement hereon.

Major General,
Chief Administrative Officer.

SECRET

HEADQUARTERS
ALLIED ARMIES IN ITALY

Draft (31)

Subject: Rehabilitation of Rome Electric Transmission Line.

To : Chief Commissioner, Allied Control Commission, A.P.O. 394.

The Commanding General, Peninsular Base Section, has been requested to undertake the rehabilitation of the electric transmission line from Naples to Rome, and he is willing to proceed on the conditions set forth below:

1. The rehabilitation will be undertaken by CG, PBS, only to the extent that he considers such rehabilitation a military necessity. His decision on the question of military necessity will be final in all matters. Rehabilitation of the power line beyond the scope of military necessity as determined by him is an ACC/AMG responsibility in which the CG, PBS, will not participate. His decision will be final in all matters connected with the work he undertakes.

2. Financing. Arrangements have been made, through the Italian Government, whereby all expenses in connection with the rehabilitation of the transmission line, including the payment of labour and the cost of materials, will be paid by the Italian State Railways. Accordingly, all invoices of materials purchased locally should be referred to General di Raimondo, Director General of the Italian State Railways, who will make prompt payment.

3. Labour. Together with American and Italian military personnel, approximately 300 civilian workers, who are now employees of the Italian State Railways, will be used on the rehabilitation of the transmission line. They will remain in the employment of the State Railways during this work, and will be paid by the State Railways, on their own account.

Many of these workers are experienced in electric transmission line construction. The following scale of wages will be paid to the permanent railroad employees:

SECRET

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TRANSMISSION LINE WORKERS' WAGES

	<u>Basic Daily Wage</u>	<u>Air raid Wage</u>	<u>Mission Allowance</u>	<u>Total</u>
Inspector	104	22	63	189
Works Assistant	62	22	50	134
Foreman	67	22	50	139
Worker	43	22	32	97
Labourer	40	22	32	94

Arrangements have been made whereby any necessary additional civilian workers needed for the job will be hired and paid by the railways and reimbursed by the Italian Government.

It is planned to pay the civilian workers in the field. It is understood that the Peninsular Base Section will furnish the minimum essential tentage to shelter the civilian employees.

4. Food. At the present time it is planned to provide the civilian employees with the normal civilian ration plus the supplementary rations for heavy labour working for the war effort. This food will be collected at Allied Control Commission Food warehouse by military personnel under the control of the Peninsular Base Section. Attempts are still being made to obtain the Italian basic military field rations.

5. The Engineer, PBS, will procure locally, for the account of the Italian State Railways, all materials and services required for the rehabilitation of the transmission line, with the understanding that he, or a representative designated by him, will certify on each invoice that he has received the materials or services itemized thereon, and forward it to the Allied Control Commission for payment by the Italian State Railways. The decision of the Engineer, PBS, will be final as to what materials and services are required, and as to the prices to be paid therefor. The Allied Control Commission guarantees prompt payment by the Italian State Railways of all such invoices. In the event requisitioning of local materials becomes necessary, it will be effected by the Allied Control Commission upon application by the Engineer, PBS.

6. Records of United States Army stores and services used in reconstruction of the line from Minturno to Rome will be maintained by PBS. This matter has been discussed with the Finance Sub-Commission and we are advised that at the present time no charges for such stores or services are to be made against the Italian Government. Such works, together with all other works performed in Italy by the Allied Armies on roads, bridges, power lines and other installations, may be considered later as part of a wider financial settlement. Such questions must obviously be considered at the highest government levels. Accordingly, there is no need to report such Charges to the Allied Control Commission.

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HEADQUARTERS
ALLIED ARMIES IN ITALY*Draft*

(30)

Subject: Rehabilitation of Rome Electric Transmission Line.

To : Commanding General, Peninsular Base Section, APO 782.

1. It has been previously requested that the rehabilitation of the electric transmission line from Naples to Rome be undertaken by the Commanding General, Peninsular Base Section, and it is understood that the Commanding General, SOS NATOUSA, has authorized the CG, PBS, to proceed with this project subject to certain limitations.

2. It is understood that the CG, PBS, will undertake the rehabilitation of the mentioned electric transmission line on the following conditions, which are agreeable to this headquarters:

a. The rehabilitation will be undertaken by CG, PBS, only to the extent that he considers such rehabilitation a military necessity. His decision on the question of military necessity will be final in all matters. Rehabilitation of the power line beyond the scope of military necessity as determined by him is an ACC/AMG responsibility in which the CG, PBS, will not participate. His decision will be final in all matters connected with the work he undertakes.

b. Financing. Arrangements have been made, through the Italian Government, whereby all expenses in connection with the rehabilitation of the transmission line, including the payment of labour and the cost of materials, will be paid by the Italian State Railways. Accordingly, all invoices of materials purchased locally should be referred to General di Raimondo, Director General of the Italian State Railways, who will make prompt payment.

c. Labour. Together with American and Italian military personnel, approximately 300 civilian workers, who are now employees of the Italian State Railways, will be used on the rehabilitation of the transmission line. They will remain in the employment of the State Railways during this work, and will be paid by the State Railways, on their own account.

It is planned to pay the civilian workers in the field. It is understood that the Peninsular Base Section will furnish the minimum essential tentage to shelter the civilian employees.

d. Food. At the present time it is planned to provide the civilian employees with the normal civilian ration plus the supplementary rations for

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SECRET

heavy labour working for the war effort. This food will be collected at Allied Control Commission Food warehouse by military personnel under the control of the Peninsular Base Section. Attempts are still being made to obtain the Italian basic military field rations.

e. The Engineer, PBS, will procure locally, for the account of the Italian State Railways, all materials and services required for the rehabilitation of the transmission line, with the understanding that he, or a representative designated by him, will certify on each invoice that he has received the materials or services itemized thereon, and forward it to the Allied Control Commission for payment by the Italian State Railways. The decision of the Engineer, PBS, will be final as to what materials and services are required, and as to the prices to be paid therefor. The Allied Control Commission guarantees prompt payment by the Italian State Railways of all such invoices. In the event requisitioning of local materials becomes necessary, it will be effected by the Allied Control Commission upon application by the Engineer, PBS.

f. Records of United States Army stores and services used in reconstruction of the line from Minturno to Rome will be maintained by PBS. This matter has been discussed with the Finance Sub-Commission and we are advised that at the present time no charges for such stores or services are to be made against the Italian Government. Such works, together with all other works performed in Italy by the Allied Armies on roads, bridges, power lines and other installations, may be considered later as part of a wider financial settlement. Such questions must obviously be considered at the highest government levels. Accordingly, there is no need to report such charges to the Allied Control Commission.

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

LWL/ac

(29)

12
May 44.

ACC/102/FNU

Subject : Rehabilitation of Rome Electric Transmission Line.

To : Central Electrical Board, A.A.I.

1. Reference is made to the letter dated 12 Apr. 44, Ref: CEB/1/2, Subject: Power Line Rehabilitation Naples to Rome, which requested the submission of a plan relating to certain aspects of the rehabilitation of an electric transmission line to Rome. The plan is set forth below.

2. Financing. Arrangements have been made through the Italian Government, whereby all expenses in connection with the rehabilitation of the transmission line, including the payment of labour, and the cost of materials will be paid by the Italian State Railways. Accordingly, all invoices of materials purchased locally should be referred to General di Raimondo, Director General of the Italian State Railways, who will arrange payment. The Allied Control Commission has received assurances from the Italian Government that all such invoices will be paid promptly by the Italian State Railways, and will do everything within its power to see that such assurances are complied with.

Labour. Together with American and Italian military personnel, approximately 300 civilian workers who are now employees of the Italian State Railways, will be used on the rehabilitation of the transmission line. They will remain in the employment of the State Railways during this work, and will be paid by the State Railways, on their own account.

Many of these workers are experienced in electric transmission line construction. The following scale of wages will be paid to the permanent railroad employees:

TRANSMISSION LINE WORKERS' WAGES

	Basic Daily Wage	Air raid Wage	Mission Allowance	Total
Inspector	104	22	63	189
Works assistant	62	22	50	134
Foreman	67	22	50	139
Worker	43	22	32	97
Labourer	40	22	32	94

Arrangements have been made whereby any necessary additional civilian workers needed for the job will be hired and paid by the railways and reimbursed by the Italian Government.

