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Folder ID: 1847781

Project ID: P009589

Dates: 9/4/1955 - 3/27/1957

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Washington, D.C.

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Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3



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298

FOR CORRESPONDENCE RELATING TO 3rd DVC Loan
see "INDIA - D.V.C. 3rd Loan"

THIS VOLUME IS CLOSED.

PLEASE SEE VOL. IV

March 27, 1957

Mr. Sudhir Sen
Director, Program Division
Technical Assistance Board
United Nations
New York, N. Y.

Dear Mr. Sen:

I am returning herewith the copy of "Damodar Valley Project - Revised Estimates for First Phase with Economic and Financial Justification" which you were kind enough to send me. Please accept my sincere thanks.

Sincerely yours,

LGM

L. Gray Marshall
Public Utilities Division
Department of Technical Operations

LGM/mms



GRAMS : DAVALLEC

PHONE : ALIPORE 1765

DAMODAR VALLEY CORPORATION.ANDERSON HOUSE, ALIPORE
CALCUTTA-27

No. G/G-54/57-1917

March 26, 1957.

Mr. L. Gray Marshall,
Public Utilities Division,
Department of Technical Operations,
International Bank for Reconstruction and
Development,
1818 H. Street, N.W.,
Washington 25 D.C.

Dear Sir:

✓ With reference to your letter dated the 11th March, 1957, I am directed to forward herewith a copy of the pamphlet "DVC Act with Rules and Regulations" together with a copy each of the DVC Fishery Regulations and the DVC Service (Conduct) Regulations which have since been promulgated under section 60 of the Act. The DVC Service Regulations which have recently been framed under section 60 of the Act have just been published in the Gazette of India and copies thereof are not available at present. A copy of these Regulations will be forwarded to you in due course.

India D.C.
VI-70
VI-71
VI-72

Yours faithfully,

K.B. Shom.
(K.B. Shom.)
ASSISTANT SECRETARY.

Encl: As above.

KB/sdg.
25.3.57.

ack Apr 2



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 26 March, 1957	Document Type Memorandum			
Correspondents / Participants To: Mr. Joseph Rucinski From: Mr. V. Narahari Rao				
Subject / Title India - Power Rates of D.V.C.				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			



Record Removal Notice

File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 25 March, 1957	Document Type Memorandum			
Correspondents / Participants To: Mr. Narahari Rao, Executive Director for India From: Mr. Joseph Rucinski				
Subject / Title India - Power Rates of DVC				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
Withdrawn by Tonya Ceesay	Date June 13, 2017			



GRAM : DAVALLEC

PHONE : 45-1765

Central File

In 72

DAMODAR VALLEY CORPORATION.

ANDERSON HOUSE, ALIPORE
CALCUTTA-27No.W/Disp-32/55⁵ Pt.II- 2292

March 21, 1957.

The International Bank for
Reconstruction & Development,
1818 H Street, N.W.,
Washington 25, D.C.,
U.S.A.

Subject:- Loan IB-72-IN for the
Damodar Project.

Gentlemen:

I am directed to invite a reference to Section
3 of Article II of the Project Agreement relating to Loan
IB-72-IN for the Damodar Project which reads as follows:

"Damodar will maintain or cause to be
maintained books, accounts and records
adequate to identify the goods purchased
in whole or in part with the proceeds
of the Loan, to disclose the end-use
thereof in the Project, to record the
progress of the Project and to reflect
in accordance with consistently main-
tained sound accounting practices
the operations and financial condition
of the Project."

2. As the Section stands, the word "goods" would
appear to embrace not only the various equipment but also
spare parts. The Corporation, however, doubts whether the
Bank really contemplated separate accounts of the spare
parts. Spare parts are not used by themselves but are
fitted to the machines as and when occasion arises. In
most cases the spares consist of very minor items and their
number is legion. At the initial stage, no separate Store
Receipt Book or Ledger was maintained for spare parts pur-
chased out of the proceeds of the Loan nor were they stocked
separately from other spares not covered by the Loan. Besides,
at the time of unpacking the spare parts no definite informa-
tion was available to determine whether they were covered by
the Loan. While adequate records are available for the entire
spare parts in a Project, no separate books or accounts have
been kept for the spares covered by the Bank Loan. Unlike cons-
truction equipment, spare parts have no serial numbers and it
is not possible at this stage to distinguish the spares purcha-
sed with Loan funds from others and to maintain separate

Circulated to Mr. A. 3/27

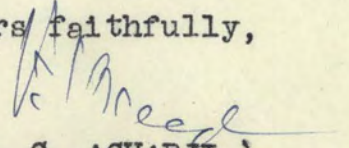
ack April 12

Contd.

separate accounts for them.

3. I am to request that in the circumstances stated above, the Bank may kindly agree that the requirement of the provision of the Agreement reproduced above may not be enforced in the case of spare parts purchased from the proceeds of the Bank Loan.

Yours faithfully,



(P. C. ACHARJI)
DEPUTY SECRETARY.

72 IN

(copy on
DVC Expansion
Project)

Mr. J. Rucinski

March 15, 1957

W.D.S. Fraser

INDIA - D.V.C.

1. With reference to the memorandum from Mr. Rao to you of March 8, reminding us of our promise to review the report made by the DVC Commercial Engineer on the DVC tariff, I have checked with TOD and they are preparing a memorandum to us on the subject next week. Mr. Marshall has pointed out to me that the above report is dated April 1956 since when there have been a number of changes in the load situation, e.g., a decision to go ahead with the Durgapur Steel Plant. He feels it will not be worth while our making a thorough review of it. At the same time TOD will be thinking about whether it will be necessary for a thorough study of DVC rate structure to be made. In any event I expect we will be able to convey something to Mr. Rao by the end of next week.

2. Regarding the other memorandum to you from Mr. Rao of March 8, submitting the report on the DVC expansion projects, Mr. Marshall's reaction is that it is so brief as to be almost useless. Half of the report describes the DVC scheme with which we are thoroughly familiar. The rest is a very brief description of what the DVC propose to do, and the information is not backed up by any supporting data. It is probable that the TOD will consider it necessary to make a field study of the project so that it looks as if we must disabuse Mr. Rao of any idea that it will be possible to negotiate the DVC loan for at least six months.

3. In the meantime you requested me to give you some figures of the cost of the new DVC projects. They are as follows:

	<u>Total</u>	<u>Local Cost</u>	<u>Foreign Cost</u>
	(crores Rs.)		
Bokaro (Fourth Unit)	4.56	1.18	3.38
Durgapur Thermal (2 units)	12.70	4.00	8.70
Transmission			
(a) Substations for railway electrification	0.77	0.22	0.55
(b) doubling existing 132 kv lines	1.00	0.72	0.28
(c) Misc. 33 kv extensions	1.00	1.23	1.04
(d) 132 kv Durgapur-Jamshedpur	1.27		
	<u>21.30</u>	<u>7.35</u>	<u>13.95</u>

Equivalent to.....\$ 29.3 million

WDSFraser/hvs

cc: Mr. Perry ✓

72 IN
DVC new
project
3/28

March 11, 1957

Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27, India

Gentlemen:

I would appreciate it greatly if you would send
me a copy of the latest DVC Act with rules and regula-
tions.

Sincerely yours,



L. Gray Marshall
Public Utilities Division
Department of Technical Operations

LGM/mms

ack Mar 11



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 08 March, 1957	Document Type Memorandum			
Correspondents / Participants To: Mr. Joseph Rucinski From: Mr. V. Narahari Rao				
Subject / Title India - Power Rates of D.V.C.				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			



GRAMS : DAVALLEC

PHONE : ALIPORE 1765

DAMODAR VALLEY CORPORATION.

ANDERSON HOUSE, ALIPORE

CALCUTTA-27

No. W/Disp-32/55 Pt.II - 1909

March 5, 1957.

To
The International Bank for
Reconstruction and Development,
1818 H Street, N.W.,
Washington 25, D.C.
U.S.A.

(Attention Mr. L. Gray Marshall)

Sub : Disposal of Construction equipment
purchased out of the I.B.R.D. Loan.

Gentlemen,

I am directed to invite a reference to Mr. Gray Marshall's letter dated 11th October 1956 and to say that our Chief Engineer has since reviewed the position of construction equipment, including those financed by the Bank, in the light of overall requirement of all the Projects still under construction for the six monthly period from 1st July to 31st December, 1956. As a result of this review, it became necessary to revise the earlier list sent with Member Mr. Ganguli's D.O. letter No. W/Disp-32/55-9013 dated 24th September 1956, the Bank's comments on which were communicated in Mr. Gray Marshall's letter dated 11th October 1956. A revised list showing the numbers of various construction equipment in all the Bank financed Projects and the numbers found surplus to requirement on the 31st December, 1956 is attached. The earlier list may kindly be regarded as superseded.

2. A statement is also attached furnishing full description of the various items of the Bank financed surplus equipment as shown in column 7 of the revised list. As desired, a certificate furnished by the Chief Engineer to the effect that the release of the surplus equipment will not have any adverse effect on the Projects still under construction is also appended.

contd.

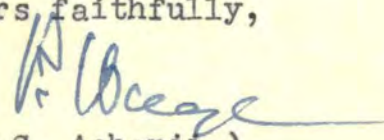
3. In view of the complete details furnished in the Statement in respect of the surplus equipment, it is hoped that the Bank will now approve the action already taken by the Corporation in the release of some machinery to other Projects of the DVC not covered by the Loans and other Government organisations, vide 'Remarks' Column of the revised list appended hereto read with paragraph 2 of the Explanatory Note attached to our letter dated 24th September 1956. ✓

4. I am also to request that if the manner of disposal of the surplus equipment as indicated in paragraph 4 of the Explanatory Note is acceptable to the Bank, permission may be given to the release of the undisposed of surplus machinery to other River Valley Projects, Government Departments in India, etc. in the order indicated therein as and when requests for such release are received by the Corporation, subject of course to a report being made to the Bank of each such transaction. A statement showing the amount of money received from the sale of the equipment will be included in this report.

5. I am to state for your information that out of the surplus equipment of Konar and Maithon, release of which to the Nagarjunasagar Project was approved ✓ by the Bank in Mr. Gray Marshall's letter dated 4th January 1957, 5 (five) numbers of Euclid Bottom Dumpers have since been retained and transferred to Panchet Hill Project for very urgent work. These have therefore not been accounted for in the list.

6. A further six-monthly report of the surplus equipment for the period from 1st January to 30th June, 1957, will be sent as soon as possible.

Yours faithfully,


(P.C. Acharji)
DEPUTY SECRETARY.

NNR:SKC.
5. 3.57.

ps

NOV 15 8 21 AM 1957
RECEIVED
SECRETARY
DEPT. OF
INDUSTRIES
GOVT. OF
INDIA

STATEMENT OF MACHINES FOR THE HALF YEAR
FROM 1ST JULY TO 31ST DECEMBER 1956

Sl. No.	Description of Machine.	Total number of machine at the commencement of the half year			Number required during the next six months	S U R P L U S			R E M A R K S
		I.B.R.D.	Others	Total		I.B.R.D. (vide detailed statement attached)	Others	Total	
		3	4	5		7	8	9	
1.	Tractor	75	10	85	42	36(a)	7	43	(a) Includes nine numbers placed at the disposal of Durgapur Coke Oven Project of the Government of West Bengal, two transferred to Kosi Project, four handed over to Konar contractors in terms of the agreement with DVC, one lent to Bermo Mines for temporary use and one transferred to DVC Durgapur Thermal Power Station.
2.	Dumpers	53	39	92	79	4(b)	9	13	(b) Includes one number placed at the disposal of Durgapur Coke Oven Project.
3.	P & H and other shovels.	8	12	20	15	3(c)	2	5	(c) Includes one number for sale to the Nagarjunasagar Dam which has been approved by the Bank in their letter dated the 4th January, 1957.
4.	Drgalines	7	1	8	5	2(d)	1	3	(d) Bank's permission has been received for sale of these two draglines to the Nagarjunasagar Dam (vide their letter dated the 4th January, 1957.)
5.	Motor Graders	3	2	5	2	1	2	3	
6.	Loader 9 BV Euclid	1	-	1	1	-	-	-	
7.	Cranes	5	3	8	7	1	-	1	
8.	Angle Dozers	16	4	20	19	1(e)	-	1	(e) This has been placed at the disposal of the Durgapur Coke Oven Project of the Government of West Bengal.

9.	Tournadozers, Bull- dozers, Tipdozers and Dozsecasters.	12	2	14	14	-	-	-	
10.	Hydraulic Grade Builders	3	1	4	3	1(f)	-	1	(f) This has been placed at the disposal of the Durgapur Coke Oven Project of the Government of West Bengal.
11.	Power Control Units	34	5	39	27	12(g)	-	12	(g) Includes two numbers placed at the disposal of Durgapur Coke Oven Project and two transferred to Kosi Project.
12.	Wagon Drills	43	5	48	26	20(h)	2	22	(h) Includes four C.P.T. Wagon Drills for which Bank's permission has been received for sale to the Nagarjuna-sagar Dam <u>vide</u> their letter dated the 4th January, 1957.
13.	Joy Diamond Core Drills	2	-	2	2	-	-	-	
14.	Dry Rock & Sinker Drills	14	13	27	27	-	-	-	
15.	Skillsaw Electric Drills	4	-	4	4	-	-	-	

Contd.

Sl. No.	Description of Machine.	Total number of machine at the commencement of the half year			Number required during the next six months	SURPLUS			REMARKS
		I.B.R.D.	Others	Total		I.B.R.D. (vide detailed statement attached)	Others	Total	
1	2	3	4	5	6	7	8	9	10
16.	Grinder Drill Sharper	1	-	1	Nil	-	-	1	
17.	Skillsaw Drill Grinder	1	-	1	1	-	-	-	
18.	Pneumatic Drill	2	-	2	2	-	-	-	
19.	Tempo Sheep Foot Roller	11	7	18	17	1	-	1	
20.	Ammeo Cylinder Grinder	1	-	1	1	-	-	-	
21.	Welding Sets	21	7	28	28	-	-	-	
22.	Concrete Vibrator	21	24	45	45	-	-	-	
23.	Pumps	7	15	22	22	-	-	-	
24.	Oil Rite Piston Pump with Farman Diesel Engine	1	-	1	1	-	-	-	
25.	Concrete Mixers	7	8	15	9	6(i)	-	6	(i) Includes two numbers trans-

26. Rippers	2	-	2	2	2	-	-
27. Alternaters Mercedes Benz	9	-	9	9	-	-	-
28. Rock Crushers	2	-	2	2	-	-	-
29. Conveyor Belts and Screens	1 set	-	1 set	1 set	-	-	-
30. Demolition Tools	5	-	5	5	-	-	-
31. Pavement Breaker	1	5	6	6	-	-	-
32. Letourneau Rooter	2	-	2	1	-	1	1
33. Letourneau Tourna Packer	2	-	2	2	-	-	-
34. Air Compressors	10	44	54	40	-	14	14
35. Radial Drilling Machine	1	-	1	1	-	-	-
36. Valve Face Grinder, Hand Grinder & Rock Master Grinder.	6	-	6	6	-	-	-
37. Air Receiver	2	-	2	2	-	-	-
38. N.N. Bending Machine	2	-	2	2	-	-	-
39. Bench Grinder, Drill Press etc.	8	-	8	8	-	-	-
40. Low Bed Trailers	3	2	5	4	1	-	1
41. Hydraulic Jack - 12 Ton capacity	1	-	1	1	-	-	-
42. Trailer - 5 Ton Capacity	1	-	1	1	-	-	-

Contd.

Sl. No.	Description of Machine	Total number of machine at the commencement of the half year			Number required during the next six months	SURPLUS			REMARKS
		I.B.R.D.	Others	Total		I.B.R.D. (vide detailed statement attached)	Others	Total	
1.	2	3	4	5	6	7	8	9	10
43.	Fordson Thames Tipping Trucks	1	5	6	6	-	-	-	
44.	Scrappers	1	9	10	8	1(j)	1	2	(j) This has been placed at the disposal of Durgapur Coke Oven Project.
45.	Utility Hoists	4	-	4	4	-	-	-	
46.	Simplex Spiral Classifier	1	-	1	1	-	-	-	
47.	Fork Lift Truck with Crane Boom	1	-	1	1	-	-	-	
48.	Diesel Engines	4	-	4	4	-	-	-	
49.	All-gearred Lathe and screw cutting Lathe	2	-	2	2	-	-	-	
50.	Willy's Jeep	1	5	6	6	-	-	-	
51.	Studebaker Pick-up	3	1	4	4	-	-	-	
52.	Power Expansion Arbors	1	-	1	1	-	-	-	

53. Torque Meter	3	-	3	3	-	-	-
54. Sprayers	11	✓	11	11	-	-	-
55. Lugh Hammer	1	-	1	1	-	-	-
56. Concrete Buckets	5	20	25	25	-	-	-
57. X-Ray Apparatus and Transformers	1	-	1	1	-	-	-
58. Euclid Dumper Top Extension	10 pairs	-	10	10	-	-	-
59. Dodge Power Wagons	4	-	4	4	-	-	-
60. WSG Lever Bar	1	-	1	1	-	-	-
61. P&H 955A Shovel Attachments	3	-	3	3	-	-	-
62. Trench Hoe attach- ment	1	-	1	1	-	-	-
63. Tanker - Truck Servicing	3	-	3	3	-	-	-
64. Street Plates for Allis Chalmer Tractors	6 sets	-	6 sets	6 sets	-	-	-
65. Tract-O-Tanker	1	1	2	Nil	1	1	2
66. Cement Silo			*	*		3	3

* Actual number is being
verified.

**

/sgt.
1.3.57.

47C

C E R T I F I C A T E .

Certified that the release of surplus I.B.R.D.-
financed equipments as shown in the enclosed list will
not have any adverse effect on the Bank-financed
Projects of Damodar Valley Corporation still under
construction.

A. M. Komora

A. M. Komora
Chief Engineer
Damodar Valley Corporation
Maithon.

Encl:- List of
equipment.

The 11th January, 1957.

LIST OF EQUIPMENTS FINANCED BY I.B.R.D. DECLARED SURPLUS

TO THE REQUIREMENT OF THE PROJECTS

• FOR THE HALF-YEAR ENDING 31ST DECEMBER, 1956.

Sl. No.	Description of equipment	Machine Sl.No.	Type and Size	Hours used	General condition	Original cost Rs. (Book Value)	Depreciated Value Rs.	Amount of money received from sale of equipment. Rs.	Name of present owner	Name of original owner	R E M A R K S
1	2	3	4	5	6	7	8	9	10	11	12
1.	Tractor, Allis Chalmer with dozer.	3793	Crawler, Model HD - 20.	5,947	Serviceable	103,256/-	26,480/-	-	Maithon Project.	Maithon Project.	
2.	-do-	4699	-do-	5,099	-do-	117,767/-	42,710/-	-	-do-	-do-	
3.	-do-	3788	-do-	4,874	-do-	103,256/-	40,332/-	-	-do-	-do-	At present placed at the disposal of Govt. of West Bengal for Coke Oven Plant, Durgapur.
4.	-do-	3467	-do-	7,375	-do-	107,310/-	8,411/-	-	-do-	B&I Project, Durgapur.	-do-
5.	-do-	3643	-do-	4,067	-do-	101,000/-	49,635/-	-	-do-	Maithon Project	-do-
6.	-do-	3876	-do-	6,803	-do-	103,306/-	15,479/-	-	-do-	-do-	Transferred to DVC Thermal Power Stn, Durgapur.
7.	-do-	3258	-do-	4,099	Poor, Needs major repairs.	126,338/-	61,623/-	-	Konar Project	Konar Project	
8.	-do-	3257	-do-	3,368	Unsatisfactory, needs overhaul.	126,338/-	73,165/-	-	-do-	-do-	

9.	-do-	without dozer	4159	-do-	2,461	Running Condition	113,138/-	78,340/-	-	B&I Project Durgapur.	B&I Project Durgapur.
10.	-do-	with dozer	2486	Crawler, Model HD - 19	5,137	Poor, needs overhaul	101,197/-	36,181/-	-	Konar Project	Konar Project
11.	-do-	-do-	1063	Crawler Model HD - 15	6,661	Serviceable	73,750/-	12,336/-	-	Maithon Project	Panchet Project
12.	-do-	-do-	267	-do-	6,225	-do-	72,286/-	16,012/-	-	-do-	Maithon Project
13.	-do-	-do-	270	-do-	5,208	-do-	70,148/-	24,474/-	-	-do-	-do-
14.	-do-	without dozer	909	-do-	3,007	Running Condition	77,438/-	48,330/-	-	B&I Project, Durgapur	B&I Project, Durgapur.
15.	-do-	-do-	914	-do-	2,185	-do-	77,438/-	56,287/-	-	-do-	-do- At present placed at the disposal of Govt. of West Bengal for Coke Oven Plant, Durgapur.
16.	-do-	-do-	919	-do-	2539	-do-	77,438/-	52,860/-	-	-do-	-do-
17.	-do-	-do-	1158	-do-	3,935	-do-	77,438/-	39,347/-	-	-do-	-do-

(Contd.....p/2.)