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SECRET

It is planned to pay the civilian workers in the field. It is understood that the Peninsular Base Section will furnish the minimum essential tentage to shelter the civilian employees who will be attached to Italian military units.

Food. At the present time it is planned to provide the civilian employees with the normal civilian ration plus the supplementary rations for heavy labour working for the war effort. This food will be collected at Allied Control Commission Food warehouse by military personnel under the control of the Peninsular Base Section. Attempts are still being made to obtain the Italian basic military Field rations.

Materials. It is understood that the transmission line will be rehabilitated from materials obtained locally. It is understood that these materials will be procured by the Engineer Service, Peninsular Base Section, which will receive, and approve all invoices, and then transmit them to the Director General of the Italian State Railways for payment. In the event that requisitioning of local materials becomes necessary, it is understood that requisitioning will be done by Allied Control Commission upon application from the Peninsular Base Section.

3. Records of U.S. Army stores ^{and} services used in reconstruction of the line from Minturno to Rome will be maintained by P.B.S. This matter has been discussed with the Finance Sub-Commission and we are advised that at the present time no charges for such stores or services are to be made against the Italian Government. Such works, together with all other works performed in Italy by the Allied Armies on roads, bridges, power lines and other installations, may be considered later as part of a wider financial settlement. Such questions must obviously be considered at the highest governmental levels. Accordingly there is no need to report such Charges to the Allied Control Commission.

For and in the absence of Chief Elec. & Admin. Div.

for. *W. M. Laffer* Capt. S.R.
W.M. LAFER,
Lt. Colonel,
Chief El. & Adm. Div.

Copy to : Col. Croshaw
Chief Accountant A.C.C.

SECRET

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SECRET

HEADQUARTERS
ALLIED ARMIES IN ITALY
(Rear Adm. Echelon)
APO 400

AIH/rjs
7 May 1944

SUBJECT: Power Line Rehabilitation Naples to Rome.

TO : Headquarters Allied Control Commission, APO 394, U. S. Army.

1. On 12 April 1944 a letter, above subject was forwarded you, in conjunction with a letter from this headquarters to CG PBS, the 1st Indorsement from CG PBS to CAO AAI, and paraphrase of radio L-12618 (copy herewith).

2. No information has been received that the matters which pertain to ACC/AMB have been accomplished. Until these matters are accomplished, the PBS is unable to make the necessary preparations for the reconstruction of this vital line, with the result that essential power may not be available when needed.

3. It is requested that information may be furnished without delay as to the status of the situation, with an estimate as to the probable dated when PBS may be assured that the ACC/AMB responsibilities will have been completed.

A. L. HANBLIN
Brigadier General, U.S.A.
DCAO

1 Incl:
Radio L-12618

Copy to: CEB.

SECRET

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COPY

SECRET

HEADQUARTERS
PENINSULAR BASE SECTION
APO 782

(27)

Paraphrase of Radio L-12818 (PBS 21157), Cite SSCDS-217 S, SSQMC, SSSIG, SSSNG, SSCRD, from CG SOS NATOUSA to CG PENBASE for action, CG NATOUSA for information, classification SECRET, precedence OPERATIONAL PRIORITY, dated 28 March 1944.

Subject is power line rehabilitation Naples to Rome; reference PENBASE 10250, 5 March and SOS radio L-3901, CITE SSSNG 115, dated 9 March. You are to inform ACMF Ada Ech that you are authorized to undertake the rehabilitation of West Coast transmission lines from Naples to Rome under the following conditions only:

- a. The work you will undertake is to be only that which you consider to be a military necessity.
- b. Rehabilitation beyond the scope of military necessity as determined by CG PBS is the responsibility of ACC/AMB in which CG PBS does not participate.
- c. ACC/AMB will furnish food for civilian labor, pay civilian wages, pay contract costs and purchase materials locally available. When ACMF Ada Ech accepts the foregoing conditions and submits a satisfactory plan acceptable to you for their fulfillment, you are authorized to proceed with the work. You are authorized to issue minimum essential tentage, bedding and housekeeping equipment required for use of civilian employees in the field. 6-Signal Corps K-43 Line trucks, 4-motorized air compressors, 4-truck mounted or crawler type cranes are authorized for issue to 345 Engr General Service Regt. As available in depot stocks with miscellaneous small tools as needed. Issues of Ord equipment in excess of TO/E are not authorized. You are to submit additional requirements to this headquarters for approval.

ACTION -- Eng
INFO -- QM, SLG, G-4, Ord, HQ ACC, BPA, CG, Secy.

SECRET

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SECRET

(26)

ENGINEER SERVICE
HQ. PENINSULAR BASE SECTION
APO 782

DSB/rak
6 May 1944.

675. BFENG

SUBJECT: Rehabilitation of Rome Electric Transmission Line.

TO : Colonel J. P. Growdon, C. E.,
Central Electrical Board, A.A.I., APO 400.

1. Reference is made to letter, Headquarters A.C.C., Public Works and Utilities Sub-Commission, file number ACC/102/PWU, dated 3 May 1944, subject as above.

2. Since vendors and manufacturers may question the ability of the Italian State Railways to meet its obligations and they may therefore refuse to sell or enter into the manufacture of required items, it is important that they be given some measure of guarantee that their invoices will be paid. It is also important, in case vendors or manufacturers question the authority of the Engineer, P.B.S., to make purchases for the account of the Italian State Railways, that it be clearly stated that he has such authority. It is accordingly suggested that

- a. The last sentence of paragraph 2 (Financing) be deleted.
- b. Paragraph 2 (Materials) be revised to read to the following effect:

"It is understood that the transmission line will be rehabilitated with materials obtainable locally. The Engineer, Peninsular Base Section, is authorized to procure locally for the account of the Italian State Railways all materials and services which in his sole opinion are required for the rehabilitation of the Naples-Rome transmission line with the understanding that he or a representative designated by him will certify on each invoice that he has received the materials or services itemized thereon and forward it to the Allied Control Commission for final approval and payment by the Italian State Railways. The Allied Control Commission guarantees prompt payment by the Italian State Railways of all such invoices. In the event that requisitioning of local materials becomes necessary, it will be effected by the Allied Control Commission upon application by the Engineer, Peninsular Base Section."

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SECRET

3. As to the cost of such labor, materials and equipment as may be furnished by the United States, it is necessary that a statement be included as to method of reimbursement. Something to the following effect is suggested:

"Any cost to the United States in connection with the rehabilitation of the Naples-Rome transmission line will be reported to the Allied Control Commission which will take steps to debit the account of the Italian Government accordingly."

4. Your attention is invited to the fact that a plan acceptable to the Commanding General, Peninsular Base Section, must be furnished by A.A.I. and not A.C.C.

Donald S. Burns
DONALD S. BURNS,
Colonel, Corps of Engineers,
Engineer Officer.

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SECRET

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

25 gpg
VSR/mc

ACC/102/PWU

3 May 1944

Subject: Rehabilitation of Rome
Electric Transmission Line.

To : Central Electrical Board, A.A.I.

1. Reference is made to the letter dated 12 April 1944, Ref.: CEB/1/2, Subject: Power Line Rehabilitation Naples to Rome, which requested the submission of a plan relating to certain aspects of the rehabilitation of an electric transmission line to Rome. The plan is set forth below.

2. Financing. Arrangements have been made through the Italian Government, whereby all expenses in connection with the rehabilitation of the transmission line, including the payment of labor, and the cost of materials, will be paid by the Italian State Railways. Accordingly, all invoices of materials purchased locally should be referred to General di Raimondo, Director General of the Italian State Railways, who will arrange payment.

Labor. Together with American and Italian military personnel, approximately 300 civilian workers who are now employees of the Italian State Railways, will be used in the rehabilitation of the transmission line. They will remain in the employment of the State Railways during this work, and will be paid by the State Railways, on their own account.

Many of these workers are experienced in electric transmission line construction. The following scale of wages will be paid to the permanent railroad employees:

TRANSMISSION LINE WORKERS' WAGES

	Basic Daily Wage	Air raid wage	Mission Allowance	Total
Inspector	104	22	63	189
Works assistant	62	22	50	134
Foreman	67	22	50	139
Worker	43	22	32	97
Laborer	40	22	32	94

Arrangements have been made whereby any necessary additional civilian workers needed for the job will be hired and paid by the railways and reimbursed by the Italian government.