FOR THE HALF-YEAR ENDING 31ST DECEMBER 1952

TO THE REQUIREMENT OF THE PROJECTS

LIST OF EQUIPMENTS FINANCED BY I.B.E.D. DESCRIBED ABOVE

1	2	3	4	5	6	7	8	9	10	11	12
18.	Tractor, Allis Chalmer without dozer	1923	Crawler, Model HD - 15	3,106	Running Condition	77,438/-	47,372/-	-	B&I Project, Durgapur	B&I Project, Durgapur.	At present placed at the disposal of Govt. of West Bengal for Coke Oven Plant, Durgapur.
19.	-do- -do-	1674	-do-	5,934	-do-	81,125/-	20,954/-	-	Maithon Project	Maithon Project	-do-
20.	-do- -do-	2042	-do-	3,471	Running Condition	77,438/-	43,839/-	-	B&I Project, Durgapur	B&I Project, Durgapur.	-do-
21.	-do- -do-	1057	-do-	6,773	-do-	73,750/-	11,302/-	-	Panchet Project.	Panchet Project.	-do-
22.	-do- -do-	1052	-do-	9,405	-do-	73,750/-	Fully depre- ciated.	-	-do-	-do-	-do-
23.	-do- -do-	2581	-do-	2,597	-do-	73,750/-	52,299/-	-	B&I Project, Durgapur	B&I Project, Durgapur	
24.	-do- -do-	2582	-do-	3,223	-do-	77,438/-	46,239/-	-	-do-	-do-	
25.	-do- with dozer.	733	Crawler, Model HD - 9B.	2,927	Serviceable after repa- irs.	54,233/-	34,386/-	-	Panchet Project	-do-	
26.	-do- -do-	414	-do-	2,689	Running Condition but needs repairs.	54,233/-	35,996/-	-	-do-	-do-	
27.	-do- -do-	753	-do-	2,565	Running condition.	58,302/-	40,911/-	-	-do-	-do-	

28.	-do-	without dozer	761	-do-	1,808	Serviceable. Engine over-hauled at Maithon and lying as spare.	54,232/-	41,974/-	-	-do-	-do-		
29.	-do-	-do-	759	-do-	1,954	-do-	54,233/-	40,983/-	-	-do-	-do-		
30.	-do-	-do-	479	-do-	1,709	Running Condition.	54,232/-	44,678/-	44,678/-	B&I Project, Durgapur.	-do-	Transferred to Kosi Project, Govt. of Bihar.	
31.	-do-	-do-	728	-do-	2,370	-do-	54,232/-	38,163/-	-	-do-	-do-		
32.	-do-	-do-	757	-do-	1,586	-do-	54,232/-	45,551/-	45,551/-	-do-	-do-	Transferred to Kosi Project, Govt. of Bihar.	
33.	Tractor, Caterpillar with dozer.		10117	Crawler, Model D - 8		12,307	-	1,02,892/-	-	102,892/-	**	Konar Project	** Handed over to M/s. Hind Patel & Co., DVC Contractors at Konar as per terms of contract.
34.	-do-	-do-	10118	-do-	10,556	-	92,626/-	-	92,626/-	**	-do-		
35.	-do-	-do-	12429	Crawler, Model D - 7		11,378	-	82,232/-	-	82,232/-	**	-do-	
36.	-do-	-do-	12436	-do-	10,440	-	70,817/-	-	70,817/-	**	-do-		
37.	Dumper, Rear, Mack		1285D	Model LVID, 15 cu.yds. fitted with Cummins engine Model NHS		7,392	Serviceable	198,972/-	51,871/-	-	Maithon Project.	Panchet Project.	

(Contd.....p/3.)

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
38.	Dumper, Rear, Mack	1288D	Model LVID, 15 Cu.yds. fitted with Cummins engine Model NHS.	2,982	Serviceable.	1,98,972/-	139,630/-	-	Maithon Project.	Panchet Project.	
39.	Dumper, Bottom, Euclid.	13931	Model 70/FDT, 14 Cu.yds.	6,439	-do-	1,86,379/-	85,518/-	-	-do-	B&I Project.	At present placed at the disposal of Govt. of West Bengal for Coke Oven Plant, Durgapur.
40.	-do-	13859	-do-	8,159	-do-	1,87,602/-	34,439/-	-	-do-	Panchet Project.	
41.	Drilline, P & H.	14737*	Model 655B, 1½ Cu.yds.	7,497	Satisfactory	2,41,195/-	1,50,871/-	-	Konar Project.	Konar Project.	* Bank's permission for sale to the Nagarjuna Sagar Dam has been received vide their letter dt.4.1.57.
42.	-do-	14738*	-do-	6,228	Satisfactory, except starting engine which needs repair.	2,41,196/-	1,66,080/-	-	-do-	-do-	
43.	Shovel, P & H.	13908	Model 955A, 2½ Cu.yds.	7,643	Poor.	3,13,595/-	1,63,806/-	-	-do-	-do-	
44.	-do-	14384	-do-	9,102	Serviceable.	3,22,297/-	1,40,257/-	-	Maithon Project.	Konar Project.	
45.	-do-	13909@	-do-	9,105	Poor.	3,13,594/-	1,35,136/-	-	Konar Project.	Konar Project.	@ Bank's permission for sale to the Nagarjuna Sagar Dam has been received vide their letter dt.4.1.57.
46.	Wagon Drill Ingersoll Rand.	11223	Model FM3	2,000	Serviceable	14,100/-	9,400/-	-	Maithon Project.	Maithon Project.	
47.	-do-	11738	Model JHM	2,000	-do-	9,150/-	6,100/-	-	-do-	Panchet Project.	
48.	-do-	11749	-do-	2,000	-do-	9,150/-	6,100/-	-	-do-	-do-	

49.	-do-	11740	-do-	2,000	-do-	9,150/-	6,100/-	-	-do-	-do-	
50.	-do-	11753	-do-	2,000	-do-	9,150/-	6,100/-	-	-do-	-do-	
51.	-do-	11752	-do-	2,000	-do-	9,150/-	6,100/-	-	-do-	-do-	
52.	-do-	11736	-do-	2,000	-do-	9,150/-	6,100/-	-	-do-	-do-	
53.	-do-	11748	-do-	2,000	-do-	9,150/-	6,100/-	-	-do-	-do-	
54.	-do-	14306	MW 10A	2,000	-do-	15,456/-	10,291/-	-	-do-	Maithon Project.	
55.	-do-	11212	I.R. FM-3	2,000 (Approx.)	-do-	14,100/-	9,400/-	-	-do-	-do-	
56.	-do-	11553	-do-	2,000 (Approx.)	-do-	14,761/-	9,841/-	-	-do-	-do-	
57.	-do-	995	≠ CPT,G-300 M.W.	700	-do-	14,720/-	13,003/-	-	-do-	-do-	≠ Bank's permission for sale of the 4 C.P.T. Wagon Drills to the Nagarjuna Sagar Dam has been received, vide their letter dt.4.1.57.
58.	-do-	1015	≠ -do-	1300	-do-	14,720/-	11,531/-	-	-do-	-do-	
59.	-do-	1012	-do-	1000	-do-	14,720/-	12,267/-	-	-do-	-do-	
60.	-do-	1011	-do-	300	-do-	14,720/-	13,984/-	-	-do-	-do-	
61.	-do-	1016	≠ -do-	600	-do-	14,720/-	13,248/-	-	-do-	-do-	
62.	-do-	1013	-do-	400	-do-	14,720/-	13,739/-	-	-do-	-do-	
63.	-do-	996	≠ -do-	1000	-do-	14,720/-	12,267/-	-	-do-	-do-	
64.	-do-	1020	-do-	600	-do-	14,720/-	13,248/-	-	-do-	-do-	
65.	-do-	287	CPT,G-150 L.W.	75	-do-	9,701/-	9,580/-	-	-do-	-do-	
66.	Motor Grader, Austin Western.	H 3260	Model UD - 14A	2,200 (Approx.)	Running condition.	72,072/-	51,549/-	-	Panchet Project,	Konar Project.	
67.	Drill Sharpner.	-	Gardner Denver	Nil.	Brand New.	24,473/-	24,473/-	-	-do-	Panchet Project.	
68.	Quickway Crane.	2419	Truck-mounted.	667	Under Repair.	29,400/-	27,439/-	-	B&I Project, Durgapur.	B&I Project, Durgapur.	

Cont'd...4.

Mar 12 9 51

— 4 —

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
69.	Dozer - Angle for HD - 15 Tractor.	607	Pneumatic.	Nil	New.	21,535/-	21,535/-	-	B&I Project, Durgapur.	B&I Project, Durgapur.	At present placed at the disposal of Govt. of West Bengal for Coke Oven Plant, Durgapur.
70.	Hydraulic Grade Builder for HD - 15 Tractor.	610	Model 154	9,405	Serviceable.	20,510/-	8,914/-	-	Maithon Project.	Maithon Project.	-do-
71.	Power Control Unit for HD - 15 Tractor.	18861	Model WE - 2.	2,185	Running condition.	10,532/-	7,301/-	-	B&I Project, Durgapur.	B&I Project, Durgapur.	-do-
72.	Power Control Unit for HD - 9 Tractor.	18830	Model WE - 2.	1,709	-do-	10,532/-	7,901/-	7,901/-	-do-	-do-	Transferred to Kosi Project Govt. of Bihar.
73.	-do-	18831	-do-	3,106	-do-	10,532/-	6,140/-	-	-do-	-do-	At present placed at the disposal of Govt. of West Bengal for Coke Oven Plant, Durgapur.
74.	-do-	18837	-do-	1,586	-do-	10,532/-	8,056/-	8,056/-	-do-	-do-	Transferred to Kosi Project Govt. of Bihar.
75.	-do-	18838	-do-	3,471			5,681/-	-	-do-	-do-	At present placed at the disposal of Govt. of West Bengal for Coke Oven Plant, Durgapur.

76.	-do-	18836	-do-			5,580/-	-	-do-	-do-	
77.	-do-	18832	-do-	Idle	-do-	10,532/-	10,532/-	-	-do-	-do-
78.	Power Control Unit for HD - 15 Tractor.	18867	-do-	3,007	-do-	10,532/-	6,265/-	-	-do-	-do-
79.	-do-	18860	-do-	3,935	-do-	10,532/-	5,096/-	-	-do-	-do-
80.	-do-	18839	-do-	3,223	-do-	10,532/-	5,993/-	-	-do-	-do-
81.	Power Control Unit for HD - 20 Tractor.	769	Baker, Model 2X.	Nil.	New	10,106/-	10,106/-	-	-do-	-do-
82.	-do-	768	-do-	2,461	Running condi- tion.	10,106/-	7,005/-	-	-do-	-do-
83.	Concrete Mixer.	27165	Dejonj, Non- tilting.	Nil.	New.	6,812/-	6,812/-	-	-do-	-do-
84.	-do-	27166	-do-	Nil.	New.	6,812/-	6,812/-	-	-do-	-do-
85.	-do-	27167	-do-	Nil.	New.	6,812/-	6,812/-	-	-do-	-do-
86.	-do-	13740	Ransom Rapier, 14NT.	1,746	Running condi- tion.	19,346/-	-	15,975/-	-do-	-do-
87.	-do-	13743	-do-	2,529	-do-	19,346/-	-	14,464/-	-do-	-do-
88.	-do-	13745	-do-	4,871	-do-	19,346/-	9,945/-	-	-do-	-do-
89.	Low Bed Trailor.	-	-	-	Under Repair.	20,900/-	-	-	-do-	-do-
90.	Scraper, Onion Empire.	343	Model EM-13.	-	Serviceable.	46,675/-	46,675/-	-	Panchet Project.	Maithon Project.
91.	Sheep-Foot Roller Tempo.	1432	Model 502	438	-do-	28,069/-	27,456/-	-	Maithon Project.	-do-
92.	Tract-O-Tanker, Allis Chalmer.	116224	Model 148-673K	332	-do-	9,025/-	5,260/-	-	-do-	-do-

Transferred to Chambal
Project, Govt. Madhya Bharat

Hours used and depreciated
value under investigation.

At present placed at the
disposal of Govt. of West
Bengal for Coke Oven Plant,
Durgapur.

March 1, 1957

Mr. B.K. Massand
First Secretary
Embassy of India
2107 Massachusetts Avenue, N.W.
Washington, D.C.

Dear Mr. Secretary:

DVC Loan 72 IN

I enclose two copies of the letter dated February 20th
which you sent to us for confirmation concerning the revised
List of Goods for the above loan.

Sincerely yours,

W.D.S. Fraser
Department of Operations
Asia and Middle East

Attachments

WDSFraser/hvs

Mr. Ellsworth Clark

February 28, 1957

W.D.S. Fraser

INDIA - DVC (Loan 72 IN)

I attach, herewith, the original of a letter, dated February 20, ✓
from the First Secretary of the Indian Embassy, requesting our agreement
to the revised List of Goods, attached thereto. Would you please arrange
to have this letter photostated and circulated in the usual way?

Attachment

WDSF:cvb



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 28 February, 1957	Document Type Memorandum			
Correspondents / Participants To: Mr. P. J. J. Pinto From: Mr. W. D. S. Fraser				
Subject / Title India - DVC (Loan 72 IN)				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

India 72

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

OFFICE MEMORANDUM

TO: Mr. Joseph Rucinski

DATE: February 27, 1957

FROM: W.D.S. Fraser *WJ*

SUBJECT: INDIA - DVC (Loan 72 IN)

Feb 20
Attached is a letter, with three copies, requiring your signature to confirm DVC's request to change the List of Goods. The relevant correspondence in this connection is attached for your reference. I will arrange to have your name and the date typed in on the forms of confirmation as soon as you have signed them.

Attachments



GRAM: DAVALLEC

PHONE: ALIPORE 1765

DAMODAR VALLEY CORPORATION

ANDERSON HOUSE, ALIPORE
CALCUTTA-27

February 25, 1957.

D.O.No.PRO- 461

My dear Mr. Fraser,

Thank you for your letter of the 6th and for your very charming remarks about our latest booklet on the progress of the DVC. We shall of course be glad to attend to any references from you for photographs, etc.

Mr. Rau was happy to see your letter and asked me to thank you most warmly for your charming reference to him.

Kind regards,

C. Balan

(C. Balan.)

Public Relations Officer

W. D. S. Fraser, Esq.,
Department of Operations
Asia and Middle East,
International Bank for
Reconstruction and Development,
1818 H Street, N. W.,
Washington 25, D.C.

NO 1 5 15 PM 1957

RECEIVED
ASIA AND MIDDLE EAST
FEB 27 1957

DAMODAR VALLEY CORPORATION

ANDERSON HOUSE, ALIPORE
CALCUTTA-27

February 25, 1957.

D.O.No. PRO-461

Information Office



Thank you for your letter of the 6th and for your very charming remarks about our latest booklet on the progress of the DVC. We shall of course be glad to attend to any references from you for photographs, etc.

Mr. Ran was happy to see your letter and asked me to thank you most warmly for your charming reference to him.

(G. Balan.)
Public Relations Officer

W. D. S. Fraser, Esq.,
Department of Operations
Asia and Middle East,
International Bank for
Reconstruction and Development,
1818 H Street, N. W.,
Washington 25, D.C.

RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT
MAR 1 2 02 PM 1957

List of Goods

10/1/56

Feb. 20, 57
APPBasic Data Loan No. 72-ININDIA - D. V. C.Damodar Project1. Borrower and Guarantor - Government of India

2. <u>Loan No.</u>	3. <u>Loan Amount</u>	4. <u>Date Loan Signed</u>	
72 - IN	Originally \$19,500,000 After part cancelled in May 1954 \$10,500,000	January 23, 1953	
5. <u>Effective Date</u>	6. <u>Closing Date</u>	7. <u>Period of Grace</u>	8. <u>Term of Loan</u>
March 22, 1954	June 30, 1958	3½ years	24 years
9. <u>Exchange Rate</u>	10. <u>TOD Report</u>	11. <u>TOD Report Date</u>	12. <u>Interest Rate</u>
US \$1 = Rs. 4.76	TO - 2b	January 16, 1953	4-7/8%

13. Commitment Charge

3/4%

14. Amortization

Payments are to be made semi-annually starting on July 15, 1956 at \$262,000, increasing to \$718,000 for the final payment on July 15, 1977.

15. Objective

To provide an adequate supply of power at reasonable rates and to improve irrigation, flood control and inland navigation facilities in the Damodar Valley region and Northwestern India.

16. Justification

The Damodar Valley is one of India's most industrialized areas, with rich mineral deposits and a high agricultural potential. The Project is part of a comprehensive development scheme which will bring substantial economic benefits to the region, in the form of an increased power supply, expanded irrigation and flood control facilities and a navigation canal for cheaper transportation of coal and agricultural products.

17. Project Description

The project will involve the construction of:

(a) The Maithon Dam and Power Plant

This will be a multi-purpose earth and concrete gravity dam, rising 162 feet above the river bed on the Barakar river. The reservoir created behind the dam will have a capacity of 1,104,000 acre feet. In addition, the underground power plant will have a generating capacity of 60,000 kw.

(b) The Panchet Hill Dam and Power Plant

The dam will be a multi-purpose construction, built of earth and concrete and rising 133 feet above the river bed, on the Damodar River. The powerhouse, with a generating capacity of 40,000 kw, will be of conventional above ground design.

Both dams will have flood control as their primary function. The two power plants will be connected to the DVC transmission grid already under construction.

(c) Durgapur Barrage and Irrigation System

The barrage will be of the floating raft type constructed over three lines of sheet piling. It will include gates for releasing water, a navigation lock, fish ladders and a roadway. The concrete section of the barrage will be 2,305 feet long. The irrigation and navigation canal will connect the Damodar and the Hooghly Rivers and will be 80 miles long, 60 feet wide, with a minimum depth of 9 feet. The left Bank system besides the main canal will consist of 800 miles of branch canals and ditches, 398 miles of drainage channels and 50 miles of old canals will be rehabilitated. The right bank system will consist of 850 miles of main canals and ditches. There will also be lower locks at the Kunti River, regulators, falls and bridges.

18. Phasing

(a) Construction Schedule: 4 years

(b) Financial Schedule: (in millions of \$ equivalent)

(Prior to March 31, 1952)	\$10.00
1952/53	12.61
1953/54	29.66
1954/55	32.31
1955/56	12.68
	<u>97.26</u>
Interest during construction	5.83
	<u>\$103.09</u>

19. List of Goods

See attached list.

20. Borrower's Organization

The Damodar Valley Corporation (DVC) is a public corporation created in 1948 to execute the unified scheme of development of the Damodar Valley, for purposes of irrigation, flood control and generation of electric power. It is administered by a Board of Directors, consisting of a chairman and two other members, all of whom are appointed by the Central Government after consultation with the two provincial governments, Bihar and West Bengal, in which the Damodar Valley lies.

DVC has, by law, a virtual monopoly in supplying electric energy in the region. The capital costs of power are shared equally by the three participating governments, while the capital costs of irrigation and flood control are the responsibility of the provincial governments primarily.

DVC derives its income from the sale of electricity, the sale of water for irrigation, industrial and domestic use, and from navigation fees. Net profits, if any, are credited to the participating governments in proportion to their contribution. Deficits will be made good by the participating governments in the same proportion, except that the net deficit in respect to flood control is the responsibility of the West Bengal Government, the chief beneficiary. For a period of 15 years, however, if the Corporation runs in a deficit, interest charges and other expenditures are to be added to the capital cost, and all receipts will be taken in reduction of net cost.

To date, DVC's management has worked well. The morale of the organization is high, and the management and staff are devoted to their work. The three participating governments have fulfilled their obligations to provide the capital necessary to carry out the work in progress.

21. Design, Supervision and Construction

DVC extended its previous contract with Harza Engineering Company of Chicago to cover the design and the supervision of the construction of the Maithon and Panchet Hill projects. The construction work will be carried out departmentally by DVC itself, under the control of a foreign chief engineer, who was appointed in December 1950.

The design, engineering and construction of the Durgapur Barrage and irrigation system will be executed by DVC's own staff and organization.

22. Expected Results

(a) Power Production

Energy production from Maithon and Panchet Hill is to be subordinated to flood control and irrigation needs. Nevertheless the estimates envisage that enough energy would be produced and fed into the DVC grid to enable the whole system, augmented by the two plants financed under Loan No. 72-IN, to deliver about one billion kwh annually.

22. Expected Results

This energy would be sold at about 0.7 anna per kwh, which is somewhat below the average Indian price for sales to industries, agriculture and traction.

At such a price there would be a net operating profit, but heavy interest charges would cause net losses, decreasing in amount annually until about 1963.

(b) Agriculture and Fisheries

The irrigation aspects of this project will provide an increase in the irrigated area from 185,000 to 1,025,000 acres for summer crop, of which 600,000 acres would also grow winter crops. One-third, or \$60 million, of the total cost of the DVC Projects (23-IN and 72-IN) is allocated to irrigation. The revenues to DVC from irrigation are calculated on the basis of an increase in the 1953 water rate from \$1.25 per acre to \$2.10 per acre for each crop, winter or summer.

DVC's revenues from irrigation are estimated at \$880,000 in 1954/1955, \$1,875,000 in 1955/1956 and \$2,240,000 in 1956/1957. Direct operational expenses for irrigation are estimated at \$150,000 in 1954/1955, \$300,000 in 1955/1956, and \$400,000 for 1956/1957.

The benefits from irrigation are calculated on the basis of a conservative increase of 500 lbs. of summer rice with a 1953 value of Rs. 150 per acre. The winter crop which is to be a net addition is estimated at Rs. 140 per acre. The water charge of \$2.10 per acre per crop is very small in comparison.

Seven reservoirs in the DVC area for the storage of water are to be used for the cultivation of fish, giving an annual yield of 500 lbs. of fish per acre, or a total of 30,000 tons of fresh fish with a value of \$12 million annually. However, in order to achieve this result, hatcheries to stock the reservoirs regularly with fish are to be organized by either DVC or the Government of Bihar and the revenue is to be derived from the sale of fishing rights.

23. (a) Extracts from the Loan Agreement

- V - 501 (a) The Borrower shall cause the Project to be carried out and completed with due diligence and efficiency and in conformity with sound engineering and financial practices.
- (b) The Borrower shall cause Damodar punctually to perform all the covenants and agreements on its part to be performed as set forth in the Project Agreement, and shall take or cause to be taken all action which shall be necessary in order to enable Damodar to perform such covenants and agreements.
- (c) The Borrower shall provide or cause to be provided as capital payments to Damodar the funds required for the carrying out and completion of the Project.

23. (a) Extracts from the Loan Agreement

V - 502 (b) The Borrower shall promptly inform the Bank of any condition which shall arise that shall interfere with, or threaten to interfere with, the accomplishment of the purposes of the Loan or the maintenance of the service thereof.

(b) Extracts from the Project Agreement

II - 1 Damodar will carry out and complete the Project and will operate and maintain the property and equipment included in the Project with due diligence and efficiency and in conformity with sound engineering and financial practices.

II - 2 Damodar will, immediately upon the preparation thereof, furnish to the Bank the plans and specifications for the Project in such form and detail as the Bank shall reasonably request. Any material modifications or changes in such plans and specifications will be promptly furnished to the Bank.

24. Guarantee Agreement - None

25. Side Letters, etc.

(a) Letters regarding authorizations and appointments.

(b) A letter dated January 13, 1953 from the Chairman of DVC, Mr. S.M. Mozundar, to the Bank, explaining how the Corporation intended to strengthen its organization by obtaining the services of foreign technicians under the Technical Cooperation Program of the U.S. Government.

(c) The proposed organization chart of DVC, as of January 1953.

Engineer: L.G. Marshall

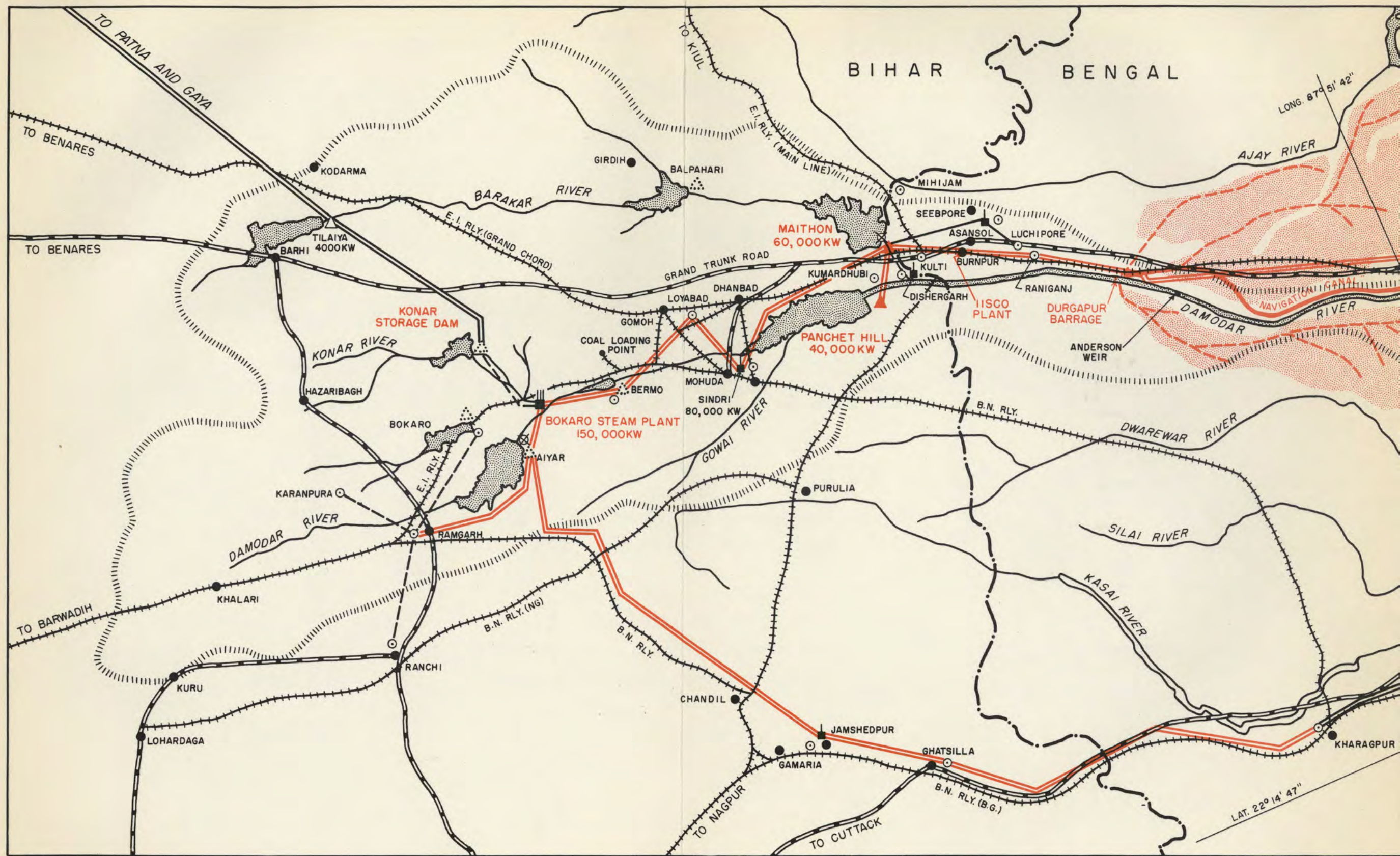
End Use: L.G. Marshall
J. Filippi
B.P. Spiro
Area: W.D.S. Fraser

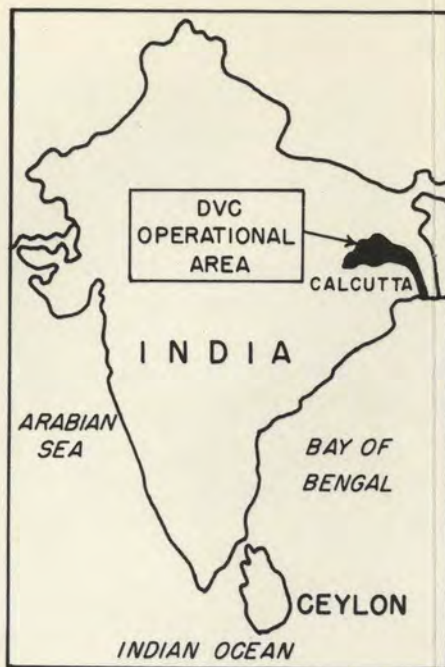
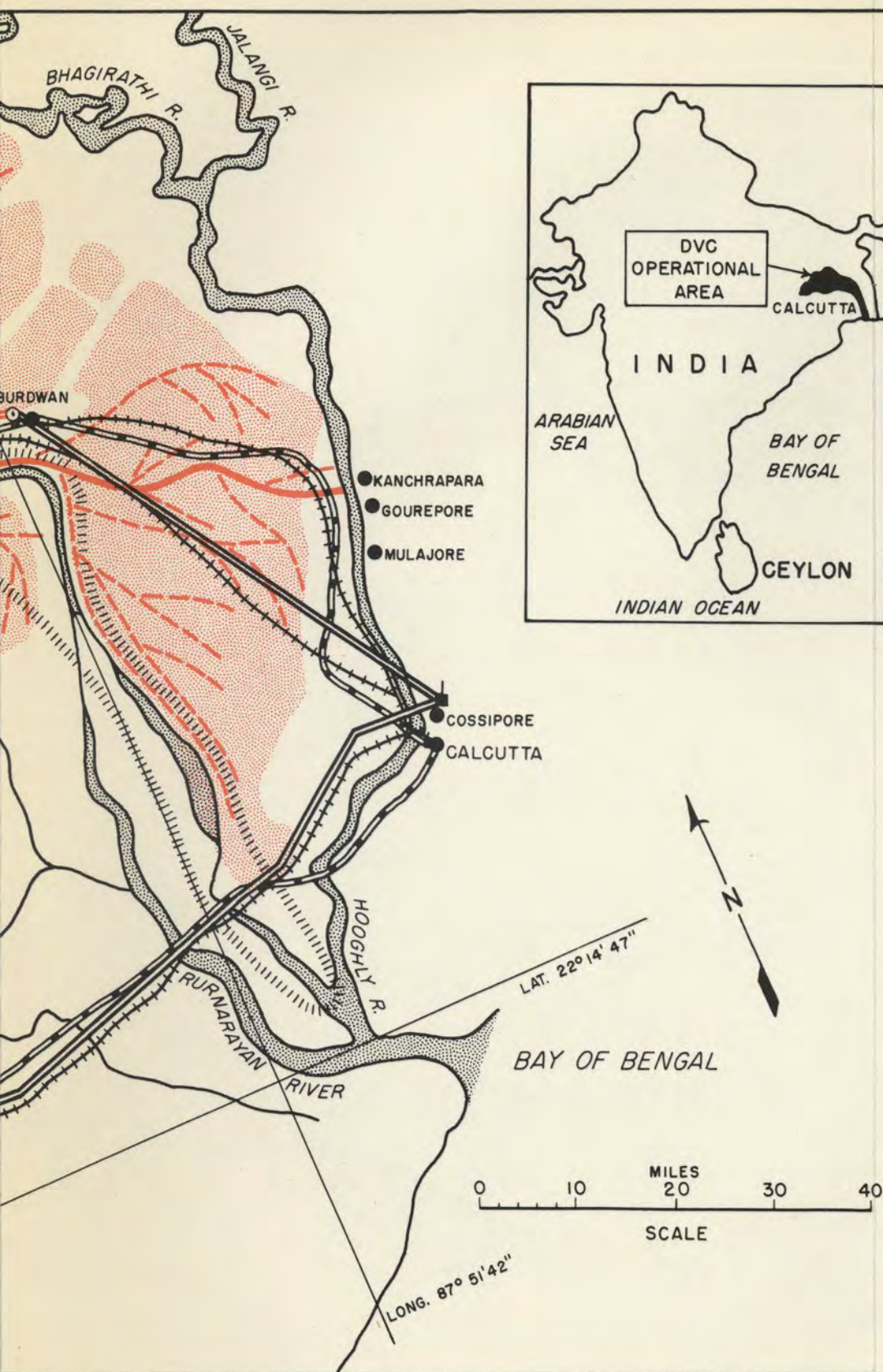
ANNEX

LIST OF GOODS

(Revised on April 18, 1955)

	Expressed in US \$
1. Materials and equipment for dams, barrages, locks, etc.	1,805,000
2. Materials and equipment for powerhouses.	723,950
3. Materials and equipment for powerhouse substations and transmission lines.	1,013,910
4. Construction equipment and spares.	5,570,000
5. Engineering Services.	83,000
6. Miscellaneous Goods.	730,000
7. Contingencies.	<u>574,140</u>
	10,500,000





DAMODAR RIVER UNIFIED SCHEME OF DEVELOPMENT

BANK-FINANCED PROJECTS IN RED

-  Reservoirs in existence and proposed
-  Area to be irrigated
-  Railways
-  Roads
-  Provincial boundary
-  Drainage area
-  Irrigation with Navigation Canal
-  Irrigation Canal and Distributaries
-  132 KV Transmission Line (First Loan)
-  132 KV Transmission Line - proposed
-  66 KV Transmission Line
-  33 KV Transmission Line
-  Hydro - Power Stations
-  Hydro - Power Stations (future)
-  Hydro - Power Stations
-  Bokaro Thermal Power Station (D.V.C.)
-  Thermal Power Stations (Local Licencees Etc.)
-  Sub-Stations
-  Switching Stations

FEBRUARY, 1955

REVISED LIST OF GOODS (*)

DAMODAR PROJECT

<u>Category of Goods</u>	<u>Amount Expressed in</u>	
	<u>U.S. \$</u>	<u>Total in U.S. \$</u>
I. <u>Materials and Equipment for Dams, Barrage, Locks, etc.</u>		
(a) Crest gates, intake service gates, sluice and undersluice gates, hoists, etc.	1,130,000	
(b) Miscellaneous (Sheet piling, etc.)	<u>307,500</u>	1,437,500
II. <u>Materials & Equipment for Power Houses</u>		
(a) Electrical equipment (turbine and generator)	2,300,000	
(b) Materials (general)	26,500	
(c) Miscellaneous equipment	<u>8,100</u>	2,334,600
III. <u>Materials & Equipment for Power House Sub-Stations & Transmission Lines</u>		
(a) Transformers and transformer oil	108,000	
(b) Control Board - L.T.A.C. Board	17,000	
(c) Miscellaneous equipment	<u>8,100</u>	133,100
IV. <u>Construction Equipment & Spares</u>		
(a) Equipment	2,127,810	
(b) Spares	<u>4,000,000</u>	6,127,810
V. <u>Engineering Services</u>		218,490
VI. <u>Miscellaneous Goods</u>		<u>248,500</u>
		<u>10,500,000</u>

(*) dated February 20, 1957



EMBASSY OF INDIA
WASHINGTON, D. C.

February 20, 1957

International Bank for Reconstruction
and Development,
1818 H Street, N.W.,
Washington, D.C.

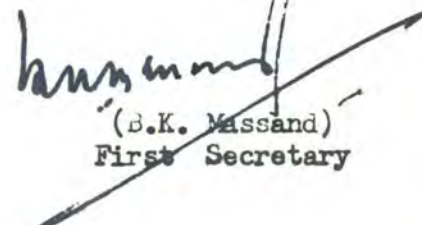
Dear Sir:

Loan Number IB 72 IN

With reference to the Loan Agreement (Damodar Project) between India and the International Bank for Reconstruction and Development dated January 23, 1953, I, on behalf of India, hereby request your agreement that the revised List of Goods attached hereto, and made a part hereof, be substituted for the List of Goods previously agreed pursuant to Section 3.01 of said Loan Agreement.

I would be obliged if you would confirm the Bank's agreement with the foregoing by signing the form of confirmation on the enclosed copy of this letter and returning it to me.

Very truly yours,

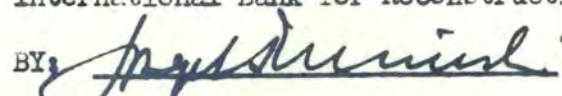

(B.K. Missand)
First Secretary

Attachments:

CONFIRMED:

Date February 28, 1957

International Bank for Reconstruction and Development

BY: 

Joseph Rucinski
Director, Department of Operations
Asia and Middle East

EMBASSY OF INDIA
WASHINGTON, D. C.

REVISED LIST OF GOODS TO BE PURCHASED WITH
PROCEEDS OF LOAN (IB 72 IN) FROM
THE INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

(DAMODAR PROJECT)

	<u>Category of Goods</u>	<u>Amount Expressed in</u>	
		<u>U.S. \$</u>	<u>Total in US \$</u>
I.	<u>Materials and Equipment for Dams, Barrage, Locks, etc.</u>		
	(a) Crest gates, Intake service gates, Sluice and undersluice gates, hoists, etc.	1,130,000	
	(b) Miscellaneous (Sheet piling, etc.)	<u>307,500</u>	1,437,500
II.	<u>Materials & Equipment for Power Houses</u>		
	(a) Electrical Equipment (Turbine & Generator)	2,300,000	
	(b) Materials (General)	26,500	
	(c) Miscellaneous Equipment	<u>8,100</u>	2,334,600
III.	<u>Materials & Equipment for Power House Sub-Stations & Transmission Lines</u>		
	(a) Transformers and Transformer oil	108,000	
	(b) Control Board-L.T.A.C. Board	17,000	
	(c) Miscellaneous Equipment	<u>8,100</u>	133,100
IV.	<u>Construction Equipment & Spares</u>		
	(a) Equipment	2,127,810	
	(b) Spares	<u>4,000,000</u>	6,127,810
V.	<u>Engineering Services</u>		218,490
VI.	<u>Miscellaneous Goods</u>		<u>248,500</u>
			<u>10,500,000</u>



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 20 February, 1957	Document Type Memorandum			
Correspondents / Participants To: Mr. P. J. J. Pinto From: Mr. G. Neil Perry				
Subject / Title India - DVC (Loan 72 IN)				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 07 February, 1957	Document Type Memorandum			
Correspondents / Participants To: Mr. P. J. J. Pinto From: Mr. Joseph Rucinski				
Subject / Title India - DVC (Loan 72 IN)				
Exception(s)				
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Withdrawn by Tonya Ceesay	Date June 14, 2017			

February 6, 1957

Mr. C. Balan
Public Relations Officer
Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27
India

Dear Mr. Balan:

I acknowledge with thanks receipt of your letter dated December 22, 1956 addressed to Mr. Black enclosing a booklet entitled "Eight Years of DVC".