It is planned to pay the civilian workers in the field. It is understood that the Peninsular Base Section will furnish the minimum essential tentage to shelter the civilian employees who will be attached to Italian military units.

Food. At the present time, it is planned to provide the civilian employees with the normal civilian rations plus the supplementary rations for heavy labor working for the war effort. This food will be collected at Allied Control Commission Food warehouse by military personnel under the control of the Peninsular Base Section. Attempts are still being made to obtain the Italian basic military Field rations.

Materials. It is understood that the transmission line will be rehabilitated from materials obtainable locally. It is understood that these materials will be procured by the Engineer Service, Peninsular Base Section, which will receive, and approve all invoices, and then transmit them to the Director General of the Italian State Railways for payment. In the event that requisitioning of local materials becomes necessary, it is understood that requisitioning will be done by Allied Control Commission upon application from the Peninsular Base Section.

3. At the present time, it is not known how charges will be handled against the Italian Government for American military stores or services. It is recommended that for future use, records be kept by the Engineer Service Peninsular Base Service, of the time expended on this work, and of the military stores used.

W.M. LAPPER
Lt. Colonel
Chief El. & Admin. Div.

ALLIED MILITARY GOVERNMENT
INTER OFFICE MEMO

SECRET

(24)

From: Public Works and Utilities Sub-Commission.

SUBJECT: Food Italian Employees.

FILE No. ACC/684/FWU

TO: Col. Growden.

30 April 1944

We attach copies of letters Ref. 085 dated 14 April 44.,
and 084 dated 29 April 44., for your information.
including copy of letter from Ch. Admin. Officer. A.A.I.

W.M. Laffer
for W.M. LAPPER,
Lieut-Colonel.
Chief El. & Adm. Div.

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C O P YS E C R E T

(23)

VSR/mc

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

ACC/085/PWU

14 April 1944

Subject: Furnishing Food Rations to
Civilians on Electrical Project.

To : The Army Sub-Commission,
Allied Control Commission.

1. The Peninsular Base Section of the United States Army, and the Allied Control Commission have recently received authorisation from NATOUSA to rehabilitate, an electric transmission line running between Naples and Rome. The rehabilitation of this line is both a military and civilian necessity since it is the most positive means of providing a sizeable supply of electricity to Rome after the Allied occupation of that city. Experience in the past few months has shown that the enemy is endeavouring to destroy all important electric facilities during his withdrawal.

2. It is planned, in the rehabilitation work, for the Peninsular Base Section to provide the necessary supervision, some construction equipment, and the tentage needed to shelter the workers, both military and civilian.

3. Employed on the project will be several units of the Italian Army, somewhat experienced in this kind of work. Also, there will be used approximately 300 civilians who are presently employees of the Italian State railways, and who are experienced in the erection of electric transmission lines. The civilian employees and the Italian Army personnel will be billeted together.

4. Some units of an American Army engineer regiment will be used in a supervisory capacity. It is believed likely that much of the work will take place near the battle area.

5. The Allied Control Commission has been charged amongst other things, with arranging for the payment and the feeding of the civilian employees on this project.

6. Details are rapidly being settled; however one point of concern which still exists is that it will be necessary to feed the Italian soldiers and civilians in the same messes. The Italian soldiers will receive the Italian Basic Field Ration, which, because it is issued to combat forces, contains more food than the present authorised civilian ration; which would, normally be supplied to the civilian workers.

7. It is strongly believed that justification exists to furnish the Italian Basic Field Rations to the civilian employees in this case because:

- (a) Of the great importance of the transmission line, and the consequent necessity of avoiding sources of friction between the Italian soldiers and civilians.

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- (b) The civilians will be under military supervision, subject to military discipline, and will be working in an area near the front.
- (c) The work will be of a strenuous character.

8. It is urgently requested that this matter be brought to the attention of the Italian Army authorities and that the Army Sub-Commission make the necessary arrangements to permit the civilian employees to receive the basic field ration during the construction of the Naples - Rome transmission line. It is further requested that this Headquarters be notified as soon as possible of the arrangements made.

W.M. LAFER,
Lieut-Colonel,
Chief, El. & Adm. Div.

C O P Y

(22)

S E C R E T

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

VSR/ccb

ACC/084/FWU

29 April 1944.

Subject : Food Rations for Workers on Electrical Project

To : Headquarters, Fifteenth Army Group,
Attention : Chief Engineer.

1. Reference is made to the attached correspondence relating to the rehabilitation of a transmission line between Naples and Rome. This line, will provide the only certain sizeable supply of electricity to Rome. You are aware of the extreme importance of this line.
2. We are trying to obtain Italian military basic field rations for the civilian workers who will be working with Italian troops. As will be noted in letter dated 27 April 1944 from A.A.I., permission was not obtained.
3. Any assistance which you can give in support of our application will be appreciated, as we believe this is the only satisfactory way in which the civilian workers can be supplied with food while working with Italian Army units.

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

Enclos. 3.

S E C R E T263
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C O P Y

SUBJECT:- Rations for Civilians on Electrical Project (21)HEADQUARTERS
ALLIED ARMIES IN ITALY
1047/4Q1Public Works and Utilities Sub-Commission,
A.C.C.APR 44.

Reference your ACC/085/PWU dated 14 Apr 44 addressed to Army Sub-Commission.

1. Your request to feed civilians from Allied or Italian Military stocks has frequently been taken up with A.F.H.Q.; but for the exception of certain authority granted to Army Commands, no ruling has been given.
2. It is noted that Italian Military and civilians will be working together on this project. It is felt that if provision were made for separate messing and billeting, the handicap mentioned in your letter would be more readily overcome.
3. With regard to the difference in bulk between the Italian military ration scale and the civilian scale, the recent decision of the A.C.C. to increase the ration for civilian labour working for the Power Companies should provide enough sustaining food for the type of labour which will be employed on the project.
4. It is pointed out however that if the civilian labour from time to time employed within the Army area it will be left to the discretion of the Army Commander whether rations are to be issued on the Italian military scale or otherwise.
5. Unless therefor, the civilian labour is employed in the Army area it is regretted that the issue of the basic ration scale cannot be permitted.

Major General,
Chief Administrative Officer.Copy to - G-4
Army Sub-Commission

262.

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A.A.I.
CENTRAL ELECTRICAL BOARD
APO 400.

REF: CMB/1/2

12 April 44.

SUBJECT:- Power Line Rehabilitation Naples to Rome.

TO:- HQ ACC CMB.
(Attention of Col. D.S. Adams)

1. Enclosed is paraphrase of Radio L-12518 dated 28 March 44, and 1st Ind. of letter dated 2 April 44, from HQ PDS to CAC AAI (Adm Echelon).
2. Para 1 c states that ACC/ACC is to furnish food for civilian labor and pay civilian wages, all contract costs and for materials procured locally. You are requested to submit a detailed plan in accordance with the requirements of para 1 c.

JAMES P. GROWDON,
COLONEL CE,
Vice Chairman, AAI - C.E.B.

Lines 16 & 17 shown to Brig Gen Hamblen 1 May 44,
with request that steps be taken to accelerate
the supply of power to Rome. He said he
would write a letter to ACC with copy
to us.

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SECRET

1/2

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AG 674. EPNEG (8 Mar 44) 1st Ind.
HEADQUARTERS, PENINSULAR BASE SECTION, APO 782, 2 April 1944.

TO: The Chief Administrative Officer, A.A.I. Adm. Echelon, APO 400.

1. Authority has been granted to me in SOS Radio L-12818 (paraphrase attached) by the Commanding General, SGS, NATUSA, to proceed with the rehabilitation of the west coast trans-union line from Naples to Rome under the following conditions:

a. Work to be undertaken is to be only that which I consider a military necessity.

b. Rehabilitation beyond the scope of military necessity as determined by me is to be considered an ACC/ANG responsibility in which I am not to participate.

c. ACC/ANG is to furnish food for civilian labor and pay civilian wages, all contract costs and for materials procured locally.

d. Minimum essential tentage, bedding and housekeeping equipment required for the use of civilian labor in the field are to be issued from Peninsular Base Section stocks.

2. If the foregoing conditions are acceptable to you, it is requested that you submit a plan for the fulfillment of those listed under paragraph 1 c. If this plan is satisfactory to me, I am authorized to proceed with the work.