The booklet is very nicely got up and will be read with interest in the Bank. I am sure that in due course our Public Relations Department will be asking you for some copies of the photographs published in it.

I note that Mr. P.S. Rao will have taken over the chairmanship by now, and I know that DVC will appreciate having him at the helm again.

May I reciprocate your good wishes for the New Year?

Sincerely yours,

Wf

W.D.S. Fraser
Department of Operations
Asia and Middle East

WDSF:cvb

sent to
Mr. Marshall
Mr. Graves
2/6/57
WDSF



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 31 January, 1957	Document Type Memorandum			
Correspondents / Participants To: Mr. Joseph Rucinski From: Mr. P. J. J. Pinto				
Subject / Title India - DVC (Loan 72 IN)				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

Mr. J. Burke Knapp

January 31, 1957

E.P. Wright

Damodar Valley Corporation - Loans 23 IN and 72 IN

Your proposed alternative for the final paragraph of the letter to D.V.C. strikes me as a marked improvement on the original and sets out much more clearly exactly what it is we want. I agree that Mr. Rao should be sent a copy of the letter.

EPW:cvb

Mr. E. Peter Wright

January 31, 1957

J. Burke Knapp

Damodar Valley Corporation - Loans 23 IN and 72 IN

I would like to suggest consideration of the following alternative draft of the final paragraph of the letter to D.V.C. I have reviewed this with Mr. Spottswood, and he is clearing it in his Department. Also, wouldn't it be a good idea to send Rao a copy of this letter? I await your response before preparing the letter for final signature.

"Perhaps you would be good enough to pass on the views expressed in this letter to the Ministry of Irrigation and Power and to the D.V.C., and I will look forward to hearing from you in the near future what further action is proposed. It appears that the only matter on which there remains any serious disagreement between us is the question of whether the Department of Planning and Construction, and the Department of Operations, should each be headed by a single Chief Engineer responsible for all the works in his Department. We have given full consideration to the views expressed on this subject at the meeting of December 10 in New Delhi, as recorded in the agreed minutes and as reported to us by the Bank's representatives. However, I want you to know that we continue to feel quite strongly that the D.V.C. ought to adopt the practice of having single Chief Engineers. I very much hope that action will be taken on this matter in the near future, since the question is certain to recur at such time as we come to discussing the financing of new projects for the D.V.C."

Mr. J. Burke Knapp

January 25, 1957

Joseph Rucinski

Damodar Valley Corporation - Loans 23 IN and 72 IN

I attach for your signature a letter to be sent to Mr. B.K. Nehru giving the Bank's further views on the problems of DVC. These problems were discussed at a meeting in December in New Delhi by Messrs. Spottswood and Marshall and officials of the Government of India and DVC.

A file of relevant correspondence is attached.

Attachments

WDSFrasercvb

ROUTING SLIP		Date Feb 13	
NAME		ROOM NO.	
Mr. Marshall			
Files Operational		209	
Action		Note and File	
Approval		Note and Return	
Comment		Prepare Reply	
Full Report		Previous Papers	
Information		Recommendation	
Initial		Signature	
Remarks			
Seen by Mr. Fraser + copy made for our files Thanks			
From			
LBM Carol Baker			

Bill Fraser
Reply Cable
Handled by
Narahari Rau
so no need
for any action
LBM

Mr. Marshall

CABLEGRAM

V. NARAHARIRAO
EXECUTIVE DIRECTOR
INTBAFRAD
WASHINGTON D. C. (USA)

SHOULD BE GRATEFUL IF YOU WOULD KINDLY SEND
ME BY RETURN OF POST LATEST PROFORMA IN WHICH
APPLICATION FOR DVC LOAN SHOULD BE SUBMITTED
STOP IRRIGATION POWER MINISTRY HAS CABLED FOR
ONE BUT NOT YET RECEIVED

RAU DAVALLEC.

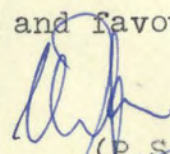
By airmail

Copy by post to

- ✓ (1) Mr. L. Gray Marshall
- (2) Mr. A. D. Spottswood

International Bank for Reconstruction & Develop-
ment, 1818-H Street, N. W., Washington 25 D.C.
(USA), for information and favour of early action.

Calcutta,
January 29, 1957.


(P. S. Rau)
Chairman, DVC

cc. made for Mr. Fraser.

RECEIVED
FEB 1 8 22 AM 1957
SECONDARY DEPT
RECEIVED

CABLEGRAM

V. NARAHARIRAO
EXECUTIVE DIRECTOR
INTEGRATED

WASHINGTON D. C. (USA)

SHOULD BE GRATEFUL IF YOU WOULD KINDLY SEND
ME BY RETURN OF POST LATEST PROFORMA IN WHICH
APPLICATION FOR DVC LOAN SHOULD BE SUBMITTED
STOP IRRIGATION POWER MINISTRY HAS CABLED FOR
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RAU DAVALLIC

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Chairman, DVC
(P. S. Rau)
Calcutta,
January 29, 1957.

RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT
FEB 7 9 55 AM 1957

cc. Made for the Press

RF

wf

AIR MAIL

January 23, 1957

Damodar Valley Corporation
Anderson House
Alipore
Calcutta
India.

Gentlemen:

Re: Loan No. IB 72 IN

We refer to Paragraph 3 of your letter No. 19 FA(B)56 Part I (1) dated December 31, 1956, concerning direct payments in sterling to a manufacturer in Italy and Bureau Veritas in Paris.

The Bank's applicable Loan Regulations provide that borrowers shall make reasonable efforts to arrange for payment in the supplier's currency. Your policy of paying manufacturers in the currency they prefer does not conform with these regulations. We note that in this connection you refer to the memorandum of November 15, 1956, from Ministry of Finance to all Ministries of the Government concerning the currencies in which contracts should be payable, and I am enclosing for your information a copy of a letter we have today sent to the Ministry of Finance.

As you know it is the Bank's policy to make payment in the currency of the country from which the goods originate. We suggest, therefore, that the applications for withdrawal request reimbursement of the equivalent in Italian lire and French francs of the sterling paid to the Italian manufacturer and Bureau Veritas, Paris respectively.

Very truly yours,

Cleared with & CC: Mr. Ellsworth Clark
Mr. Fraser ✓

Peter G. Ramm
Assistant Treasurer.

CC: Mr. A.R. Anand, Accounts Officer, India Supply Mission
File: Forms and Procedures

VGJones:gg

✓
3/6/57

AIR MAIL

January 23, 1957

The Secretary
Ministry of Finance
Government of India
New Delhi
India.

Gentlemen:

Re: Loan No. IB 72 IN

We refer to your Office Memorandum No. F.1(95) E.F. VII/56-4166, dated November 15, 1956, addressed to all Ministries of the Government of India concerning the currencies in which contracts should be payable.

A copy of this memorandum has been sent to us by the Damodar Valley Corporation as justification for making direct payments in sterling to a manufacturer in Italy and Bureau Veritas in Paris. The Corporation state that it is their policy to pay manufacturers in the currency in which they want payment.

As you will recall, the Bank's Loan Regulations No. 3, dated October 15, 1952, which are incorporated by reference in the Loan Agreement for the above loan, provide in the first sentence of Article III, Section 3.01, "The Borrower shall use reasonable efforts to assure that payment for goods financed out of the proceeds of the Loan is made in the currencies of the countries from which such goods are acquired". The practice of paying suppliers in Pounds sterling if they so prefer, does not conform with these regulations and I am sure you will agree that your memorandum under reference should, therefore, be amended accordingly.

I am sending a copy of this letter to the Damodar Valley Corporation for its information.

Very truly yours,

Cleared with & CC: Mr. Ellsworth Clark
Mr. Fraser ✓
CC: Damodar Valley Corp
Mr. A.R. Anand, India Supply Mission

Peter G. Baum
Assistant Treasurer.

ROUTING SLIP		Date	
NAME		ROOM NO.	
9 Mr. Hoover		306	

Action		Note and File
Approval		Note and Return
Comment		Prepare Reply
Full Report		Previous Papers
Information		Recommendation
Initial		Signature

Re: s

This is the letter
prepared by W.P. in
DUC.

From Be

Chadener
ADG
EPWright:hvs
January 23, 1957

DRAFT LETTER FROM MR. BURKE KNAPP TO MR. B.K. NEHRU

Dear Mr. Nehru:

Subject: Damodar Valley Corporation - Loans 23 IN and 72 IN

We have now had an opportunity to consider the minutes of the December meeting in New Delhi between Mr. Spottswood and Mr. Marshall of the Bank staff and representatives of the Ministry of Irrigation and Power and the Damodar Valley Corporation, and I am writing to let you know the Bank's views on the various matters discussed at that meeting.

First, let me say how much we appreciate the very co-operative attitude shown by your Government, and by the Corporation, with regard to the recommendations made in my letter to Mr. Kamat of August 17th last. The Bank is glad to know that the Board of the DVC has now been restored to its full complement, and I think we are now close to agreement on all the important organizational issues.

Perhaps the simplest way of dealing with the outstanding points would be for me to refer, item by item, to the minutes of the meeting of December 10. The Bank's views on the seven recommendations listed are as follows:

Recommendation No. 1.

The Bank welcomes the proposal that a high level executive should be appointed as Secretary of the DVC and that he should be delegated ample authority to function effectively as the Chief Executive of the Corporation. The Bank still considers it highly desirable that the person chosen for this post should have public utility experience.

Recommendation No. 2

It remains the Bank's view that a single Chief Engineer should be given full responsibility for both civil engineering and electrical and mechanical work, and it would strongly urge the D.V.C. to adopt this recommendation, not only for the completion of the Maithon and Panchet Hill projects, but as a permanent feature of its organization on both the construction and operational sides.

Subject to the views expressed above, the Bank welcomes the Corporation's decision to extend the appointment of the present Chief Engineer until the Panchet Hill project has been substantially completed. It would be greatly appreciated if the Bank could be given an opportunity to study the terms of the new contract with Mr. Komora, if possible, before it is signed.

Recommendation No. 3

The Bank considers that the proposed regrouping of the D.V.C.'s functions under three main departments will mark a great improvement in the organization of the Corporation. In line, however, with the view that engineering functions should be combined under one Chief Engineer, the Bank would like to see a single head for each of the ^{Construction & Operation} ~~first two~~ departments named, so that there would be three persons responsible to the Secretary and not five as proposed by the Corporation.

Recommendation No. 4

The Bank agrees to the proposed arrangements with the Harza Engineering Company and the Kuljian Corporation, but would like to see copies of the new contracts with these two firms before they are signed.

Recommendation No. 5

The Bank notes that the only work now being undertaken departmentally at Panchet Hill is the large-scale earth moving and the placing of concrete, and

that all the remaining work on the project is to be contracted out where economically feasible. *The Bank has no objections to this arrangement* This arrangement is entirely satisfactory to the Bank.

Recommendation No. 6

The Bank has received a copy of the Bill for the levying of water rates in West Bengal, which has been drafted by the State Government, and which we understand will be introduced in the State Legislature after the forthcoming elections. This draft does not, however, give any indication of the actual rates to be charged, and we should be interested to know what the rate policy of the West Bengal Government (is.) *will be.*

Recommendation No. 7

The Bank has not yet had time to study the D.V.C.'s report on power rates, but it hopes to be able to do so before long and will communicate its views to the Government of India and to the Corporation as soon as practicable. The Bank attaches the greatest importance to an early adjustment of the D.V.C.'s rate structure, and it is understood that the D.V.C. accepts this view and has agreed in principle to the establishment of rates which would permit the Corporation to earn at least the maximum percentage permitted other utilities under law on its capital base.

I think that the only one of the seven recommendations on which there is any serious disagreement between us is that relating to the appointment of a single Chief Engineer, and I very much hope that the Corporation will feel able to go along with the Bank on this point. Perhaps you would be good enough to pass on the views expressed in this letter to the Ministry of Irrigation and Power and to the D.V.C., and I will look forward to hearing

from you in the near future what action is proposed.

cc: Working Party
Mr. Rucinski
Mr. Perry

Cleared with Working Party



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 22 January, 1957	Document Type Letter			
Correspondents / Participants To: Mr. V. Narshari Rao, E.D. for India From: Mr. J. Burke Knapp, Vice President				
Subject / Title Damodar Valley Corporation - Loans 23 IN and 72 IN				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			



GRAM : DAVALLED

45-1765

PHONE: ~~ALIPORE 4765~~

DAMODAR VALLEY CORPORATION.

ANDERSON HOUSE, ALIPORE
CALCUTTA-27

No.W/Disp-32/55(II)-581.

January 21, 1957.

To
The International Bank for
Reconstruction and Development,
1818 H Street, N.W.,
Washington 25, D.C.,
U.S.A.

(Attention : Mr. L. Gray Marshall)

Sub : Disposal of Bank-financed
Construction Equipment.

Gentlemen,

I am directed to acknowledge with thanks the receipt of your letter dated the 4th January, 1957, on the subject mentioned above.

As desired, a copy of Member, Mr. Ganguli's d.o. letter No.W/Disp-32/55-9013 dated the 24th September, 1956, together with its enclosure, is attached. I am to observe in this connection that the Bank have already communicated their observations on this letter in Mr. Gray Marshall's d.o. letter dated the 11th October, 1956, to Mr. Ganguli.

The comprehensive report on the Bank-financed surplus equipment with the details required by the Bank is now ready and is being sent separately.

You have agreed to the disposal of some surplus construction equipment to the Nagarjunasagar Project, a list of which was furnished with Mr. Ganguli's d.o. No.W/Disp-32/55(II)-11672 dated the 26th December, 1956. I am to observe in this connection that out of the five Euclid Bottom Dumpers mentioned in that list, one was reserved for the Government of West Bengal. Accordingly, it is proposed to dispose of one dumper to that Government and the rest to the Nagarjunasagar Project. It is hoped that the Bank will have no objection to this slight change in the manner of disposal.

Yours faithfully,

(P.C. Acharji)

DEPUTY SECRETARY

ack Apr 19

/sgt.
22.1.57.

Shri A.B. Ganguli, I.C.S.,
Member.

D.O.No. W/Disp-32/55 - 9013

September 24 , 1956.

Re : List of Surplus machinery.

Would you kindly refer to my D.O. letter No.Disp-32-4348 dated the 22nd May 1956, wherein it was stated that a list of surplus machinery would be sent to you as soon as finalised ?

2. It appears from a letter of Mr. J.S. Raj of the IBRD to the Ministry of Finance (DEA) that the question of transfer of surplus machinery from DVC to other Projects in India has been discussed recently between yourself and Dr. Antonin Basch and that you desired to have a list of equipment which the DVC intends to retain for the next six months in order to complete the projects on schedule and the equipment declared surplus with an indication of the manner of its disposal. A list has accordingly been prepared and sent to the Ministry of Irrigation and Power. A copy of my letter to Venkataraman together with the list and the Explanatory Note is attached herewith for your information.

3. According to the arrangement previously agreed to by the Bank, a list will also be appended to our Monthly Progress Report to the Bank showing the machinery that have already been surplus and the machinery likely to become surplus during the following two months.

4. I am sorry that this has taken some time to finalise.

(A.B. Ganguli)

Gray Marshall Esq.,
International Bank for
Reconstruction & Development,
1818 H Street, N.W.,
Washington 25, D.C.

NNR:SKC.
24.9.56.

Shri A.B. Ganguli, ICS.,
Member.

D.O. No. W.Disp-32/55 - 9012

September 24, 1956.

My dear Venkataraman,

Please refer to your D.O. letter No.6(10)/55-Policy dated the 16/17th July 1956 regarding the disposal of machines financed by the IBRD which are surplus to the requirement of the Corporation.

2. As desired by the IBRD a statement is attached showing (1) the total number of machines held by the Bank financed Projects as on 1st July 1956 (2) the number of machines required during the next six months and (3) the number surplus to requirement. An explanatory note explaining the position is also enclosed.

3. The Bank desired to have a separate statement showing the equipment declared surplus with an indication of the manner of its disposal. For the sake of convenience the number of surplus machines has been indicated in the last column of the statement enclosed herewith and a separate statement for this purpose has not been prepared. The manner of disposal of the surplus equipment is stated in the Explanatory note. It will be seen from the statement that some machines purchased out of the Bank loan have already been disposed of without the approval of the Bank. The circumstances in which these machines were disposed of are stated in the Explanatory note. To regularise the action taken, formal approval of the Bank may now be obtained.

4. In regard to the suggestion contained in the last sentence of your letter regarding suspension of transfer of the surplus machinery, I would draw your attention to Shri Congulee's D.O. letter No.6(10)/55-Policy dated the 4th May 1956 to Kshetrapal. According to the procedure stated therein, the Corporation is

contd:

required to append to its Monthly Progress Report to the Bank a list of machinery that may be already surplus as well as a list of machinery likely to become surplus during the following two months. The DVC is also authorised to proceed with disposal of the machinery if after receipt of the list the Bank raises no objection. It is presumed that this arrangement still stands. This may kindly be confirmed.

Yours sincerely,

(A.B. GANGULI)

Shri S. Venkataraman,
Deputy Secretary to
the Government of India,
Ministry of Irrigation & Power,
New Delhi.

NNR/sbs.
24.9.56.

RECEIVED
11 SEP 1956

DEPT. OF
IRRIGATION & POWER

RECEIVED
NATIONAL BANK FOR
ECONOMY AND DEVELOPMENT

JAN 28 11 27 AM 1957

34-3-22
MEX/era

Now report
Ministry of Education & Science
the collection of data
primary research to
study a development

(V.B. GIVENCHI)

Donna Givens

development study group. This will result in a
report on progress. It is expected that this
the Ministry of Education & Science of the U.S. will
has to also emphasize to develop a new system of
primary research and the following are points. The
study is not a part of primary study to
to the U.S. of primary study will be a study
study to show to the Ministry of Education & Science

**STATEMENT OF MACHINES FOR THE HALF YEAR
FROM 1ST JULY TO 31-ST DECEMBER, 1956.**

Sl. No.	Description of Machine	Total Number of machines at the commencement of the half-year.			Number required during the next six months.	Surplus
		IBRD	Others	Total No.		
1	2	3	4	5	6	7
1.	Tractors	75	10	85	49	36(a)
2.	Dumpers	53	39	92	55	37(b)
3.	P. & H. and other Shovels	8	12	20(c)	15	5
4.	Draglines	7	1	8(d)	3	5
5.	Motor Graders	3	2	5(e)	2	3
6.	Loader 9BV <i>Enclid</i>	1	-	1	1	-
7.	Cranes	5	3	8	6	2 (f)
8.	Angledozer	16	4	20	19	1 **
9.	Tournadozers, Bulldozers, Tipdozers & Dosecasters	12	2	14	12	2
10.	Hydraulic Grade Builders	3	1	4	3	1 (g)
11.	Power Control Units	34	5	39	25	14 (h)

- (a) Includes nine IBRD machines temporarily placed at the disposal of the Durgapur Project of the Govt. of West Bengal, two at the disposal of the Kosi Project of the Govt. of Bihar and four made over to Konar contractors in terms of the Agreement with DVC.
- (b) Includes one IBRD machine lent to the Durgapur Project of the Govt. of West Bengal.
- (c) Includes two IBRD machines relating to Bokaro now in use at Maithon and two Konar machines now working in the Bermo Mines Divin. of the DVC.
- (d) Includes two IBRD machines relating to Konar taken over by Maithon & Panchet Hill Projects on completion of work at Konar.
- (e) Includes one IBRD machine relating to Konar at present in use at Panchet Hill Project
- (f) Includes one IBRD Crane temporarily placed at the disposal of Kosi Project of the Govt. of Bihar.
- (g) This is an IBRD Unit at present in use by the Durgapur Project of the Govt. of West Bengal.
- (h) Includes two IBRD machines placed at the disposal of the Kosi Project of the Govt. of Bihar.
- ** Lent temporarily to the Durgapur Project of the Govt. of West Bengal.

Contd.....

Sl. No.	Description of Machine	Total Number of machines at the commencement of the half-year.			Number required during the next six months	Surplus
		IRD	Others	Total No.		
1	2	3	4	5	6	7
12.	Wagon Drills	43	5	48	25	23
13.	Joy Diamond Core Drill	2	-	2	2	-
14.	Dry Rock & Sinker Drills	14	13	27	27	-
15.	Skillsaw Electric Drills	4	-	4	4	-
16.	Grinder Drill Sharpener	1	-	1	-	1
17.	Skillsaw Drill Grinder	1	-	1	1	-
18.	^{en} Pneumatic Drills	2	-	2	2	-
19.	Tampo Sheep foot Rollers	11	7	18	16	2
20.	Amco Cylinder Grinder	1	-	1	1	-
21.	Welding Sets	21	7	28	23	-
22.	Concrete Vibrator	21	24	45	40	5
23.	Pumps	7	15	22	14	8
24.	Oil Rite Piston Pump with Farman Diesel Engine	1	-	1	1	-
25.	Concrete Mixers	7	8	15	9	6(1)
26.	Rippers	2	-	2	2	-
27.	Alternators - Mercedes Benz	9	-	9	9	-
28.	Rock Crushers	2	-	2	2	-
29.	Conveyors, Belts and Screens	1 Set	-	1	-	1
30.	Demolition tools	5	-	5	5	-
31.	Pavement Breaker	1	5	6	6	-

(1)

Includes two IRD Mixers taken over by the Chambal Project of the Govt. of Madhya Pradesh.

Sl. No.	Description of Machine	Total Number of machines at the commencement of the half-year.			Number required during the next six months.	Surplus
		IBRD	Others	Total No.		
1	2	3	4	5	6	7
32.	Letournes ^u Roster	2	-	2	2	-
33.	Letournes ^u tourna- packer	2	-	2	-	2
34.	Air Compressors	10	44	54 (j)	36	18
35.	Radial Drilling Machine	1	-	1	1	-
36.	Valve Face Grinder, Hand Grinder and Rock Master Grinder.	6	-	6	6	-
37.	Air Receiver	2	-	2	2	-
38.	H.M. Bending Machine	2	-	2	2	-
39.	Bench Grinder, Drill Press etc.	8	-	8	8	-
40.	Low Bed Trailers	3	2	5	4	1
41.	Hydraulic Jack- 12 Ton Capacity	1	-	1	1	-
42.	Trailer - 5 Ton Capacity	1	-	1	1	-
43.	Fordson Thames Tipping Truck	1	5	6	6	-
44.	Scrapers	1	9	10	5	5 (k)
45.	Utility Hoists	4	-	4	4	-
46.	Simplex Spiral Classifier	1	-	1	1	-
47.	Fork Lift Truck with Crane Boom	1	-	1	1	-
48.	Diesel Engines	4	-	4	4	-
49.	All - Geared Lathe and Screw cutting Lathe	2	-	2	2	-

(j) Includes one IBRD machine now in use in H.E.M. Division of the DVC,

(k) Includes one IBRD machine lent to the Durgapur Project of the Govt. of West Bengal.

Contd

Sl. No.	Description of Machine	Total number of machines at the commencement of the half-year.			Number required during the next six months	Surplus
		IERD	Others	Total No.		
1	2	3	4	5	6	7
50	Willy's Jeep	1	5	6	6	-
51	Studebaker Pick up	3	1	4	4	-
52	Power Expansion Arbors	1	-	1	1	-
53	Torque Meter	3	-	3	3	-
54	Sprayers	11	-	11	11	-
55	Lugh Hammer	1	-	1	1	-
56	Concrete Bucket	5	20	25	25	-
57	X-ray Apparatus & Transformers	1	-	1	1	-
58	Euclid Dumper Top Extension	10 pairs	-	10	10	-
59	Dodge Power Wagons	4	-	4	4	-
60	WSG Lever Bar	1	-	1	-	1
61	P&H 955A Shovel attachment	3	-	3	2	1
62	Trench Hoe attachment	1	-	1	1	-
63	Tanker - Truck Servicing	3	-	3	3	-
64	Street Plates for Allis Chalmers Tractors	6 Sets	-	6 Sets	6 Sets	-

EXPLANATORY NOTE

The statement has taken into account only such categories of machines as have been purchased solely or partly out of the IBRD loan. The classes of machines which have not at all been financed by the Bank have been excluded. The statement has been prepared after assessing the overall requirement of the Maithon, Panchet and Barrage and Irrigation Projects for the next six months upto 31st December 1956.

2. It will be seen that some of the loan machines have been in use by Projects other than those for which they were procured. The details of such machines are furnished below :

(a) Four Tractors were made over to Konar Contractors in terms of the Agreement with them which provided that the Corporation would take over from the Contractors on residual value only such machines as had worked less than two-thirds of their working life. As these tractors had worked more than two-thirds of their life, they were taken over by the Contractors against payment by them of the full value.

one Angle Dozer
(b) Nine Tractors, one Dumper, one Hydraulic Grade Builder and one Scraper have been temporarily placed at the disposal of the Durgapur Project of the Government of West Bengal; two Tractors, one Crane and two Power Control Units have been placed at the disposal of the Kosi Project of the Government of Bihar and two Concrete Mixers taken over by the Chambal Project of the Government of Madhya Pradesh.

3. Approval of the Bank has not unfortunately been obtained before disposal of these machines. The Durgapur Project, the Kosi Project and the Chambal Project were very urgently in need of the machines and they were issued in anticipation of the Bank's approval. The Konar

contd:

Contractors took over the four Tractors in terms of the Agreement which had been executed before the First Loan Agreement was finalised.

4. In respect of the machinery found surplus to the requirements of the Projects for which they were purchased, it is proposed to take disposal action in the following order of priority :

- (1) By transfer to other Projects of the DVC.
- (2) By transfer to other River Valley Projects in India.
- (3) By disposal to Government sponsored Projects, Government Departments, Railways and local bodies in India.
- (4) By sale to the public.

5. It is hoped that the Bank will not object to transfer of machines from one DVC Project to another outside the scope of the particular loan subject to a report being made to them.

MR/sbs.
24.9.56.

WM 50 11 55 AM 1956

RECEIVED
GENERAL MANAGER
HYDRO-ELECTRICITY
DEPARTMENT

JAN 28 11 27 AM 1957

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in order to be able to do so.

operate the scope of the investigation from which the
analysis of the results of the investigation is made.
It is noted that the work of the committee is

(c) It is noted that the committee

will be able to do so.

(d) It is noted that the committee

will be able to do so.

(e) It is noted that the committee

will be able to do so.

(f) It is noted that the committee

will be able to do so.

will be able to do so.

will be able to do so.

will be able to do so.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

OFFICE MEMORANDUM

TO: Files

DATE: January 17, 1957

FROM: D. Groenfeld

SUBJECT: Damodar Valley Corporation

In accordance with the terms of reference dated November 7, 1956, Messrs. Spottswood and Marshall met with representatives of the Ministry of Irrigation and Power and the Damodar Valley Corporation on December 10, 1956, in New Delhi and discussed the problems listed in the letter of August 17, sent by the Bank to Mr. Kamat regarding the Damodar Valley Corporation. *True of Ref. 4*

Most recommendations are about power, construction, or management. However Recommendation 6 is of interest to us.

Recommendation No. 6

It would not be realistic to insist on the introduction of a bill levying water rates into the West Bengal State Legislature before elections which will be held in early 1957. A copy of the draft bill was not available at the time of the conference but the DVC promised to obtain the draft and forward it to the Bank in the very near future. If the bill should provide for adequate water rates, we recommend that the Bank agree to defer the introduction of the bill in the State Legislature until after the forthcoming elections.

The draft bill was received on January 8, 1957.

Air Mail

January 8, 1957

Mr. A. B. Ganguli, I. C. S
Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27, India

Dear Mr. Ganguli:

Your letter of December 31 enclosing revised estimates of cost of the Maithon, Panchet Hill and Barrage and Irrigation projects and the bill for the levy of water charges by the West Bengal Government was received today. I have not yet had an opportunity to study the documents, but I feel sure that they will be most helpful to us. After we have studied the documents I shall let you know if anything more is required.

Sincerely yours,

A. D. Spottswood
Assistant Chief
Public Utilities Division
Department of Technical Operations

ADSpottswood:peg

cc: Mr. Marshall

Air Mail

January 4, 1957

Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27, India

Attention: A. B. Ganguli

Gentlemen:

The statement expressed in your letter of December 17, No. DO-No.WK 5/56 that the Bank has no objection to the transfer of Bank-financed construction equipment between projects covered by the two loans without prior Bank approval is correct. As stated, we would want to be informed of the transfer in due course.

Unfortunately, we have not been able to find the September 24 letter (DO No. W/Disp-32/55-9013) relating to surplus IERD equipment. We would appreciate your sending us a copy as soon as practicable.

Referring to your letter of December 26 (DO No. W/Disp-32/55 (11)), we have no objection to your disposing of the surplus 66 kV electrical equipment listed to the Uttar Pradesh Government. We appreciate that the equipment is not now a standard voltage for DVC.

We have reviewed the list of equipment that the DVC considers surplus to Konar and Maithon and desires to dispose of to the Nagarjunsagar project and have no objection to such a disposition.

The information supplied on the equipment is in line with our discussions and if the comprehensive report is made up with the same detail, it will be satisfactory to the Bank.

Likewise, there is no objection to the utilization of the Vibrators surplus to Maithon on the Durgapur project.

Very truly yours,

LBM

L. Gray Marshall
Public Utilities Division
Department of Technical Operations

etc
cleared with Fraser
cleared with Street
LGMarshall:peg

cc: Mr. Clark, Mr. Fraser, Mr. Street, Mr. Basch



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 03 January, 1957	Document Type Letter			
Correspondents / Participants To: Mr. J. Burke Knapp, Vice President From: Mr. V. Narshari Rao, E.D. for India				
Subject / Title Damodar Valley Corporation - Loans 23 IN and 72 IN				
Exception(s) Communications of Executive Directors' Offices				
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

Bernard Chadenet

January 2, 1937

A. D. Spottswood and L. Gray Marshall

Conference in New Delhi regarding Damodar Valley Corporation

In accordance with the terms of reference dated November 7, 1936, Messrs. Spottswood and Marshall met with representatives of the Ministry of Irrigation and Power and the Damodar Valley Corporation on December 10, 1936, in New Delhi and discussed the problems listed in the letter of August 17 sent by the Bank to Mr. Kanat regarding the Damodar Valley Corporation. on Tenny Ref

The results of this conference are summarized in the attached minutes of the meeting which were reviewed by those present at the conference. Dec 10

Our recommendations concerning the various matters discussed are:

Recommendation No. 1

The Bank's letter to Mr. Kanat urged the appointment to the DVC Board of a person with extensive utility experience. Inasmuch as the position of Secretary is now vacant, it is our opinion that the appointment of a person with utility experience to this position would be more desirable than the appointment of such a person to the Board of Directors. It is our recommendation, therefore, that the Bank insist on the employment of a Secretary with public utility experience and that the Bank interpose no objection to the appointment of Mr. Kan to the position of Chairman of the Board.

The conference readily agreed that the new Secretary would be delegated authority by the Board to enable him to function effectively as the Chief Executive Officer of the Corporation. If this is done, many of the organizational problems of the Corporation could be solved.

Recommendation No. 2

The DVC and the Ministry of Irrigation and Power both would prefer to continue the Indian practice of having a Chief Civil Engineer and a Chief Electrical Engineer on the grounds that it has been working satisfactorily in India. In our opinion, this arrangement has not been working satisfactorily. It is our strong recommendation that the Bank insist on the DVC's giving full responsibility for both civil and electrical work to a single Chief Engineer.

The question of the continuation of the service of the present Chief Engineer, Mr. Kanora, was definitely settled with the agreement by the DVC to extend his appointment until the Panchet Hill project has been substantially completed. It is our recommendation, however, that the Bank request from the DVC a copy of the new contract with Mr. Kanora so that the terms and conditions of the new contract can be studied.

Bernard Chadenet

January 2, 1957

Recommendation No. 1

The DVC agreed in principle to the separation of the functions of the Corporation into three general departments as recommended by the Bank, but the Corporation still wished to retain a separation of responsibility for the civil and electrical engineering work in the planning, designing, and construction department and in the operation and maintenance department. It is our recommendation that the Bank insist on a single head for each of the departments as originally suggested in the letter to Mr. Knut.

Recommendation No. 4

The agreement by the DVC to request Harza Engineering Company to assign a resident engineer for quality control and inspection until the completion of Maithon and Panchet Hill projects will provide for adequate liaison with the Harza Engineering Company, who designed the project, and the construction engineers. It is therefore recommended that the Bank accept this arrangement, but that the Bank obtain a copy of the contract with Harza for study before it is signed.

The DVC also agreed to a review by Kuljian Corporation of the designs of the new 75,000 kw unit for the Bokaro Thermal Station and to the supervision of installation of equipment for this plant by the same consulting engineers. We recommend that the copy of the contract with Kuljian Corporation covering this work be reviewed by the Bank before it is signed.

Recommendation No. 5

The only work now being undertaken departmentally at Panchet Hill is the large-scale earth moving and the placing of concrete. All other work at present is on a contract basis and the DVC agreed to continue contracting out the remaining work including erection of the principal machinery and equipment in the powerhouse. The manufacturers of the equipment will send the necessary supervisors but personnel for the actual erection work will be secured through contractual arrangements. We recommend acceptance of the continuation of work now being carried out departmentally and the DVC's plans for contracting out the remaining work.

An actual inspection of the work at Panchet Hill revealed that from November 9 to December 9 the DVC moved approximately 250,000 cubic yards of earth. This is the highest rate of earth moving ever achieved on this project. To complete the dam according to present schedule (July, 1958), earth moving must average 220,000 cubic yards per month during the current dry season. With the closure of the river early in January, 1957,

Bernard Chadenet

January 2, 1957

and diversion of the low-water flow through the spill-way section of the dam, earth moving should be somewhat easier than during the past month.

The transfer from Maithon of the necessary construction equipment for placing concrete at Panchet Hill is in progress and it appears that the DVC can successfully place the remaining concrete at Panchet Hill with this equipment. The operators who gained experience at Maithon should operate more efficiently at Panchet Hill.

Recommendation No. 6

It would not be realistic to insist on the introduction of a bill levying water rates into the West Bengal State Legislature before elections which will be held in early 1957. A copy of the draft bill was not available at the time of the conference but the DVC promised to obtain the draft and forward it to the Bank in the very near future. If the bill should provide for adequate water rates, we recommend that the Bank agree to defer the introduction of the bill in the State Legislature until after the forthcoming elections.

Recommendation No. 7

A copy of the review of power rates mentioned under Recommendation 7 was supplied to us but it has not yet been studied. The DVC, however, agreed to the establishment of rates which would permit the Corporation to earn at least the maximum percentage permitted other utilities under law on its capital base. We recommend that the Bank accept in principle the DVC's proposal pending further study of DVC's present rate structure. In any event, however, the Bank should obtain from the DVC and the Indian Government a definite commitment that rate adjustments will be inaugurated in the very near future.

cc: area Dept

AlSpottawood:IGMarshall:peg

Revised Estimates



GRAM : DAVALLED

PHONE : ALIPORE 1765

DAMODAR VALLEY CORPORATION.

ANDERSON HOUSE, ALIPORE
CALCUTTA-27

A.B. Ganguli, I.C.S.,
Member.

No. WG-420/56 - 11865
December 31, 1956.

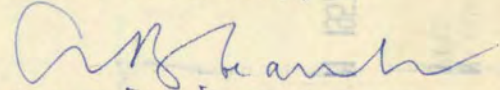
Dear Mr. Spottswood,

I am enclosing herewith a note on the upward revision of the Maithon, Panchet and Barrage & Irrigation estimates, with explanatory notes. I trust you will find the information adequate for your purpose. If anything more is required, please let me know.

2. I am also sending a 'bill' for levy of water charges by the West Bengal Government. I understand the bill is under further consideration.

With kindest regards,

Yours sincerely,


(A.B. Ganguli).

Enc: a/a.

A.D. Spottswood, Esqr.,
International Bank for Reconstruction
and Development,
1818 H Street, N.W.,
Washington 25 D.C.,
U.S.A.

cut from 8

EXCESS ON ESTIMATES

*Only difference
IBRD Report includes
inwards.*

The following table will show the cost of the Projects as estimated in 1955 compared to the cost estimated in 1952 and the consequential excesses. This statement excludes General Administration and Audit charges.

<u>Name of Project</u>	<u>1952</u>	<u>1955</u>	<u>Excess</u>
Tilaiya Dam	2.55	3.06	.51
Tilaiya Hydro-electric	.41	.53	.12
Barrage and Irrigation	19.65	22.44	2.79
Maithon Dam	10.42	12.66	2.24
Maithon Hydro-electric	3.20	3.74	.54
Panchet Hill Dam	10.89	14.39	3.50
Panchet Hill Hydro-electric	3.21	3.53	.32
	<u>50.33</u>	<u>60.35</u>	<u>10.02</u>

The particulars of excesses under the various subheads of the estimates are shown in the statements enclosed to this note. There was no revision since 1952 of the estimates for the B.T.P.S., the Konar Dam and the Transmission System(First Stage). They have therefore been excluded from the above table.

TILAIYA - DAM

2. The estimate for the Tilaiya Dam registers an increase of Rs.51 lakhs as per details shown in the enclosed statement. Increased cost of land acquisition and rehabilitation over which the Corporation has little control accounts for an increase of Rs.16 lakhs. Other important increases are explained below :

A. Preliminary -- Rs.1.26 lakhs: This is mainly due to two factors, viz. cost of drilling work carried out by Mr. Jamieson the Canadian Driller which was not known at the time of preparation

of the estimate of 1952, and the cost of drilling work carried out for the Karanjia bridge which was not contemplated at the time of preparation of the 1952 estimate.

C. Works -- Rs. 4.89 lakhs: The excess was caused by the following factors:

i. Increased cost on form work(straight) due to a larger number of panel-forms being utilised with a view to hastening the completion of the dam. The increased cost on this account amount to more than Rs. 2 lakhs.

ii. Increased cost of concrete which accounts for about Rs.2 lakhs.

iii. Extra expenditure under closure coffer dam which had to be put up repeatedly three or four times during the monsoon of 1952.

iv. Increase in the rates for water-stop metal and plain backfill toe of the dam as the estimated rates of 1952 proved unworkable.

D.Spillway and sluice equipment -- Rs.64,000/-:

This is mainly due to change in design of the undersluice gates in place of the pipe undersluices.

K. Buildings -- Rs.34,000/-: The excess was caused by the provision of debits on account of share of common buildings at Maithon in respect of which decision was taken after the 1952 estimate was prepared.

O. Miscellaneous -- Rs.9.08 lakhs: This was primarily caused by increased cost of the Ranchi-Patna Diversion Road in respect of which the design was changed more than once during the course of construction. There was also an increase in the quantity of excavation on account of the configuration of the ground along the hill side. The cost of land which was previously provided under B.Land was also provided in this estimate under O. Miscellaneous.

P.Maintenance -- Rs.80,000/-: This was caused by the prolongation of the period of construction.

Q.Spl. Tools & Plant -- Rs.9.60 lakhs: This was caused by the following factors:

- i. Payment of hire charges for machines received on loan from other Projects of the DVC (Rs.6.59 lakhs) and
- ii. Increased cost on spares and repairs to construction equipment (Rs. 3 lakhs).

Receipts and Recoveries -- Rs. 1.51 lakhs: The previous estimate of 1952 was not considered attainable in the light of the condition of machines as at the time of preparation of the revised estimate.