ARTHUR R. WILSON
Major General, U.S. Army
Commanding

1 incl added:
Paraphrase SOS L-12818.

Prepared by Engr Service PB3
D3B, Originating Officer.

Rewritten by C-1 at C/S direction.

L-12818 is PB3 #21157.

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SECRET

HEADQUARTERS
PENINSULAR BASE SECTION
APO 782

Paraphrase of Radio L-12818 (PBS 21157), cite SSCDS-217 S, SSQMO, SSSIG, SSENG, SSORD, from CG SOS NATUSA to CG PENBASE for action, CG NATUSA for information, classification SECRET, precedence OPERATIONAL PRIORITY, dated 28 March 1944.

Subject is power line rehabilitation Naples to Rome; reference PENBASE 10254, 5 March and SOS radio L-3901, CITE SSENG 115, dated 9 March. You are to inform ACFM Adm Ech that you are authorized to undertake the rehabilitation of West Coast transmission lines from Naples to Rome under the following conditions only:

- a. The work you will undertake is to be only that which you consider to be a military necessity.
- b. Rehabilitation beyond the scope of military necessity as determined by CG PBS is the responsibility of ACC/AMC in which CG PBS does not participate.
- c. ACC/AMC will furnish food for civilian labor, pay civilian wages, pay contract costs and purchase materials locally available. When ACFM Adm Ech accepts the foregoing conditions and submits a satisfactory plan acceptable to you for their fulfillment, you are authorized to proceed with the work. You are authorized to issue minimum essential tentage, bedding and housekeeping equipment required for use of civilian employees in the field. 6-Signal Corps K-43 Line trucks, 4-motorized air compressors, 4-truck mounted or crawler type cranes are authorized for issue to 345 Engr General Service Regt. As available in depot stocks with miscellaneous small tools as needed. Issues of Ord equipment in excess of TO/E are not authorized. You are to submit additional requirements to this headquarters for approval.

ACTION - Eng

INFO - QM, SIG, G-4, Ord, HQ ACC, BPA, CG, Secy.

U. S. SECRET

Equals British MOST SECRET

HQ ACMF (Adm. Echelon)
APO 400ALH/jra
8 March 1944

SUBJECT: Allocation Electrical Rehabilitation Project.

TO : Commanding General, Peninsular Base Section, APO 782,
U. S. Army.

1. In conformity with the provisions of radio instructions (Freedom to Flambo - 44768 - Sigs No: 4632 131/C2) and pursuant to action of the ACMF Central Electrical Board at its meeting on 14 February 1944, the rehabilitation of the electric transmission line from the Capuano Steam Plant in Naples to the Prenestina substation in Rome is allocated to the Commanding General, Peninsular Base Section.

2. The double circuit Volturno line from the Doganella plant to the crossing of the S.M.E. Liri line, the double circuit S.M.E. Frattamaggiore line to Minturno and the F.F.S.S. single circuit line from Minturno to Rome are to be repaired and connected to form a single circuit 60 kv line from the Capuano Steam Plant, Naples, to the Prenestina Substation, Rome.

3. So far as practicable the material required to repair the lines, Capuano to Minturno, is to be obtained by cannibalizing the Volturno line in sections not yet repaired. Similarly material required to repair the F.F.S.S. line, Minturno to Rome, should be procured, so far as practicable, from stock now in possession of the F.F.S.S. and by cannibalizing parts of the S.M.E. 150 kv. Pescara-Frattamaggiore line. The Minturno-Rome line should be constructed with the same insulation and clearance as the original line.

4. In all rehabilitation work the maximum amount of material from damaged and unnecessary lines should be used. The Central Electrical Board will undertake to locate and provide required materials not under the control of Commanding General, Peninsular Base Section, by salvage and cannibalization of other Italian systems including Sicily and Sardinia. Wherever work is done or materials are salvaged in areas not under control of Commanding General, Peninsular Base Section, the Central Electrical Board will inform the proper area authority and arrange for such assistance from that area authority in providing materials and expediting the work as is practicable. When new material or equipment is required which becomes a part of the electrical system, the Commanding General, Peninsular Base Section, should consult the Central Electrical Board as to the source supply. Items required to be issued from British or American mili-

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U. S. SECRET

(over)
Equals British MOST SECRET

U. S. SECRET
Equals British MOST SECRET

S23

S28

tary stocks should be procured and authorized in accordance with existing instructions of the respective supply services.

5. Minimum use should be made of Allied military units. Maximum use will be made of Italian commercial firms and civil labor. In connection with payment of services and supplies furnished from Italian resources attention is invited to AFHQ Administrative Memo, No. 95, dated 27 December 1943. Every effort will be made by direct action between Commanding General, Peninsular Base Section and Allied Control Commission to assure that, to the maximum extent practicable, the project is financed both as to labor and materials by the Italian Government.

6. The Commanding General, Peninsular Base Section, is requested to take the necessary steps to secure authority for the use of Allied stores and equipment including accommodation stores and food as may be required for the prompt accomplishment of his allocated task.

7. The rehabilitation should provide only reasonable safety and continuity of operation. Special safety features such as double insulator strings and duplicate switches may be omitted. State safety codes and regulations may be disregarded.

8. The ability to transmit power to Rome within 30 days after the occupation thereof is desired.

W. D. Hamilton
Major General,
Chief Administrative Officer.

Copy to: ACME
ACC
AFHQ
SOS NATOUSA
5th Army
8th Army
2 Dist.
3 Dist.
CEB
AFSC/ATO
RN
DDW Flambo
DCLG "
G-4 "

U. S. SECRET
Equals British MOST SECRET

4998

N-1588
HEADQUARTERS PENINSULAR BASE SECTION

10 MARCH 1944

SECRET
PRIORITY

SECRET

TO (ACTION) : CG PENBASE
(INFORMATION) : NONE
FROM : SIGNED LAUKIN
DATE TIME SIGNED : 092115 A
DATE TIME REC'D : 100328 A
REF NR : L-3901
CITE : SSENC-195, SSCPS



E.P.M.

TRANSMISSION LINE REHABILITATION MAPLES TO HOME PENBASE CABLE 10254

DATED 5 MARCH IS SUBJECT. PROPOSAL FOR ACC/AMG COOPERATION AND OTHER FEATURES PRESENTED TO NATOUA FOR APPROVAL. WILL ADVISE. CONTINUE PLANNING ALONG LINES PROPOSED BY YOU AND KEEP THIS HEADQUARTERS ADVISED PERIODICALLY AS PLANS DEVELOP. BECAUSE OF DETAIL INVOLVED SUBMIT PLANS BY LETTER INSTEAD OF CABLE. BY PLANS IS MEANT GENERAL SCHEME TO INCLUDE ROUTE, COSTS INCURRED AND ANTICIPATED, DEPOT STOCKS ALLIOTED TROOPS AND LABOR INVOLVED, AND ALLIED ADMINISTRATIVE FEATURES BUT INCLUDE DETAILS OF ENGINEERING.

ACTION : ENGR O
INFO : G-4
: SECT'Y GEN. STAFF
: COMMANDING GENERAL

By ACC (attn Col. Browdon)

SECRET

A.C.C. DISTRIBUTION

(INFO) - Econ Sec. (for Col. Browdon)

" DEP. CC.
" . Telecommunications & posts
" . 5575

10 Mar
1.6

FOWIT
 5 ARMY
 8 ARMY
 P.B.S.
 No 3 District
 A.F.H.Q.

R
⑪

Copies to Vice Chairman, A.C.M.F. Central Electrical Board
 C.E. A.C.M.F.
 D.D.W.
 Chief Commissioner A.C.C.

1. The early rehabilitation of electric power supply in the Rome area will be essential to military operation when Rome has been captured.
2. On the recommendation of the A.C.M.F. Central Electrical Board, it has been decided that the responsibility for repairing the main power lines to Rome shall rest with P.B.S. while D.D.W. A.C.M.F. shall be responsible for the provision of emergency power equipment at Rome.
3. Addressees of this letter are requested to assist C.G. P.B.S. in the execution of the work represented in par. 2 above by the provisions of stores etc. Required by him.
4. A.F.H.Q. are requested to state the conditions under which stores to be provided from military sources, including S.O.S. NATOUSA and RN. may be furnished for the rehabilitation and operation of the electrical power systems in ITALY.