Establishment -- Rs.5.70 lakhs: This was caused primarily by the prolongation of the period of construction and the provision for the cost of indirect establishment charges the full extent of which was not known at the time of preparation of the 1952 estimate.

Tools and Plant -- Rs.90,000/-: This was due to some new purchases required in the course of construction and continued cost of maintaining the tools and plant due to lengthening of the period of construction.

HYDRO-ELECTRIC INSTALLATION - TILAIYA

3. The estimate for Hydro-electric Installation records an increase of about Rs. 13 lakhs which is accounted for primarily by excess under "C. Works" and "Establishment". The increase under C.Works amounts to Rs. 6.65 lakhs comprising Rs.3.63 lakhs for the Power House structure and Rs. 3.2 lakhs under Hydro-electric plant.

(a) The increase under Power House structure was due to -

- i. Increase both in the quantity and the rate for formwork and in the quantity of work on excavation in rock.
- ii. Increased cost of the penstocks and of the super-structure.

iii. Provision for stoplongs which was not provided for in the earlier estimate.

(b) The increase on "Plant and equipment" was caused primarily by the extra cost of the main plant, power control cables, conduits and wiring as also freight, insurance and customs duty.

(c) The increase in Establishment charges was due to adjustment of a larger amount of indirect establishment charges including payments to the C.E.C.

B & I PROJECT

4. The estimates for the B&I Project amounting to Rs.19.65 crores sanctioned in October 1951 were revised in 1954 to Rs.22.36 crores. An additional provision of Rs.8 lakhs was made in 1955 to cover the cost of a New Irrigation Scheme at Arambag on the Right Bank of the Damodar River. The estimate sanctioned in 1955, therefore, amounts to Rs.22.44 crores.

5. The estimates prepared in 1954 registered an increase of Rs.2.71 crores over the estimate of 1950-51. It may be noted in the first instance that the Project estimates of 1950-51 were based on very uncertain and insufficient data as the necessary surveys and designs were yet to be done. Further, there has been considerable rise since then in the price of labour and materials, such as cement, steel, ballast, POL and transport, which accounts for a general rise in the cost by about ^{15%}~~50%~~. Increase in the cost of compensation for land added considerably to the total estimated cost of the Project. There was also an increase in the cost of machines and spare parts, and the economics of mechanical operations were yet to be studied. Surveys and designs of the Canal structures and distributaries were not complete even at the time of preparation of the 1954 estimates and the cost had, therefore, to be worked out in many cases from the cost curves based on

estimates sanctioned upto that date. The net increase of Rs. 271 lakhs comprises excesses to the extent of Rs. 372 lakhs under certain subheads and savings to the tune of Rs. 101 lakhs under others. The particulars will be found in the statement enclosed to this note. The important excesses and savings are explained below :

A. Preliminary -- Saving Rs. 8.87 lakhs:

The saving was due to change of classification.

B. Land -- Excess Rs. 75.82 lakhs:

This includes Rs. 18.72 lakhs for Land Acquisition Establishment charges which were not provided for in the earlier estimate. The balance is accounted for by increase in the cost of land over which the Corporation has little control.

C. Works -- Excess Rs. 21.57 lakhs:

This is accounted for partly by provision of a Protection Bund (Rs. 5.50 lakhs) to save some lands on the Right Bank from flooding and partly by increase in the cost of labour and materials. As the detailed design of the Barrage was not available when the estimate of 1951 was prepared, the estimates of 1954 registered variations in quantities as well.

D. Regulators

&

E. Pils

-- Saving Rs. 16.50 lakhs :

The saving was mainly due to modification in design.

F. Cross drainage works -- Excess Rs. 41.90 lakhs:

The increase in cost was due to larger number of cross drainages found necessary on the basis of actual surveys as also rise in the price of cement, steel, ballast, etc. There was also no provision for cross drainages in the 1951 estimate for Navigation Canal. As surveys and designs were not available, provision for all these structures - specially some major cross drainage works could not be made in 1951.

G. Bridges - Locks ... Excess Rs. 51.19 lakhs:

The excess was caused by the following factors:

- a. Higher cost of Rly. bridges over the Canal System than was anticipated in 1951.
- b. Increase in the loading standard and specifications and width of the road bridges insisted upon by the Road Development Department of the Government of West Bengal.
- c. Provision of a double-lane road-bridge over the Durgapur Barrage with a side-walk of Class AA loading standard.

H. Escapes -- Excess Rs. 5.50 lakhs

The excess is due to higher cost of earthwork. The unit rates allowed in the 1951 estimates were found inadequate.

K. Buildings (temporary) -- Excess Rs. 28.97 lakhs:

The increase was caused by the provision of Rs. 41.02 lakhs for temporary buildings for the construction staff at Durgapur. The 1951 estimates did not make this provision as it was thought that hired buildings would be available at Durgapur during the period of construction of the Barrage. Unfortunately, no hired accommodation was available in the village. This excess was partly set off by a theoretical saving caused by transfer of certain items of work to "O. Miscellaneous". The estimate also provides for Salvage value of temporary buildings and colony roads to the tune of Rs. 18 lakhs.

L. Earthwork -- Saving Rs. 45.48 lakhs:

The saving was primarily due to reduction of the total volume of earthwork from 202 to 161.2 crore cyds. which was made possible by the implementation of correct and economical methods of design, most economical and suitable alignments and reduction of unproductive lengths of canals and all unnecessary lengths of the channels in their tail reaches, partly set off by increased unit rates as the rate provided in the original estimate was found to be too low.

L1 - Service Roads -- Excess Rs. 8.01 lakhs:

The excess was due to provision of new links to aqueducts and lock sites and of colony roads and roads connecting the quarries.

M. Plantation -- Excess Rs. 3.27 lakhs:

The excess was due to provision of plants on both sides of the Main and Branch canals and in the colonies.

O. Miscellaneous -- Excess Rs. 63.85 lakhs:

An excess of Rs. 30 lakhs is accounted for by the provision of terminal facilities in the Navigation canals. Other reasons for the excesses are the following :

- a. Provision for construction power, telephones, bathing ghats, Municipal taxes.
- b. Extra outlets on the Left Bank Canal System.
- c. Electrification of colonies.
- d. Cost of pitching along sandy portions of the Navigation Canal; and
- e. Change in classification leading to the transfer to this head of certain items of expenditure previously provided under "K. Buildings" and "L. Earthwork".

P. Maintenance -- Excess Rs. 7.04 lakhs:

Excess due to provision for a longer period than was anticipated in 1951.

Spl. & Ordinary Tools and Plant - Saving Rs. 6.62 lakhs:

The 1951 estimates lumped together the provisions for Spl. and Ordinary Tools & Plant and the amount provided was Rs. 222.70 lakhs. The gross provision for Spl. and Ordinary Tools & Plant in the 1954 estimate amounted to Rs. 170.74 lakhs which means a saving of Rs. 51.96 lakhs. This saving was reduced to Rs. 6.6 lakhs due to the fact that utilisation provided for in 1951 estimates amounted to Rs. 173 lakhs while utilisation plus salvage value in respect of machines anticipated in the 1954 estimates amounted to Rs. 127.66 lakhs. The low utilisation in the 1954 estimates to the tune of Rs. 45.34 lakhs is accounted for partly by the acquisition of a smaller number of machines and partly by a portion of the work on the Canals being done by contract.

II. Establishment -- Excess Rs. 61.79 lakhs:

The original provision of about 4½% for Establishment charges was too low. In fixing the appropriate cost of establishment charges for the Project we have to take account of the following factors:

- a. The area of operation of the Project involving the establishment of camps and other formations over a large area covering four districts.
- b. The cost of a full-fledged Central Design Office to deal expeditiously and efficiently with designs of the canal structures and the distributaries.
- c. Cost of the Medical and Anti-malarial Establishments, Welfare Officers, Field Accounts Offices in addition to Accounts Staff in the Divisions.
- d. Share of expenditure of the Central Purchase Organisation, Meteorological and the Hydrological establishments, etc.
- e. The percentage adopted by other Projects in India.

In course of discussions at the meetings of the Technical Committee of the Representatives of the Participating Governments held in April 1953, it came to light that the percentage of Establishment charges adopted by similar other Projects in India ranges from 8 to 11% of the expenditure on Works. The percentage for the 1954 estimates was, therefore, raised to about 8% and the latest actuals indicate that the increase was justified.

Receipts and Recoveries -- Saving Rs. 22.52 lakhs

The original provision of Rs. 2.30 lakhs on account of miscellaenous receipts was raised to Rs. 24.82 lakhs in the 1954 estimate accounted for by the following -

i. Salvage value of temporary buildings, colony roads and land covered by the colonies	..	..	Rs. 22.15 lakhs
ii. Rent	..	..	Rs. 2.67 lakhs
Total :			Rs. 24.82 lakhs

MAITHON - DAM

6. The estimate for the Maithon Dam registers an increase of Rs. 2.24 crores. Out of this total excess of Rs. 2.24 crores, increased cost of land acquisition and rehabilitation over which the Corporation has little

control accounts for Rs. 110 lakhs. The reasons for the further excess of Rs. 114 lakhs may be summarised as follows :

i. Non-availability of earth materials in adequate quantities from the diversion ^{channel} ~~tunnel~~ and the upstream borrow areas.

ii. Unexpectedly poor quantity of the quarries in the vicinity of the dam.

iii. Low efficiency of earthmoving equipment through the cumulative effect of -

- (a) the weakness of the P&H shovel for heavy rock work.
- (b) the difficulties in procuring spare parts in time.
- (c) the comparative inefficiency of operators and the maintenance crew.
- (d) the go-slow policy of labour from the latter part of 1954-55.

iv. Higher cost of repairs and maintenance of construction equipment.

v. Lengthening of the period of construction caused by some of the factors stated above as also the delay in securing delivery of the concreting plant.

7. The detailed reasons are furnished below:

A. Preliminary -- Rs. 8.70 lakhs: This includes fees payable to the Harza Engineering Co. for design work which was not included in the 1952 estimate as it was thought that T.C.M. grant would be free of charge to the Projects.

C. Works -- Rs. 38.70 lakhs: The unit cost of concreting and earthwork had gone up primarily due to low output of machinery, the higher cost of repairs and maintenance of equipment, and longer haulage for quarry and borrow-earth materials. The efficiency of the operational and maintenance crew was over-estimated while preparing the 1952 estimates. In actual working, the operators and mechanics proved less efficient and the performance expectations did not materialise. Due to improper handling of machinery and inefficient maintenance, breakdowns were too frequent which

appreciably raised the cost of repairs and maintenance and also led to semi-idle labour. To add to this difficulty, the earlier expectation that adequate quantities of rock and earth would be available from the diversion channel or areas close-by did not materialise. In consequence, a number of quarries had to be opened at places $\frac{2}{3}$ miles distant and earth material had also to be brought from a number of places of similar distance. But for substantial reduction in the quantity of concreting brought about by a change in design, viz. raising of the foundation level of the spillway etc., the increase under this head would have been still greater.

K. Buildings -- Rs. 16 lakhs: Provision for a share of common buildings at Maithon in respect of which a decision was taken later contributed to an excess of Rs. 12 lakhs. The balance of Rs. 4 lakhs represents the cost of additional quarters and fans found absolutely necessary.

O. Miscellaneous -- Rs. 38.32 lakhs: This excess mainly comprises Rs. 19.5 lakhs for construction and maintenance of H.T. and L.T. lines and about Rs. 12 lakhs for running charges of the water-supply and sanitation system in respect of which no provision was made in the 1952 estimates.

O. Spl. Tools & Plant -- Rs. 24.57 lakhs: The excess was caused by provision for residual spares found necessary in the light of experience and on the advice of experts, partly set off by a small saving on purchases.

II. Establishment -- Rs. 23.67 lakhs: The increase under Establishment is primarily due to prolongation of the period of construction. The previous estimate was prepared on the basis of an ad hoc percentage on Works expenditure, while the 1955 estimate was prepared on basis of actuals upto 31.3.55 and the anticipated expenditure for the rest of the period. Further, the extent of the share of indirect establishment charges, such as Planning and Design, C.P. & S., etc., was not

clearly known at the time the 1952 estimate was prepared.

III. Ordinary Tools and Plant - Rs. 8.22 lakhs: This is accounted for partly by new purchases found necessary in course of construction and partly by continued expenditure on maintenance of Tools and Plant caused by the prolongation of the construction schedule.

The above excesses were partly set off by ^{Saving}~~charging~~ under certain heads and an improvement in the salvage of value of capital assets.

MAITHON POWER HOUSE

8. The Maithon Power House registers an increase of Rs. 54 lakhs. The principal items of increase are as follows:

- a) Preliminary expenditure -- Rs. 20.97 lakhs
- b) Works -- -- 26.30 lakhs

The excess of Rs. 20.97 lakhs under "Preliminary expenditure" represents fees payable to M/s. Harza Engineering Co. for design work which was not included in the earlier estimate as it was thought that T.C.M. grants would be free of charge to the Projects.

The increase of Rs. 26.30 lakhs under "Works" was caused by -

(i) increase in the unit rate of concreting, as already explained, and unsatisfactory nature of the rock in the Underground Power House. Greater quantities of rock had to be excavated and the entire underground Tunnel and Chamber had to be strengthened by reinforced concrete wall.

(ii) Provision of an additional unit of 20,000 Kw to utilise surplus water in a normal year and for peaking purposes.

PANCHET HILL - DAM

9. The estimate for the Panchet Hill Dam registers an increase of Rs. 3.50 crores. Increased cost of rehabilitation of displaced persons and possible claims for minerals, which were not provided for in the previous estimate (partly set off by decrease in the area to be acquired) accounts for an

increase of Rs. 32.44 lakhs. The largest excess occurred under "C.Works" (Rs.190.73 lakhs). The causes for this large increase under "C.Works" may be summarised as follows:

a. Increase in cost due to increase in quantity.	Rs.42.96 lakhs
b. Increase in cost due to increase in the unit rate of <u>concrete</u>	25.26 "
c. Increase in cost due to increase in unit rates of <u>items other than concrete</u>	87.83 "
d. Cost of additional items	15.65 "
e. Cost of additional haulage	20.59 "
f. Consequential increase in the provision for contingencies	8.36 " 200.65

This total increase was partly set off by the decrease in cost under D.Spillway and an improvement on the estimated salvage value of capital assets.

10. Increase in quantity of work was caused by a change in design. The axis of the Diversion Channel was shifted further left involving an increase in the length of the channel, causing an increase in the quantity of work by 10.000 cyds. Further, the introduction of the left saddle dyke caused an increase in the volume of earth work on the Earth Dam to the extent of about 200.000 cyds. The more important cause was, however, the increase in the unit rate of concrete and earth work caused primarily by inadequate provision in the earlier estimates for repairs and overhaul of construction equipment and for extra haulage. Some additional items of work which were not provided for in the original estimate, such as placed rock, dumped rock, were also to be included. Moreover, there was the extra cost due to rise in the prices of spare parts, steel, cement, etc. The cost of cement in particular increased by Rs.16/- per ton as the entire quantity had to be transported in bags by road, causing an increase of over Rs.11 lakhs.

K. Buildings -- Rs.35.68 lakhs: The original estimate of Rs.50.00 lakhs provided for a nucleus colony at Panchet far short of the requirement of a big departmental construction like that at Panchet Hill. The additional provision which accounts for the increase is on the following items :

- a. Workers' quarters, field store godowns and field offices not provided in the earlier estimate -- Rs.19.83 lakhs
- b. Additional workshops, central storage depots and administrative office buildings as the previous provision proved inadequate -- 4.00 lakhs
- c. Provision of a dispensary at the dam site and a larger hospital with more staff quarters. -- 2.50 lakhs
- d. Provision for share of common buildings at Maithon not contemplated in 1952 -- 9.00 lakhs

O. Miscellaneous -- Rs.33.02 lakhs: This is accounted for by provision of Rs.36 lakhs for water supply and sanitary installation system, installation of telephones, running expenses of pump sets, etc. against a lumpsum provision of Rs. 3 lakhs in the 1952 estimates which was just sufficient for a nucleus colony.

O. Spl. Tools and Plant -- Rs.59.56 lakhs: This was due to the following reasons:

i. Provision for residual spares not provided for in the previous estimate, partly set off by increase under Salvage value. (Rs.35.56 lakhs)

ii. Increased cost of machines transferred from other Projects and the cost of additional machinery which had to be purchased due to delay in completion of the Maithon Project and consequential delay in delivery of construction equipment therefrom. This has been partly set off by increased provision for Salvage value.

II. Establishment -- Rs.29.25 lakhs: This was primarily due to retardation of progress and the adjustment of indirect establishment charges the extent of which was not known in 1952.

Ordinary Tools and Plant -- Rs.16.24 lakhs: The L.S. provision in the earlier estimate was found to be inadequate. The continued maintenance of Tools and Plant for a longer period caused by prolongation of the period of construction also contributed to the increase.

Savings: There is a saving of Rs.15.09 lakhs under Spillway due to reduction in cost of rock excavation in the left half of the diversion channel and in concreting of the spillway. A change in the design involving the raising of the foundation level of the left half of the spillway contributed to this saving. A saving was also caused by the reduction in the number of underclauces and the lower cost of tainter gates. There is an improvement in the salvage value to the extent of Rs.27.63 lakhs. There was also a saving of Rs.3 lakhs over the earlier estimate on account of the omission of capitalised abatement of land revenue.

HYDRO-ELECTRIC INSTALLATION - PANCHET HILL

11. The revised estimate for the Panchet Hill Hydro-electric scheme registers an increase of Rs.31.77 lakhs as per details shown in the statement enclosed to this note. The 1952 estimate for the Hydro-electric Project was a Preliminary estimate based on L.S. provision without detailed calculation of cost while the 1955 estimate was the result of detailed estimating based on quantities, rates, etc. and the latest schedule of prices of plant, equipment, etc. The excesses are accounted for as follows :

A.Preliminary -- Rs.13.31 lakhs: This represents fees payable to Harza Engineering Co. - not provided for in the earlier estimate as it was thought that T.C.M. grants would be free of charge to the Projects.

C.Works -- Rs.7.23 lakhs: The increase was due to higher cost of equipment than anticipated at the time of preparation of the previous estimate.

K.Buildings -- Rs.4 lakhs: The original provision of Rs. 2 lakhs was increased to Rs. 6 lakhs to provide for permanent quarters and an Inspection bungalow.

O.Miscellaneous -- Rs.4 lakhs: This was caused by the new provision of Rs.4 lakhs to cover the cost of an access road from the Right Bank Railhead to the Power House Site to facilitate transport of materials.

P.Maintenance -- Rs.1.50 lakhs: No provision was made in the 1952 estimates.

TILAIYA PROJECT - FINAL ESTIMATE 1955

Head of Account	Sanctioned Estimate 1952	Final Esti- mate 1955		Variation
<u>DAM & APPURTENANT WORKS:</u>				
<u>I. Works</u>				
A. Preliminary	4,77,000	6,03,000	(+)	1,26,000
B. Land	70,00,000	86,00,000	(+)	16,00,000
C. Works	94,40,000	99,29,000	(+)	4,89,000
D. Spillway & Sluice Equipment	9,50,000	10,14,000	(+)	64,000
K. Buildings	13,52,000	13,86,000	(+)	34,000
M. Plantation	25,000	28,000	(+)	3,000
O. Miscellaneous	42,58,000	51,66,000	(+)	9,08,000
P. Maintenance	1,30,000	2,10,000	(+)	80,000
Q. Special Tools & Plant	43,00,000	52,60,000	(+)	9,60,000
Total I. Works ::	2,79,32,000	3,21,96,000	(+)	42,64,000
II. Establishment	18,80,000	24,50,000	(+)	5,70,000
III. Tools & Plant	2,60,000	3,50,000	(+)	90,000
IV. Suspense	-	-		-
V. Deduct - Receipts and Recoveries	(-) 45,42,000	(-) 43,91,000	(+)	1,51,000
VI. Capitalised value of abatement of Land Revenue	6,000	-	(-)	6,000
Total ::	2,55,36,000	3,06,05,000		50,69,000

HYDRO-ELECTRIC INSTALLATION:

<u>I. Works</u>				
A. Preliminary	5,000	-	(-)	5,000
C. Works	37,23,000	43,88,000	(+)	6,65,000
K. Buildings	85,000	91,000	(+)	6,000
O. Miscellaneous	1,60,000	30,000	(-)	1,30,000
P. Maintenance	22,000	70,000	(+)	48,000
Total I. Works ::	39,95,000	45,79,000	(+)	5,84,000
II. Establishment	1,99,000	6,49,000	(+)	4,50,000
III. Tools & Plant	40,000	92,000	(+)	52,000
IV. Suspense	-	-		-
V. Deduct Recoveries	(-) 1,69,000	(-) 4,000	(+)	1,65,000
Total ::	40,65,000	53,16,000		12,51,000

:AKM.

1

PANCHET HILL PROJECT
REVISED ESTIMATE 1955.

HYDRO-ELECTRIC INSTALLATION

ABSTRACT

Head of Account	Revised Estimate 1952.	Revised Estimate 1955.	Increase (+) Decrease (-)
<u>I-WORKS:</u>			
A. Preliminary	1,00,000	14,31,000	(+) 13,31,000
C. Works	2,92,43,000	2,99,66,000	(+) 7,23,000
K. Buildings	2,00,000	6,00,000	(+) 4,00,000
O. Miscellaneous	2,00,000	6,00,000	(+) 4,00,000
P. Maintenance	-	1,50,000	(+) 1,50,000
Total I- Works	2,97,43,000	3,27,47,000	(+) 30,04,000
II Establishment	20,82,000	22,49,000	(+) 1,67,000
III Tools and Plant	2,97,000	3,18,000	(+) 21,000
Total Hydro-Electric Installation :	<u>3,21,22,000</u>	<u>3,53,14,000</u>	(+) <u>31,92,000</u>

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:MRC.22.12.56.

PANCHET HILL PROJECT
REVISED ESTIMATE - 1955
ABSTRACT
Dam and Appurtenant Works

2

Head of Account.	Revised Esti- mate - 1952	Revised Esti- mate - 1955	Increase (+) Decrease (-)
I - WORKS			
A. Preliminary	22,00,000	19,04,000	(-) 2,96,000
B. Land	2,01,00,000	2,33,44,000	(+) 32,44,000
C. Works	3,46,80,000	5,37,53,000	(+) 1,90,73,000
D. Spillway & Sluice Equipment	2,17,84,000	2,02,75,000	(-) 15,09,000
K. Buildings	50,00,000	85,68,000	(+) 35,68,000
M. Plantation	2,00,000	2,00,000	-
O. Miscellaneous	41,90,000	74,92,000	(+) 33,02,000
P. Maintenance	13,00,000	14,40,000	(+) 1,40,000
Q. Special Tools & Plant:			
i) Purchase & Transfers	1,81,20,000	2,05,20,000	(+) 24,00,000
ii) Repairs, Maintenance and Overhaul		1,88,82,000	(+) 1,88,82,000
iii) Residual spares		35,56,000	(+) 35,56,000
iv) Deduct transfer to works		(-1,88,82,000)	(-) 1,88,82,000
Net Q. Special Tools and Plant	1,81,20,000	2,40,76,000	(+) 59,56,000
Total I - Works	10,75,74,000	14,10,52,000	(+) 3,34,78,000
II - ESTABLISHMENT	64,54,000	93,79,000	(+) 29,25,000
III TOOLS & PLANT	10,76,000	27,00,000	(+) 16,24,000
IV SUSPENSE	-	-	-
V - DEDUCT : RECEIPTS AND RECOVERIES ON CAPITAL ACCOUNT	(-) 65,14,000	(-) 92,77,000	(-) 27,63,000
VI CAPITALISED ABATEMENT ON LAND REVENUE	3,00,000	-	(-) 3,00,000
Total Dam & Appurtenant Works	10,88,90,000	14,38,54,000	3,49,64,000 3,04,91,472

Maithon Project
Revised Estimate, 1955.
Hydro-Electric Installation.

3

A b s t r a c t.

<u>Head of Account</u>	<u>Revised Estimate, 1952</u>	<u>Revised Estimate, 1955</u>	<u>Increase (+) Decrease (-)</u>
<u>I. Works.</u>			
A. Preliminary	1,00,000	21,97,000	+ 20,97,000
C. Works	2,92,76,000	3,19,06,000	(+) 26,30,000
K. Buildings	1,01,00,000	1,00,000	-
O. Miscellaneous	1,50,000	3,70,000 (+)	2,20,000
P. Maintenance		1,50,000 (+)	1,50,000
<u>Total I. Works</u>	<u>2,96,26,000</u>	<u>3,47,23,000 (+)</u>	<u>50,97,000</u>
II. Establishment	20,74,000	24,31,000 (+)	3,57,000
III. Tools & Plant	2,96,000	3,47,000 (+)	51,000
V. Deduct: Receipts & Recoveries for Sale of Power	- (-)	80,000 (-)	80,000
VIII Audit Charges	74,000	82,000 (+)	12,000
VII Overhead	5,18,000	4,09,000 (+)	1,91,000
<u>Total: Hydro-Electric Installation</u>	<u>3,19,96,000</u>	<u>3,74,21,000</u>	<u>54,25,000</u>

Maithon Project
Revised Estimate, 1955.
Dam & Appurtenant Works.
A b s t r a c t.

4

Head of Account	Revised Estimate 1952	Revised Estimate 1955	Increase (+) Decrease (-)
<u>W o r k s :</u>			
A. Preliminary	27,00,000	35,70,000 (+)	8,70,000
B. Land	148,00,000	2,53,06,000 (+)	1,10,06,000
C. Works	356,90,000	3,95,60,000 (+)	38,70,000
D. Spillway	205,73,000	2,05,75,000 (+)	2,000
K. Building	61,00,000	77,00,000 (+)	16,00,000
M. Plantation	3,00,000	1,00,000 (-)	2,00,000
O. Miscellaneous	54,81,000	93,13,000 (+)	38,32,000
P. Maintenance	11,76,000	11,76,000	-
Q. Special Tools & Plant			
1) Purchase & Transfer	2,22,29,000	2,20,00,000 (-)	2,29,000
2) Repairs, Maintenance and overhaul		1,47,13,000 (+)	1,47,13,000
3) Residual Spares		26,36,000 (+)	26,36,000
4) Deduct: Transfer to Works		(-) 1,47,13,000 (+)	1,47,13,000
New Q.	2,22,29,000	2,46,86,000 (+)	24,57,000
Total I. Works	10,90,49,000	13,24,86,000 (+)	2,34,37,000
II. Establishment	76,33,000	1,00,00,000 (+)	23,67,000
III. Tools & Plant	11,78,000	20,00,000 (+)	8,22,000
IV. Suspense	-	-	
V. Deduct: Receipts & Recoveries on Capital Account	(-) 1,39,75,000	(-) 1,78,63,000 (-)	38,88,000
VI. Capitalised Abate- ment on land revenue	3,00,000	-	(-) 3,00,000
Total: Dam & Appurtenant Works:		12,92,79,000	2,29,14,000
	10,41,85,000	12,66,23,000 (+)	2,24,38,000

Barrage and Irrigation Project

(Figures in lakhs)

5-

Sub-heads of estimates	1951	1954	Excess	Saving	Net excess
A. Preliminary Expenses	16.28	7.41	-	8.87	
B. Land	254.78	330.60	75.82	-	
C. Works	300.82	322.39	21.57	-	
D. Regulators	186.39	177.42	-	8.97	
E. Falls	13.08	5.55	-	7.53	
F. Cross Drainage Works	75.93	117.83	41.90	-	
G. Buildings ^{Bridge}	321.97	373.16	51.19	-	
H. Escapes	3.00	8.50	5.50	-	
K. Buildings (Permanent)	49.89	49.11	-	.78	
K. Buildings (Temporary)	27.22	56.19	28.97	-	
L. Earth Work	526.84	481.36	-	45.48	
L.(1) Service Roads	28.57	36.58	8.01	-	
M. Plantation	2.50	5.77	3.27	-	
O. Miscellaneous	10.00	73.85	63.85	-	
P. Maintenance	6.00	13.04	7.04	-	
R. Water Course	2.85	5.00	2.15		
Special and Ordinary Tools and Plant	222.70	127.66	-	-	
Ordinary Tools & Plant	-	43.08			
Gross :	222.70	170.74			
Depreciation	- 173.00	- 93.78			
Salvage	-	- 33.88			
	49.70	43.08	-	6.62	
II. Establishment	87.57	149.36	61.79	-	
Abatement of L/R	3.44	4.30	.86	-	
Receipts	- 2.30	-24.82	-	22.52	
	<u>1964.53</u>	<u>2235.68</u>	<u>371.92</u>	<u>100.77</u>	<u>271.15</u>

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INDIA

Loan 72 IN (Damodar Project)

Status as of December 31, 1956

Amount	US\$ 19.5 million or equivalent, with no participations or portfolio sales.																						
Borrower	India																						
Purpose	Electric power development, flood control and irrigation																						
Interest	4-7/8% per annum																						
Term	24 years (including 3-1/2 years grace period)																						
Date of Loan Agreement	January 23, 1953																						
Effective Date	March 22, 1954																						
Closing Date	June 30, 1958																						
Cancellations	\$9,000,000 on February 4, 1954																						
Amount disbursed	\$8,226,963 as follows: <table><tbody><tr><td>US Dollars</td><td>\$5,371,432</td></tr><tr><td>Pounds Sterling</td><td>\$ 33,833</td></tr><tr><td>Austrian Schillings</td><td>\$ 138</td></tr><tr><td>Belgian Francs</td><td>\$ 625,050</td></tr><tr><td>French Francs</td><td>\$ 790,178</td></tr><tr><td>German Marks</td><td>\$ 244,868</td></tr><tr><td>Italian Lire</td><td>\$ 93</td></tr><tr><td>Neth. Guilders</td><td>\$ 622,945</td></tr><tr><td>Swedish Kroner</td><td>\$ 1,280</td></tr><tr><td>Swiss Francs</td><td>\$ 535,683</td></tr><tr><td>Japanese Yen</td><td>\$ 1,463</td></tr></tbody></table>	US Dollars	\$5,371,432	Pounds Sterling	\$ 33,833	Austrian Schillings	\$ 138	Belgian Francs	\$ 625,050	French Francs	\$ 790,178	German Marks	\$ 244,868	Italian Lire	\$ 93	Neth. Guilders	\$ 622,945	Swedish Kroner	\$ 1,280	Swiss Francs	\$ 535,683	Japanese Yen	\$ 1,463
US Dollars	\$5,371,432																						
Pounds Sterling	\$ 33,833																						
Austrian Schillings	\$ 138																						
Belgian Francs	\$ 625,050																						
French Francs	\$ 790,178																						
German Marks	\$ 244,868																						
Italian Lire	\$ 93																						
Neth. Guilders	\$ 622,945																						
Swedish Kroner	\$ 1,280																						
Swiss Francs	\$ 535,683																						
Japanese Yen	\$ 1,463																						
Amount undisbursed	\$2,273,037																						
Amortization	Semi-annually (January 15 and July 15) beginning July 15, 1956, for \$141,000. Next repayment due July 15, 1957 for \$148,000.																						
Amount repaid	\$285,000.																						
Amount outstanding	\$7,941,963																						

Dec. 31, 1956

Cost of Project

In Rs. millions:

	<u>Original</u>	<u>September</u> <u>1955</u>	<u>Expenditures to</u> <u>Sept. 30, 1956</u>
Maithon	139.0	167.4	-
Panchet Hill	149.0	182.5	-
Durgapur & Irrigation	<u>198.0</u>	<u>222.6</u>	<u>-</u>
	486.0	572.5	373.7
\$ Equivalent	102.0	121.5	79.5

February 4, 1957



GRAM : DAVALLEE

PHONE : ALIPORE 1765

DAMODAR VALLEY CORPORATION.ANDERSON HOUSE, ALIPORE
CALCUTTA-27

D.O.No.W.Disp-32/55(II)- 11672

Dt. 26-12-56

Dear Mr.Marshall,

Sub: Disposal of equipment purchased
out of the I.B.R.D. Loan.

In your letter dated 11th October 1956, you desired us to draw up a comprehensive final report on the equipment purchased out of the proceeds of the IBRD loan which have become surplus to our requirement. We have also been advised to withhold release of such equipment until we have received the Bank's comments after they have examined the complete report. A comprehensive report is under preparation and will be sent to you as soon as it is finalised. Meanwhile, we have received a few urgent and firm requisitions from some River Valley Projects and State Governments in India for release of some of the surplus equipment which had been purchased out of the Bank loan.

2. The surplus items include some electrical equipment such as 66 KV Lightning Arrestors, Oil Circuit Breakers and Control Board for O.C.B. These were purchased out of the First Dollar Loan for the erection of the temporary 66 KV transmission system for initial distribution of power from Sindri. On completion of the permanent 132 KV transmission and distribution system, the interim 66 KV transmission system has been dispensed with and the equipment have now become surplus. Details of these equipment are furnished in the attached statement. The Electricity Department of Uttar Pradesh Government are in immediate need for

these

Contd

equipment and have requested their release as early as possible. These are not required by any of our projects and their release will not have any adverse effect on the Bank financed Projects still under construction. In the circumstances, it is hoped that the Bank will not have any objection to their disposal at their book value less depreciation as shown in the statement.

3. We have also received requests from certain River Valley Projects and Government sponsored Projects, such as, the Durgapur Steel Project, the Durgapur Coke Oven Project, for release of some of our construction machinery purchased out of the Bank loan which are now lying surplus at Konar, Maithon and Durgapur. Since the surplus machines are fast deteriorating, it will be appreciated if the Bank would agree to their release pending finalisation of the comprehensive report and the Bank's comments thereon. Some of the machines have already been declared "absolute" surplus and are not required for any of the Bank financed Projects under construction. However, before authorising release of the machines, it will be verified again and confirmed by the Chief Engineer that they will not be required for the Projects now under construction and that their release will not have any adverse effect on our construction programme. A list of the surplus construction equipment for which release has been asked for, with details regarding the type, size, hours used, general condition, original cost and the depreciated value, is attached.

4. It is also proposed to utilise a few Pneumatic type Concrete Vibrators which were purchased from the Second Dollar Loan and are now lying surplus at Maithon, for the construction of our Second Thermal Power Station at

Contd.

Durgapur. It is hoped that the Bank will have no objection to this.

Yours Sincerely,
A. B. Ganguli

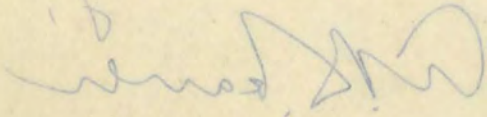
(A. B. Ganguli)

To
Mr. L. Gray Marshall,
International Bank for
Reconstruction & Development,
1818 H Street, NW,
Washington 25 DC, USA.

1954. 1. 24 54 1820

RECEIVED
JAN 24 1954
U.S. DEPT. OF COMMERCE

no objection to this. It is hoped that the Bank will have

Yours sincerely,


(A. B. Ganguly)

To
 Mr. L. Gray Marshall,
 International Bank for
 Reconstruction & Development,
 1818 H Street, NW,
 Washington 25, DC, USA.

JAN 2 1 35 PM 1950

RECEIVED
 INTERNATIONAL BANK FOR
 RECONSTRUCTION AND DEVELOPMENT

STATEMENT SHDWING PARTICULARS OF 66 KV EQUIPMENT
TO BE DISPOSED TO THE ELECTRICITY DEPARTMENT OF
THE GOVERNMENT OF UTTAR PRADESH.

Name of Equipment	Nos, declared as surplus for disposal.	BOOK VALUE		Life of equipment	Period of use,	Amount of depreciation		Disposal value	Remarks
		Per Unit	Total,			Per unit	Total		
		Rs.	Rs.			Rs.	Rs.		

TRANSFORMER & EQUIPMENT

66 KV Lightning Arrestor.	5	1,257	6,285	35	4 Nos- 2-10 1 No - 2- 2	17	229	6,056	
------------------------------	---	-------	-------	----	----------------------------	----	-----	-------	--

SWITCHGEAR

66 KV Oil Circuit Breaker,	2	58,083	1,16,166	20	1 No - 2-10 1 No - 2- 0	1847	8927	1,07,239	
66 KV Oil Circuit Breaker Control Board.	1	11,562	11,562	20	2-10	368	1043	10,519	

STATEMENT SHOWING CONSTRUCTION EQUIPMENT FINANCED BY THE I.B.R.D. WHICH HAVE BEEN
DECLARED SURPLUS TO THE REQUIREMENTS OF THE D.V.C. PROJECTS AND ARE PROPOSED
TO BE SOLD TO NAGARJUNSAGAR PROJECT.

Sl. No.	Description of equipment.	Serial No. of Machine.	Type & Size.	Hours used.	General condition.	Original cost. Rs.	Depreciated Value. Rs.	Name of Present owner.	Name of Original owner.	Remarks.
1.	Dumper, Bottom, Euclid.	11373	Model 67 FDT/58W 13 Cu.Yds.	6962	Poor.	1,28,322/-	72,488/-	Konar Project.	Konar Project.	
2.	-do-	11374	-do-	8892	Fairly satisfactory.	1,28,861/-	57,245/-	-do-	-do-	
3.	-do-	11375	-do-	8040	Poor.	1,28,860/-	64,104/-	-do-	-do-	
4.	-do-	11376	-do-	7247	Fair.	1,28,860/-	70,497/-	-do-	-do-	
5.	-do-	11377	-do-	8275	Unsatisfactory.	1,28,860/-	62,211/-	-do-	-do-	
6.	Dragline, P & H.	14737	Model 655 B 1½ Cu.Yds.	7497	Satisfactory.	2,41,195/-	1,50,871/-	-do-	-do-	
7.	-do-	14738	-do-	6228	Satisfactory except starting which needs repairs.	2,41,196/-	1,66,080/-	-do-	-do-	
	Shovel, P & H.	13909	Model 955 A 2½ Cu.Yds.	9105	Poor.	3,13,594/-	1,35,136/-	-do-	-do-	
9.	CPT Wagon Drill with 60N 3½ Drifter	F.362962	G-300 Medium weight.	600	In running order.	14,720/-	13,248/-	Maithon Project.	Maithon Project.	
10.	-do-	F.379104	-do-	700	-do-	14,720/-	13,003/-	-do-	-do-	
11.	-do-	F.379116	-do-	1300	-do-	14,720/-	11,531/-	-do-	-do-	
12.	-do-	F.362952	-do-	1000	-do-	14,720/-	12,267/-	-do-	-do-	



GRAM: DAVALLEE

Regd. AIR MAIL.

PHONE: ALIPORE 1765

DAMODAR VALLEY CORPORATION.

ANDERSON HOUSE, ALIPORE

CALCUTTA-27

D.O.No.PRO-⁸/₅₆ 11-2473

December 22, 1956.

Dear Mr. Black,

May I send you, with the compliments of the Corporation, a copy of our latest booklet "Eight Years of DVC"? It represents a modest attempt to present the over-all progress of the scheme.

We would always love to recall - and gratefully - the great honour you did us in visiting our projects and encouraging us in our activities, when you were in India some years ago. May we hope that that honour will again be ours when you find yourself in this part of the world next? Our visitors in recent months include Chief Justice Warren of U.S.A., the Emperor of Ethiopia, Premier Chou En-lai of China and Dr. Estenssoro, ex-President of Bolivia. A list not lacking in catholicity!

Mr. P.S.Rau, who till recently was Adviser under Presidential rule in Travancore-Cochin, is taking over as Chairman in a day or two.