File

ACTMF - CCB

FOUR
5 Army
8 Army
PSS

No. 3 District

ARH

Copies to Vice Chairman, ACME Under Electrical Service
CS ACME
DDW
Chaplain's Office

1. The early in state to take of electric power supply
in the ACME area will be essential to military operations
when Rome has been captured.

2. On the recommendation of the ACME Under Electrical
Board, it has been decided that the components of the
expanding the main power line. It seems shall not
with PSS, which DDW ACME shall be responsible for
the provision of emergency power equipment at
Rome.

3. Addressees of this letter are requested to assist
CS PSS in the execution of the work referred to in
para 2 above by the provision of stores etc required
by them. At this particular time, no separate

(16)

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They have a very

1. The early evaluation of electric power supply in the course will be essential to military operations when Rome has been captured.
2. By the recommendation of the Atomic Energy Control Board, it has been decided that the components of the supplying the main power line, it seems shall not with PWS, which DOS seems shall be responsible for the provision of emergency power equipment at Rome.
3. Addressee of the letter has requested to assist CG PWS in the execution of the work assigned in para 2 above by the provision of stores also required ^{by him} ~~of the work~~. ~~At this particular time equipment~~
~~is attached CG NATOUSA in order to secure~~
~~from him authority for the provision of~~
~~stores or other quantities required by CG PWS.~~
4. Letter has requested to state the conditions under which stores are provided from military sources, including SOS NATOUSA and SEP, may be furnished for the rehabilitation and operation of the electric power system in 1944.

HQ ACMF (Adm. Echelon)
APO 400

ALH/rjs
3 March 1944

MEMORANDUM: Draft of Directive of Power Rehabilitation.

1. There is attached hereto a draft of the proposed directive to Commanding General, Peninsular Base Section, in connection with the rehabilitation of the Naples-Rome power system. May I have your comments in written form as soon as practicable? If no comments are desired, request you state your agreement.

A. L. HAMILTON
Brigadier General, U.S.A.
DCAO

Copy, including draft, to:

CG PDS
VP ACMF CEB(2)
Works Flambo
Q Flambo

254

253

(13)

HQ ACMF (Adm. Echelon)
APO 400ALH/rjs
3 March 1944

SUBJECT: Allocation Electrical Rehabilitation Project.

TO : Commanding General, Peninsular Base Section, APO 782,
U. S. Army.

1. In conformity with the provisions of radio instructions (Freedom to Flambo - 44768 - Sigs No: 4632 131/Q2) and pursuant to action of the ACMF Central Electrical Board at its meeting on 14 February 1944, the rehabilitation of the electric transmission line from the Capuano Steam Plant in Naples to the Prenestina substation in Rome is allocated to the Commanding General, Peninsular Base Section.

2. The double circuit Volturno line from the Doganella plant to the crossing of the S.M.E. Itri line; the double circuit S.M.E. Frattamaggiore line to Minturno and the F.F.S.S. single circuit line from Minturno to Rome will be repaired and connected to form a single circuit 60 kv line from the Capuano Steam Plant, Naples, to the Prenestina Substation, Rome.

3. So far as practicable the material required to repair the lines, Capuano to Minturno, will be obtained by cannibalizing the Volturno line in sections not yet repaired. Similarly material required to repair the F.F.S.S. line, Minturno to Rome, will be procured, so far as practicable, from stock now in possession of the F.F.S.S. and by cannibalizing parts of the S.M.E. 150 kv. Pescara-Frattamaggiore line. The Minturno-Rome line should be constructed with the same insulation and clearance as the original line.

4. In all rehabilitation work the maximum amount of material from damaged and unnecessary lines will be used. The Central Electrical Board will undertake to locate and provide required materials not under the control of Commanding General, Peninsular Base Section, by salvage and cannibalization of other Italian systems including Sicily and Sardinia. Wherever work is done or materials are salvaged in areas not under control of Commanding General, Peninsular Base Section, the Central Electrical Board will inform the proper area authority and arrange for such assistance from that area authority in providing materials and expediting the work as is practicable. When new material or equipment is required which becomes a part of the electrical system, the Commanding General, Peninsular Base Section, will consult the Central Electrical Board as to the source of supply. Items required to be issued from British or American mili-

253

tary stocks will be procured and authorized in accordance with existing instructions of the respective supply services.

5. Minimum use will be made of Allied military units. Maximum use will be made of Italian commercial firms and civil labor. In connection with payment of services and supplies furnished from Italian resources attention is invited to AFHQ Administrative Memo, No. 95, dated 27 December 1943. Every effort will be made in conjunction with Allied Control Commission to permit direct financing of the rehabilitation by Italian funds.

6. The Commanding General, Peninsular Base Section, will take the necessary steps to secure authority for the use of Allied stores and equipment including accommodation stores and food as may be required for the prompt accomplishment of his allocated task.

7. The rehabilitation will provide only reasonable safety and continuity of operation. Special safety features such as double insulator strings and duplicate switches may be omitted. State safety codes and regulations will be disregarded.

8. The ability to transmit power to Rome within 30 days after the occupation thereof is desired.

Major General,
Chief Administrative Officer.

A.C.M.F.
CENTRAL ELECTRICAL BOARD

(12)

24 February 1944

SUBJECT: Rehabilitation of Naples-Rome transmission line

TO : D/CAO - A.C.M.F.

1. The A.C.M.F. - C.E.B. at its meeting on 20 February 1944 allotted the rehabilitation of the Naples-Rome transmission line to the P.B.S.
2. It is requested that the attached directive be issued.

JAMES P. GROWDON
Colonel CE
Vice Chairman A.C.M.F. - C.E.B.

A.F.H.Q. Adv Adm Echelon
C.M.F.

(11)

TO: C.G. F.E.S.

24 February 1944

A.F.H.Q. Adv Adm Echelon
Adm Instruction No _____

Rehabilitation of Naples-Rome Transmission Line

1. You will proceed at once to rehabilitate the electric transmission line from the Capuano Steam plant in Naples to the Prenestina substation in Rome.
2. The double circuit Volturmo line from the Doganella plant to the crossing of the S.M.E. Liri line; the double circuit S.M.E. Prattomaggiore line to Minturno and the F.F.S.S. single circuit line from Minturno to Rome will be repaired and connected to form a single circuit 60 kv line from the Capuano Steam plant, Naples, to the Prenestina Substation, Rome.
3. Material required to repair the lines Capuano to Minturno will be obtained by "cannibalizing" the Volturmo line in sections not yet repaired. Material required to repair the F.F.S.S. line Minturno to Rome will be taken from stocks now in possession of the F.F.S.S. and by cannibalizing parts of the S.M.E. 150 kv. Pescara-Prattomaggiore line. Some types of repair parts can be manufactured locally. The Minturno-Rome line should be reconstructed with the same insulation and clearance as the original line.
4. In reconstruction of the Naples-Rome line the maximum amount of material which can be recovered from the damaged line will be used. The construction will provide only for reasonable safety and continuity of operation. Special safety features such as double insulator strings, duplicate or unnecessary switches will be omitted. State safety codes and regulations will be disregarded.
5. The rehabilitation of the Naples-Rome transmission line should be planned so that power can be transmitted to Rome within 30 days after occupation by Allied Forces.

MAJOR GENERAL
D.C.A.O.

250

C O P Y/rak 10A.C.M.F. Central Electrical Board
(Col. Growdon, Vice-Chairman)

Feb 23 1944

SECRET

VAPOUR 12

PRIORITY

AFHQ

Edited Literal

_____ Plan power supply for Rome. Reference your radio 48160 cite FHMOS which is paraphrase of MS 98923 of 4 February from Wright signed Somervell.

1st, supply generated by portable Army sets and used exclusively by military units.

2nd, 500 to 1500 kilowatts from small diesel sets available in Italy transported to Rome by water. 3rd, 5,000 to 7,500 KW transmitted at 60,000 volts over transmission lines to be reconstructed from Naples steam plant now being repaired. 4th, capacity of transmission line to be increased to about 15,000 kilowatts by installing transformers at Minturno and Rome and operating this line at nominal 150,000 volts. 5th, installation of synchronous condensers in Rome will add about 5,000 KW to power available. All equipment required by plan available in Allied Italy. If additional transformers can be found a total of about 25,000 kilowatts can be transmitted from Naples steam plant.

Further power for Rome can be generated by moving hydro-electric units from plants in Allied Italy to plants near Rome where generating units will probably be destroyed.

Time required to accomplish above depends on extent of enemy demolition and adequacy of the organization to which the work of reconstruction and cannibalization will be assigned

C O P Y

2498

C O P Y

by the ACMF Central Electrical Board. Is expected that materials available locally either in stock or from cannibalization of existing lines, supplemented by minor importations, will be sufficient. If the 6,000 kilowatts of portable generating equipment under order by Peninsular Base Section arrives in time it would be useful but is not included in plan.

New Subject: Restoration of power supply in Naples was as follows: (a) Naples occupied 1 October. No power available except undamaged 100 KW steam plant started operation 3 October for pumping water and refrigeration. (b) 17 October 700 KW generated by 3 Italian submarines. Work planned by Engineers, Peninsular Base Section, and British Navy and executed by latter. (c) 29 October diesel unit in local power plant repaired and operated generating 1,600 KW. Work done by British Navy and power plant employee. (d) 4 November 1 unit hydro-electric plant and transmission to Naples repaired adding 4,000 KW. Work done by British Engineer troops and power company employees at direction Engineers, Peninsular Base Section. (e) 7 November further transmission line repairs added 1,000 KW. Work done by power company employees under direction Peninsular Base Section. (f) 17 November repair of 150 KV transmission line from large undamaged hydro-electric plant in southern Italy added 15,000 KW. Work done by power company under direction Peninsular Base Section. (g) 3 January repair of 1 unit in hydro-electric plant to north and transmission line to Naples added 5,000 KW. Work done by power company and U. S. Engineer troops. (h) 20 January repair of 2nd transmission from south made total 30,000 KW available which is about 40% of normal supply.

New Subject: Answering specific questions. 1st, Portable diesel electric sets totaling about 3,000 KW would have been most useful if available immediately upon occupation of Naples. 2nd, Combat operations were not impeded by lack of power equipment but military effort as a whole would have been helped had generating sets totaling

2448

C O P Y

C O P Y

100 KW been immediately available. 3rd, Civilians suffered hardships due to lack of power for hospitals, bakeries, flour mills and similar installations which would have been alleviated had portable equipment described above been immediately available. 4th, U. S. Engineers of Peninsular Base Section planned and coordinated power rehabilitation program, performed a limited amount of the work and furnished transportation for labor and materials as required. Most of work done by power company employees. 5th, Italian engineers and other employees of power company have cooperated to the fullest extent but require Army direction and help.

247246

C O P Y

SECRET

OUTGOING MESSAGE

Office of Origin : A.C.M.F. Central
Electrical Board, signed Growdon

Date: 18 February 1944

Classification: SECRET

Telephone: Vapour 12

Precedence: PRIORITY

To: SOMERVELL FOR WRIGHT

REFER YOUR TELEGRAM OF MS 98923 OF 4 FEBRUARY SIGNED SOMERVELL. PLAN POWER SUPPLY FOR ROME. FIRST SUPPLY GENERATED BY PORTABLE ARMY SETS AND USED EXCLUSIVELY BY ARMY. SECOND 500 TO 1500 KILOWATTS MADE UP OF SMALL DIESEL SETS AVAILABLE IN ITALY TRANSPORTED TO ROME BY WATER. THIRD 5000 TO 7500 KW TRANSMITTED AT SIXTY THOUSAND VOLTS FROM NAPLES STEAM PLANT NOW BEING REPAIRED OVER RECONSTRUCTED LINE TO ROME. FOURTH CAPACITY OF TRANSMISSION LINE INCREASED TO ABOUT 15000 KILOWATTS BY INSTALLING TRANSFORMERS AT MINTURNO AND ROME AND OPERATING THIS LINE AT NOMINAL 150000 VOLTS. FIFTH INSTALLATION OF SYNCHRONOUS CONDENSERS IN ROME WILL ADD ABOUT 5000 KW TO POWER AVAILABLE ALL EQUIPMENT REQUIRED BY PLAN AVAILABLE IN ALLIED ITALY. IF ADDITIONAL TRANSFORMERS CAN BE FOUND ABOUT 25000 KILOWATTS CAN BE TRANSMITTED FROM NAPLES STEAM PLANT. FURTHER POWER FOR ROME CAN BE GENERATED BY MOVING HYDROELECTRIC UNITS FROM PLANTS IN ALLIED ITALY TO PLANTS NEAR ROME WHERE GENERATING UNITS WILL PROBABLY BE DESTROYED. TIME REQUIRED TO ACCOMPLISH ABOVE DEPENDS ON EXTENT OF ENEMY DEMOLITION AND THE ADEQUACY OF THE ORGANIZATION TO WHOM THE WORK OF RECONSTRUCTION AND CANNIBALIZATION WILL BE ASSIGNED BY THE A.C.M.F. CENTRAL ELECTRICAL BOARD.

IT IS BELIEVED THAT GENERATING EQUIPMENT SHIPPED FROM THE UNITED STATES WOULD ARRIVE TOO LATE TO BE USEFUL IN ROME AND ONLY EQUIPMENT AVAILABLE LOCALLY HAS BEEN INCLUDED IN PLAN. IF THE 6000 KILOWATTS OF PORTABLE GENERATING EQUIPMENT ORDERED BY P.B.S. ARRIVES IN TIME IT WOULD BE USEFUL. RESTORATION OF POWER SUPPLY IN NAPLES WAS AS FOLLOWS.

246

SECRET
-2-

NAPLES OCCUPIED 1 OCTOBER. NO POWER AVAILABLE EXCEPT UNDAMAGED 100 KW STEAM PLANT OPERATED 3 OCTOBER FOR PUMPING WATER AND REFRIGERATION. SEVENTEENTH OCTOBER 700 KW GENERATED BY THREE ITALIAN SUBMARINES ~~AVAILABLE~~. WORK PLANNED BY ENGINEERS P.B.S. AND BRITISH NAVY AND EXECUTED BY LATTER. TWENTY NINTH OCTOBER DIESEL UNIT IN LOCAL POWER PLANT REPAIRED AND OPERATED GENERATING 1600 KW. WORK DONE BY BRITISH NAVY AND POWER PLANT EMPLOYEES. FOURTH NOVEMBER ONE UNIT HYDROELECTRIC PLANT AND TRANSMISSION TO NAPLES REPAIRED ADDING 4000 KW. WORK DONE BY BRITISH ENGINEER TROOPS AND POWER COMPANY EMPLOYEES AT DIRECTION ENGINEERS P.B.S. SEVENTH NOVEMBER FURTHER TRANSMISSION LINE REPAIRS ADDED 1000 KW. WORK DONE BY POWER COMPANY EMPLOYEES UNDER DIRECTION P.B.S. SEVENTEENTH NOVEMBER REPAIR OF 150 KV TRANSMISSION LINE FROM LARGE UNDAMAGED HYDROELECTRIC PLANT IN SOUTHERN ITALY ADDED 15000 KW. WORK DONE BY POWER COMPANY UNDER DIRECTION P.B.S. THIRD JANUARY REPAIR OF ONE UNIT IN HYDROELECTRIC PLANT AND TRANSMISSION LINE TO NAPLES ADDED 5000 KW. WORK DONE BY POWER COMPANY AND U.S. ENGINEER TROOPS. TWENTIETH JANUARY REPAIR OF SECOND TRANSMISSION FROM SOUTH MADE TOTAL 30000 KW AVAILABLE WHICH IS ABOUT 40 PERCENT OF NORMAL SUPPLY.

ANSWERING SPECIFIC QUESTIONS. ONE. PORTABLE DIESEL ELECTRIC SETS TOTALING ABOUT 3000 KW WOULD HAVE BEEN MOST USEFUL IF AVAILABLE IMMEDIATELY UPON OCCUPATION OF NAPLES. TWO. COMBAT OPERATIONS WERE NOT IMPEDED BY LACK OF POWER EQUIPMENT BUT MILITARY EFFORT AS A WHOLE WOULD HAVE BEEN HELPED HAD GENERATING SETS TOTALING 3000 KW BEEN IMMEDIATELY AVAILABLE. THREE. CIVILIANS SUFFERED HARDSHIPS DUE TO LACK OF POWER FOR HOSPITALS, BAKERIES, FLOUR MILLS AND SIMILAR INSTALLATIONS WHICH WOULD

245

-2-

SECRET

SECRET

-3-

HAVE BEEN ALLEVIATED HAD PORTABLE EQUIPMENT DESCRIBED ABOVE BEEN IMMEDIATELY AVAILABLE. FOUR. U. S. ENGINEERS OF P. B. S. PLANNED AND COORDINATED POWER REHABILITATION PROGRAM. MOST OF WORK DONE BY POWER COMPANY EMPLOYEES. FIVE. ITALIAN ENGINEERS AND OTHER EMPLOYEES OF POWER COMPANY HAVE COOPERATED TO THE FULLEST EXTENT BUT ARE INEFFECTIVE WITHOUT ARMY DIRECTION AND HELP. IT IS BELIEVED THAT ITALIAN LABOR, EQUIPMENT AND MATERIAL SUPPLEMENTED BY IMPORTING A LIMITED AMOUNT OF ESSENTIAL SUPPLIES ARE ADEQUATE TO PROVIDE POWER FOR MILITARY AND ESSENTIAL CIVILIAN NEEDS IN THE AREA SOUTH OF FLORENCE PROVIDED THEY ARE FULLY EXPLOITED.

244

SECRET

PENINSULAR BASE SECTION

OFFICIAL BUSINESS

OUTGOING MESSAGE

Office of origin

Date

Classification

SECRET

(Restricted Confidential Secret)

Telephone

10286

(Responsible officer)

Precedence

PRIORITY

(Deferred Routine Priority Operational Priority Urgent)

To:

Edited Literal

Power is subject. Reference your telegram #48160, 6 February 1944. Plans for supplying power in Rome prepared by Growden are as follows:-

1. The first electric power in Rome will be that generated by portable generating sets belonging to various organizations of the Army. The power so generated will be used exclusively by the Army.
2. The next power available in Rome will be generated by two or three small diesel electric generating sets which have been discovered in Allied Italy. These sets will be mounted on an L.C.T. and will be taken from Naples to Rome by water. The known available diesel/electric generating sets available for this purpose have a total capacity of between 500 and 600 kilowatts. This power should be available in Rome within a very brief period after occupation by Allied Forces.
3. The next addition to the power supply at Rome will be transmitted from the Capuana steam plant in Naples over a 60 KV line from Naples to Minturno and a line belonging to the State Railways, from Minturno to Rome. It is proposed to rehabilitate this line as promptly as it is in Allied control. The time required for rehabilitation

Content and classification

Distribution

authenticated by

243

Signal Corps Message Center Number

(Do Not Write in This Space)

depends on the amount of damage done by the enemy. Operating at 60 KV, this line will deliver between 5,000 and 7,000 kilowatts of power in Rome. This power would be put on the 9 KV distribution circuits.

4. The next addition to the power for Rome will come from the installation of two 60 KV - 150 KV transformers in a temporary sub-station at Minturno and the installation of two 150 KV - 9 KV transformers in Rome. These transformers are now located in Southern Italy and must be disassembled for transport. This will permit operating the State Railway transmission line from Minturno to Rome at a nominal 150 KV and will permit the delivery of 10,000 to 15,000 kilowatts in Rome, where it would be available on the 9 KV distribution circuits.

5. An additional supply of power can be delivered in Rome by installing a synchronous condenser (which is available in Allied Italy) at the Rome end of the transmission lines. This will permit the delivery of a total of from 13,000 to 18,000 kilowatts in Rome.

6. If additional transformer capacity can be discovered to augment the transformers now planned for installation in the temporary sub-station at Minturno, an additional amount of power up to a total of 25,000 kilowatts can be delivered to Rome.

7. Further supply of power to Rome will depend on the damage to hydro-electric generating stations at Tivoli and Terni and the transmission lines connecting these generating stations to the Rome area."

Note that only equipment available locally is required. It is believed that generating equipment shipped from United States would arrive too late to meet Rome requirements.

The above plan can be executed in time to meet Rome situation only by setting up an effective organization to do the job and giving it the necessary supply. This has not been done. Answering specific questions: (1) October 2, 1943 Naples occupied.

All power facilities damaged and no power available except 100 KW steam plant which was started up ⁴ before October 1943. October 17, 1943 - 700 KW generated by

4 Italian submarines. Work done by Royal Navy and Engineers, PBS. October 29, 1943 - 1 diesel electric unit in local power plant repaired and operated at 1,600 KW.

Repairs effected by Royal Navy assisted by Engineers, PBS and Italian power plant employees. November 4, 1943 - 1 unit in hydro electric plant and transmission line from plant to Naples repaired adding 4000 KW available in Naples. Repairs by British Engineers and Italian civilians under supervision of Engineers PBS. November 7, 1943 additional transmission line repaired adding 1000 KW. Repairs by power company employees under supervision of Engineers PBS. November 17, 1943 - Main transmission line from large undamaged hydro electric plant southern Italy repaired and placed in operation; 15000 KW additional available. Repairs by power company employees under direction of Engineers PBS. January 3, 1944 - hydro electric plant and line to Naples partly repaired and operated; adding 5000 KW. Repairs by power company employees and US Engineer troops under direction of Engineers PBS. January 20, 1944 second transmission line from south repaired and operated making total of 30,000 KW available in Naples. Repairs by Italian power company employees under direction of Engineers PBS. Naples now has about 40 percent normal power supply. Additional supply of power must come from rebuilt hydro electric plants on which some work is being done by power company.

(1) (2) Actual combat operations not impeded by lack of power equipment but military effort as a whole would have been helped had portable diesel electric sets totaling about 3000 KW been available immediately upon occupation of Naples. (3) Hardships were suffered by civilians due to lack of power for hospitals, bakeries, flour mills and similar installations, which would have been alleviated had equipment in (2) above been available immediately upon occupation of Naples. (4) Engineers of PBS have planned and coordinated rehabilitation of Naples distribution system and organized the repair of generating plants and transmission lines utilizing power company personnel wherever possible. [Without their work Naples would be without power today.] (5) Italian civilian power engineers have cooperated to the fullest extent but are totally ineffective without Army direction and help. It is believed that Italian equipment and material supplemented by limited amount of essential supplies are adequate to provide power for ~~essential~~ ^{and essential civilian} military needs in the area south of Florence provided they are fully exploited.

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
APO 394
ELECTRIC POWER MISSION

RG

11 February 1944

TELEGRAM
SECRET
PRIORITY

TO : Sonervall for Wright

SIGNED: Grady

Reference MS 98923 of 4 February. Your telegram refers to military matters which I am not in a position to answer authoritatively. A central Electrical Board has been set up to handle electrical matters. Your telegram has been referred to the Board who will reply fully.

penally

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080206A

N 1109

RADIO

Signal Corps, United States Army

SECRET

Telegram

PRIORITY

GPO

Received at PENINSULAR BASE SECTION
SIGNAL MESSAGE CENTER

8 FEB 1944

19

SECRET

PRIORITY

ACTION COPY

4 copies

TO (ACTION) : FLAMBO FOR ROBERTSON

(INFORMATION) : FARGO FOR GRADY

FROM : SIGNED WILSON

DATE TIME SIGNED: 071927A

DATE TIME REC'D : 080206A

REFERENCE NR. : 48739

CITE : FHENG AND FHGDS



CERTAIN INQUIRIES FROM AGWAR HAVE BEEN REPEATED TO FARGO FOR GRADY IN CABLE 48160 THIS HEADQUARTERS. THESE INQUIRIES RELATE TO POWER PLANT PLANS FOR ROME AND FOR REPORT ON RESTORATION OF POWER SYSTEM OF NAPLES OR FOGGIA. IT IS DESIRED THAT THIS REPORT BE AS COMPLETE AS POSSIBLE AND TO INCLUDE ACTION TAKEN BY PBS OR OTHER LOCAL AGENCIES IN REHABILITATION WORK PRIOR TO ORGANIZATION OR YOUR CENTRAL POWER AGENCY. SUGGEST THAT REPLY TO INQUIRY BE COORDINATED THROUGH YOU OR YOUR POWER AGENCY PRIOR TO DISPATCH.

Info AMG Hqs
MGS ABV
FNG
H-4
sec
etc

Aec Thair
(Action) Ecom Sec (3)

239

ACTION COPY

FORM 713-A

CRYPTO

SECRET

87et
28

13149

Form 123D
061932ASignal Corps, United States Army^{N-906} RAD

SECRET Telegram

PRIORITY

2610

ECON-SEC

5

Received at

PENINSULAR BASE SECTION
SIGNAL MESSAGE CENTER

19

6 FEBRUARY 1944

SECRET

ACTION COPY

PRIORITY

TO (ACTION)

CG PBS FARGO FOR GRADY

(INFORMATION)

NONE

FROM

SIGNED CINC

DATE TIME SIGNED:

061435A

DATE TIME REC'D

061932A

REFERENCE NR.

48160

CITE

FHMG



THIS IS PARAPHRASE OF MS 98923 OF 4 FEBRUARY FROM WRIGHT
SIGNED SOMERVELL.

WHAT PLANS HAVE BEEN MADE TO CARE FOR ELECTRIC POWER NEEDS
IN ROME.

REPLY TO THIS QUESTION AT ONCE, EVEN THOUGH INFORMATION NOW
AVAILABLE MAY BE TENTATIVE, INCLUDING PRESENT ESTIMATE OF SITUATION
AND SUMMARY OF PROPOSED ACTION. ALSO CABLE EARLIEST FULL INFORMATION
CONCERNING EXPERIENCE AND METHODS USED TO RESTORE ELECTRIC POWER
SYSTEMS FOR EXAMPLE IN NAPLES AND FOGGIA. SPECIFICALLY: 1. WHAT
MATERIAL AND EQUIPMENT WERE LACKING WHICH YOU SHOULD HAVE HAD. 2.
WAS MILITARY EFFORT IMPEDED BY LACK OF EQUIPMENT. IF SO WHAT EQUIP-
MENT. 3. WAS UNDUE HARDSHIP CAUSED TO CIVILIANS BY LACK OF EQUIPMENT
WHAT EQUIPMENT. 4. WHAT AID AND EQUIPMENT WAS RECEIVED FROM CORPS OF
ENGINEERS. 5. WHAT AID WAS RECEIVED FROM ITALIAN CIVILIAN ENGINEERS.

FORM #18-A

CRYPTO

SINK

SECRET

12963

SECRET

N-906

PRIORITY

END OF PARAPHRASE.

2 REPLIES REQUIRED. NECESSARY TO EXPEDITE. WE WILL RELAY IMMEDIATELY UPON RECEIPT.

ACTION COPY

Action - a m & Hy ✓
 Info - Engr
 --- G-4
 --- Secy
 --- C. G.

Acc Thier
 (Action) Gen Sec (3)

237

SECRET

12963

HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394

4

7 February 1944

TO : *AMG 5th Army*
~~C.O., A.C.C., AMG~~ (Attention Col. J.O.M. Ashley)

SUBJECT: Status of Electric Power for Rome.

1. The problem of supplying Rome with Electric Power has been studied by an Executive and Technical subcommittee of the Electric Power Committee. A copy of the committee report is attached. It is believed that this report gives all the information at present available.

2. Replying to certain specific question in your letter of 21 January 1944. There is no other practical alternative route for transmitting power to Rome. The time required to import power into Rome after occupation by allied troops depends on several factors, such as the speed with which the advance is made and the amount of damage to transmission lines and equipment. It cannot be accurately estimated at this time.

3. It is suggested that a personal discussion of the power supply for Rome would be helpful.

James F. Growdon
JAMES F. GROWDON
Colonel C.E.
Chief, Electric Power Mission.

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APPENDIX "A"

MEMORANDUM FOR THE ELECTRIC POWER COMMITTEE

SUBJECT: POWER SUPPLY FOR ROME

1. The first electric power in Rome will be that generated by portable generating sets belonging to various organizations of the Army. The power so generated will be used exclusively by the Army.
2. The next power available in Rome will be generated by two or three small diesel electric generating sets which have been discovered in the Naples and Bari areas. These sets will be mounted on an L.C.T. and will be taken from Naples to Rome by water. The L.C.T. will move up the Tiber river to the site of a steam plant and will be anchored there. The known available diesel/electric generating sets available for this purpose have a total capacity of between 500 and 600 kilowatts. This power should be available in Rome within a very brief period after occupation by Allied Forces.
3. The next addition to the power supply at Rome will be transmitted from the Capuauna steam plant in Naples over a 60 KV transmission line from Naples to Minturno and over a single transmission line, belonging to the State Railways, from Minturno to Rome. It is proposed to rehabilitate this line as promptly as it is in Allied control. The time required for rehabilitation depends on several factors, among which is the amount of damage done by the enemy. Operating at 60 KV, this line will deliver between 5,000 and 7,000 kilowatts of power in Rome. This power would be put on the 9 KV distribution circuits.
4. The next addition to the power supply for Rome will come from the installation of two 60 KV - 150 KV transformers in a temporary sub-station at Minturno and the installation of two 150 KV - 9 KV transformers in Rome. These transformers are now located in Southern Italy and must be disassembled for transport. This will permit operating the State Railway transmission line from Minturno to Rome at a nominal 150 KV and will permit the delivery of 10,000 to 15,000 kilowatts in Rome, where it would be available on the 9 KV distribution circuits.
5. An additional supply of power can be delivered in Rome by installing a synchronous condenser (which is available in Allied Italy) at the Rome end of the transmission lines. This will permit the delivery of a total of from 13,000 to 18,000 kilowatts in Rome.
6. If additional transformer capacity can be discovered to augment the transformers now planned for installation in the temporary sub-station at Minturno, an

2. The next power available in Rome will be generated by two or three small diesel electric generating sets which have been discovered in the Naples and Bari areas. These sets will be mounted on an L.C.T. and will be taken from Naples to Rome by water. The L.C.T. will move up the Tiber river to the site of a steam plant and will be anchored there. The known available diesel/electric generating sets available for this purpose have a total capacity of between 500 and 600 kilowatts. This power should be available in Rome within a very brief period after occupation by Allied Forces.

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5. An additional supply of power can be delivered in Rome by installing a synchronous condenser (which is available in Allied Italy) at the Rome end of the transmission lines. This will permit the delivery of a total of from 15,000 to 18,000 kilowatts in Rome.

6. If additional transformer capacity can be discovered to augment the transformers now planned for installation in the temporary sub-station at Minturno, an additional amount of power up to a total of 25,000 kilowatts can be delivered to Rome.

7. Further supply of power to Rome will depend on the damage to hydro-electric generating stations at Fivoli and Terni and the transmission lines connecting these generating stations to the Rome area.

JAMES P. GROWDON
COLONEL C.E.
CHAIRMAN

EXECUTIVE & TECHNICAL SUB-COMMITTEE

JFG/WGM

1 FEBRUARY 1944

SECRET

HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394

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28 January 1944

TO : S.C.A.O., AMG - 5th Army.

SUBJECT: Electric Power for Rome.

1. The supply of Electric Power for Rome is being studied and work has been started although the plans have not yet been approved by the Electric Power Committee set up by A.F.H.Q. Adv Ech. to handle the matter.
2. In advance of such approval the questions contained in your letter of 21 January 1944 can not be answered by this office.
3. The information requested is not available from any other source.

JAMES P. CROWDON
Colonel CE
Chief, Electric Power Mission.

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SECRET

HEADQUARTERS
A.M.G. 5th. ARMY
A.P.O. 464 U.S. ARMY.

21st. January 1944.

SECRET.

To: Electrical Power Commission, A.C.C. ✓

From: S.C.A.O., A.M.G. 5th. Army.

1014.

Subject: Status of Electrical Power for Rome City.

1. This office desires information regarding Electrical power for Rome City. It is therefore requested that the following information be furnished this office if available. If not available in your office sources from which the information can be obtained is requested.

2. The information desired is as follows.

(a) Has a method of transmitting power into Rome been declared upon. If so which route.

(b) Are there alternative routes.

(c) Has the work been begun and if so what progress has been made.

(d) How soon after the entry of Allied troops into Rome will a power supply be available from outside Rome.

(e) What projects are under consideration and adopted for alternate supplies from portable sets for essential services, e.g. hospitals, sewerage works, water supply and telephone exchanges.

(f) What is the prosecution of the places referred to in (e) above.

(g) What power will be available and when from such temporary sets.

(h) What means have been adopted to ascertain the position in Rome and have any steps been taken to institute possible repairs.

John M. Ashley
J.M. ASHLEY,
COLONEL, CHIEF OF STAFF,
for S.C.A.O., A.M.G. 5th. ARMY.

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