May I close with the warmest greetings and good wishes of the Corporation to you for a truly happy Christmas and New Year? And my own? With regards,

Yours faithfully,

C. Balan

(C. Balan.)

Public Relations Officer

Eugene R. Black, Esq.,
President,
International Bank for Reconstruction & Development,
1818 H Street, N.W.,
Washington D.C. (USA)

DAMODAR VALLEY CORPORATION.

ANDERSON HOUSE, ALIPORE

CALCUTTA-27



December 22, 1956.

D.O.No. PRO-1/24-3173

Black

May I send you with the compliments of the Corporation a copy of our latest booklet "Eight Years of DVC"? It represents a modest attempt to present the over-all progress of the scheme.

We would always love to recall - and gratefully - the great honour you did us in visiting our projects and encouraging us in our activities, when you were in India some years ago. May we hope that that honour will again be ours when you find yourself in this part of the world next? Our visitors in recent months include Chief Justice Warren of U.S.A., the Emperor of Ethiopia, Premier Chou En-lai of China and Dr. Estenssoro, ex-President of Bolivia. A list not lacking in catholicity!

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May I close with the warmest greetings and good wishes of the Corporation to you for a truly happy Christmas and

New Year? And my best regards

Yours faithfully,

C. Balan

(C. Balan.)
Public Relations Officer

Eugene R. Black, Esq.,
President,
International Bank for Reconstruction & Development,
1818 H Street, N.W.,
Washington D.C. (U.S.A.)



Shri A.B. Ganguli, I.C.S.,
Member.
GRAM : DAVALLER
PHONE : ALIPORE 1765
DAMODAR VALLEY CORPORATION.
ANDERSON HOUSE, ALIPORE
CALCUTTA-27

D.O.No.WK.5/56 - 11434

December 17, 1956.

Dear Mr Marshall,

Inter-Project transfer of equipment
purchased out of the proceeds of the
I.B.R.D. Loans.

.....

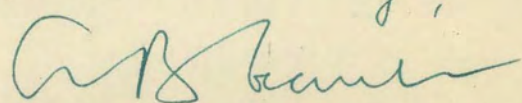
The Loan Agreement as well as the Project Agreement in respect of the First Dollar Loan No.23 IN for Bokaro-Konar Project provides that, except as may be otherwise agreed in writing by the Bank, all goods purchased in whole or in part with the proceeds of the Loan will be used exclusively in the carrying out of the Project concerned. Similar provision exists also in the Loan and Project Agreements in respect of the Second Dollar Loan (No.72 IN) for Maithon-Panchet Hill-Barrage and Irrigation Project. Strictly speaking, transfers of equipment purchased for a Project covered by the First Loan to a Project covered by the Second Loan and vice versa, even on a temporary basis, would attract the provisions of these Agreements.

2. It is understood that during your last visit to the DVC you expressed the view to Mr. Komora that inter-project transfer of I.B.R.D. financed equipment could be made without the prior approval of the Bank subject to the Bank being informed of such transfers. This was also the impression I gathered when we discussed this subject at our recent meeting in Delhi on 10th December, 1956. I shall be grateful if you will kindly confirm that inter-project transfers of machines may be made within I.B.R.D. financed projects irrespective of whether they are covered by the First Loan or the Second Loan without the prior approval of

contd:

ack Jan 4

the Bank. In this connection, I would invite your attention to paragraph 5 of the Explanatory Note relating to surplus I.B.R.D. machines, a copy of which was attached with my D.O. No.W/Disp-32/55-9013 dated the 24th September, 1956.

Yours Sincerely,


(A.B. Ganguli)

Mr. L. Gray Marshall,
International Bank for
Reconstruction & Development,
1818 H Street,
N.W. Washington 25, D.C.,
U.S.A.

S.Laf
ABG: MRC
17.12.56.

22P1, 25.12.56, 22P1, 25.12.56, 22P1, 25.12.56
(109)

the Bank. In this connection, I would invite your attention to paragraph 2 of the Explanatory Note relating to surplus I.B.R.D. machines, a copy of which was attached with my D.O. No. W/Disp-32/55-9013 dated the 24th September, 1956.

Yours sincerely,
W. B. Ganga
(A. B. Ganga)

Mr. I. Gray Marshall,
International Bank for
Reconstruction & Development,
1818 H Street,
N.W. Washington 25, D.C.,
U.S.A.

17.12.56
ABG: MRC
2.12.56

Des. 26, 1956
(199)
received

Original Official Copy

10 Dec. 1956

The following were present in the meeting
held in Secretary's room this morning:

Bank:	Mr. A.D. Spottswood	
	Mr. Gray Marshall	
Government of India:	Mr. T.Sivasankar, I.C.S.,	Secretary, Ministry of I & P.
	Mr. R.R. Bahl, I.C.S.	Joint Secy. Min. I & P.
	Mr. M. Hayath	Member, CW&PC.
	Mr. G.D. Kshetrapal, IAS	Dy. Secy. Min. I&P.
	Mr. B.K. Nehru, I.C.S.	Joint Secy. Min. of Finance
	Mr. S.S. Puri	Dy. Secy. Min. of Fin.
	Mr. P.P. Srivastava	Under Secy. Min. of Fin.
DVC	Mr. P.P. Varma	Chairman, DVC.
	Mr. A.B. Ganguli, ICS	Member, DVC
	Mr. S.M. Banerjee	Financial Adviser, DVC
	Mr. A.M. Komora	Chief Engi- neer, DVC
	Mr. K. Subramaniam	Commercial Engineer, DVC.
	Mr. C.R. Das Gupta	Assistant Financial Adviser, DVC.

Original Official Copy

At a conference in New Delhi in which representatives of the Damodar Valley Corporation, the Central Government and the International Bank were present, the recommendations set forth in Mr. Knapp's letter of August 17th, 1956, to Mr. G.R. Kamat, were discussed. A summary of the position of the DVC and the Central Government with regard to the Bank's recommendations is given below:

Recommendation No.1. The position was that in view of the fact that the D.V.C. Board would soon be complete with the return of Mr. Rau to the position of Chairman in December the Government of India would give consideration to the appointment of a high-level Executive preferably with utility experience to the position of Secretary of the Corporation. Should the Board be re-constituted in future, consideration would be given to the appointment to the Board of a person with utility background. While it was agreed that a Secretary with public utility experience would be desirable, the D.V.C. thought the Secretary might be a person of somewhat broader experience because his duties would encompass more than ¹⁵ required of a public utility manager.

When will a suitable secretary be appointed?

It was agreed that the Secretary to be appointed would be delegated ample authority by the Board to enable him to function effectively as the Chief Executive Officer of the Corporation and the Board would confine itself largely to matters of policy and the broader aspects of administration.

It was agreed ^{that} the terms of all members of the Board of the D.V. C. would be staggered in future so that the terms of all the Board Members would not expire at the same time as at present. It was also agreed that the terms of the Board's Members would be

lengthened so as to ensure continuity in office of experienced Members.

The policy of the present Ministry has been not to interfere in the operations of the DVC and this will be the continued policy of the Ministry ^{in future} to ensure that the Corporation functions as an autonomous entity as intended in the D.V.C. Act.

Recommendation No.2. It is the Indian practice not to assign responsibility for civil ~~work~~ and electrical work to a single Chief Engineer. The Chief Civil Engineer and the Chief Electrical Engineer remain responsible for civil and electrical works respectively, an appropriate machinery being set up for necessary coordination. In the D.V.C. the coordination is ensured at the Board level. As this arrangement in the opinion of the DVC has been working satisfactorily it would prefer, if the Bank has no serious objections, to continue with the established pattern in this regard and not appoint a single Chief Engineer with full responsibility for engineering and construction of all projects including electrical and mechanical works. The D.V.C., however, agreed that the present Chief Engineer would continue to have complete responsibility for the completion of the Maithon and Panchet Hill Projects, including mechanical and electrical works therein.

The D.V.C. agreed that the services of the present Chief Engineer would be continued until the Panchet Hill Project had been substantially completed and that definite contractual arrangements to this end would be promptly finalised.

Recommendation No.3: While it was agreed in principle that the functions of the Corporation would be separated into -

- (a) Planning, designing and construction,
- (b) Operation and maintenance, and
- (c) Administration

the DVC did not think it expedient to have a single administrator for each of these functions. It was DVC's contention that the civil and electrical engineering work under (a) and (b) should be headed by civil and electrical engineers respectively who would report directly to the Secretary. Thus there will be five persons reporting to the Secretary instead of three as suggested by the Bank. The co-ordination of the functions divided between the civil and electrical engineers would then be achieved through the Secretary.

Recommendation No.4: It was pointed out that the Harza Engineering Company is responsible for the completion of the designs for the Panchet Hill Project and that these designs are scheduled to be completed substantially by June 1957. The D.V.C. agreed that Harza Engineering Company would be requested to provide as soon as possible a resident engineer for quality control and inspection until the completion of Maithon and Panchet Hill projects.

The D.V.C. agreed that the design of the proposed 75,000 KW unit to be installed at Bokaro Thermal Station could be referred to a Consulting Engineering firm for review and recommendation with special reference to items for which no financial commitments have been made and that the supervision of installation of the equipment would be under the same Consulting Engineers who have been retained to supervise design and construction of the Durgapur Thermal Plant.

Recommendation No.5: It was pointed out by the representatives of the Bank that the words in this recommendation "contracting out" were intended to have

the meaning of contracting out certain items of work and not the entire work. It was pointed out by the representatives of the D.V.C. that the only work at Panchet Hill now being undertaken departmentally was the large scale earthmoving and placement of concrete and that substantially all other work was on a contract basis. The D.V.C. agreed to continue the practice of contracting all work including the erection of machinery and equipment in the powerhouse that could be economically undertaken in this manner.

is that not done by the manufacturers?
have we got this draft?
Recommendation No.6: It was pointed out that a bill authorising the levy of water rates had already been drafted by the West Bengal Government which was likely to be introduced into the State Legislature soon after the next election. This would enable the State to levy charges for water in the absence of agreements with farmers.

are we got this report?
Recommendation No.7: It was pointed out by the D.V.C. that the Corporation had undertaken a review of its power rates and that this review was now under the consideration of the Government of India. In the discussions, it was brought out that the Electricity (Supply) Act, 1948, limits profits by electric utility undertakings to 5% on the Capital base. Although the D.V.C. does not come within the purview of the Electricity (Supply) Act 1948, the Central Government was of the opinion that it should not be allowed appreciably to exceed the profits of other electrical utilities. The D.V.C. agreed that it would establish rates for sale of electricity as soon as practicable which would permit the Corporation to earn at least the maximum percentage permissible under law on its capital base (investments allocated to power).

It was pointed out that there was currently under consideration an amendment to the Electricity (Supply) Act which would permit utility earnings to be related to the prevailing Bank rate which now stands at $3\frac{1}{2}$ per cent.

This would permit utilities at present to earn upto
5½ per cent on their capital base.

New Delhi
10th December 1956.

C
O
P
Y

RF
2nd DVC

I N C O M I N G W I R E

NOVEMBER 27, 1956 1535

ACTION COPY: TECH. OP.

TO: INTERNATIONAL BANK FOR RECONSTRUCTION
& DEVELOPMENT

INFORMATION COPY: MR. POORE
MR. PRINS

FROM: BANGKOK

EIGHT

FOR CHADENET RECEIVED CABLE FROM IRRIGPOWER STATING DECEMBER TENTH
SUITABLE FOR MEETING. BANK THAILAND AUTHORIZED TO PAY ME FIFTY
US DOLLARS AT 22,000 BAHTS CANNOT USE BAHT TO PURCHASE RUPEE PLEASE
AUTHORIZE ADDITIONAL HUNDRED US DOLLARS FOR TRIP TO INDIA.

SPOTTSWOOD

✓
12/20

The Times of India
Nov 22 1956

LARGE AGAINST

MR. RAU BIDS FAREWELL

Acting Governor Of Kerala

"The Times of India" News Service
TRIVANDRUM, November
20: The Acting Governor, Mr.
P. S. Rau, who guided the State
administration for about eight
months, left today for Madras.

As he walked quietly to the
plane, which took him to Mad-
ras, he fought back tears and
bade goodbye to Kerala.

In his parting message, he
wished that Kerala would be-
come the "home of progress and
haven of joy."

"May Kerala rise above petty
differences and communal jea-
lousies. My good wishes and
prayers will always be with
you," he added.

D.V.C. CHIEF

He will formally quit charge
of his office at Madras tomorrow
after meeting the Governor-de-
signate, Mr. B. Ramakrishna
Rao.

After spending three weeks
at Coonoor, near Ooty, he will
rejoin the Damodar Valley Cor-
poration, Calcutta, as Chairman.

State Government officials and
police officers saw him off at the
airport.

He inspected a guard of hon-
our provided by the Kerala Po-
lice. He arrived here on March
26 last as Adviser to the Raj-
pramukh.

DR. RAO LEAVES FOR TRIVANDRUM

K. R. Menon Is Adviser

MADRAS, Nov. 20: Dr. B.
Ramakrishna Rao, Governor-
designate of Kerala, who arrived
here this afternoon from Hydera-
bad en route to Trivandrum, held
discussions with Shri P. S. Rau,
acting Governor of Kerala, who
reached here in the evening from
Trivandrum.

On arrival at the airport, Dr.
Ramakrishna Rao was received
by the Governor of Madras, Shri
Sri Prakasa.

Dr. Rao is leaving tonight by
train for Trivandrum and will be
sworn in as Governor on Thurs-
day.

Shri K. Ramunni Menon, for-
mer chief secretary to the Gov-
ernment of Madras, who has
been appointed Adviser to the
Governor of Kerala in the place
of Shri P. S. Rau, will also as-
sume charge the same day.

Shri A. J. John, Governor-
Designate of Madras, is expected
to assume office on or about De-
cember 3.

The present Governor, Shri Sri
Prakasa, who has been appointed
Governor of Bombay, will be
leaving Madras for Bombay on
December 1.

Shri Sri Prakasa will hand over
charge from Bombay telegraphi-
cally to Shri John.—UPI.

*clippings received with Mr Marshall's
letter dated Nov. 26, 56 Filed 101 CE*

OUTGOING WIRE

CLASS OF SERVICE: LETTER TELEGRAM

DATE: NOV. 19, 1956

TO: SPOTTSWOOD
INTBAFRAD
BANGKOK

PCA

COUNTRY (THAILAND

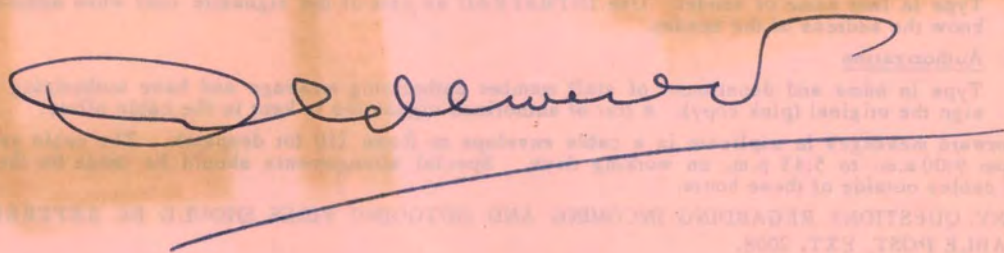
TEXT:

Cable No. FIVE.

REUR CABLE SIX DATES SUGGESTED YOUR CABLE ALL RIGHT IF PROPOSED MEETING
NEW DELHI CAN BE ORGANIZED BY E. K. NEHRU AROUND DECEMBER TENTH STOP
NEHRU WILL CABLE CONFIRMATION OF DATE AND WE SHALL INFORM YOU ACCORDINGLY
PLEASE DO NOT CABLE MINISTRY POWER AND IRRIGATION.

CHADENET

nl



Signed:

AUTHORIZED BY:

NAME: Bernard Chadenet
DEPT: Technical Operations Dept.
SIGNATURE:

For Use by Archives Division

Checked for Dispatch

Cleared with & Copy to Dr. Basch, Area Dept.

ORIGINAL (File Copy)

(IMPORTANT: See over for guide in preparing Outgoing Wire)

GUIDE FOR PREPARING OUTGOING WIRES

1. Class of Service

Type in class of service desired. Each class is described as follows:

Letter Telegram Letter telegrams are normally delivered the morning after day of despatch. The cost is half the cost of full rate messages with a minimum charge for 22 words including address and text.

Full Rate Full rate messages are normally transmitted and delivered immediately. There is a minimum charge for 5 words, including address and text.

IBF Govt. This is a preferential rate extended to the Bank by some of its member countries. Messages are sent at full rate speed and at about half the cost. This rate normally should be used whenever available. It is at present available for the following countries:

Bolivia	Cuba	Guatemala	* Peru
Brazil	Dominican Republic	Honduras	* Syria
Burma	Ecuador	Jordan	Uruguay
Chile	El Salvador	* Lebanon	Venezuela
* China	* Ethiopia	Nicaragua	Yugoslavia
Colombia	* France	Pakistan	
Costa Rica	Greece	Panama	

* In these countries the letter telegram rate is lower than IBF government rate and should be used for messages when immediate transmission is not required.

Code Code messages are transmitted at full rate (or IBF Govt.) speed and cost. This rate should be used only for confidential messages to staff members having a code with them.

Day Letter Day letters are delivered during the day of transmission and should be used only for messages in the United States and to Mexico and Canada. There is a minimum charge for 50 words in text.

Teletype To be used only for messages to the New York Office, United Nations, and certain commercial firms. For information, call Cable Post (Ext. 2008).

2. Address

Use only last name of addressee and cable address whenever possible. The Bank cable address "INTBAFRAD" is registered in Paris, Beirut, Rio de Janeiro, Bogota, and Guatemala City. The name of the country of destination must always be added. (No charge is made for the name of a country).

3. Text

Messages to Bank Missions and to Resident Representatives should be numbered. These numbers may be obtained by calling Ext. 2008.

Type text in capital letters and double space between lines. The text should be edited to eliminate unnecessary words and unnecessary punctuation. If punctuation is needed, spell out the words "Comma," "Stop," etc.

Use common abbreviations whenever possible, i.e. reourlet, reurfive, etc. Write as one word hyphenated words, hyphenated names, and certain two-word groups, e.g. Airmail, Newyork, enduse.

4. Signature

Type in last name of sender. Use INTBAFRAD as part of the signature only when addressee does not know the address of the sender.

5. Authorization

Type in name and department of staff member authorizing message and have authorizing staff member sign the original (pink copy). A list of authorized signatures is kept in the cable office.

Forward messages in triplicate in a cable envelope to Room 210 for despatch. The cable service is open from 9:00 a.m. to 5:45 p.m. on working days. Special arrangements should be made for the despatch of cables outside of these hours.

ANY QUESTIONS REGARDING INCOMING AND OUTGOING WIRES SHOULD BE REFERRED TO THE CABLE POST, EXT. 2008.

MAY 19 5 58 PM 1956

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

ORIGINAL (File Copy)

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INCOMING WIRE

1. Mr. Perry
2. Mr. Borch

2nd DVC

DATE OF WIRE: NOVEMBER 17, 1956 1150

TO: INTERNATIONAL BANK FOR RECONSTRUCTION AND DEV.

FROM: BANGKOK

ROUTING	
ACTION COPY TO	TECH. OP.
INFORMATION COPY TO	MR. BUCINSKI
Decoded By	

TEXT:

Letter to Chadenet will send another cable correcting the misunderstanding - cable will be sent today

11.19.56

SIX FOR CHADENET YOUR FOUR RECEIVED WILL PLAN MEET MARSHALL IMPERIAL HOTEL NEW DELHI DECEMBER EIGHTH AND LEAVE FOURTEENTH STOP WILL CABLE MINISTRY POWER AND IRRIGATION CONFIRMING MEETING DECEMBER TENTH STOP FIFTEENTH SIXTEENTH BANGKOK THEN LEAVING FOR WASHINGTON VIA PACIFIC HOPE TO ARRIVE ABOUT TWENTIETH WITH DAY REST TOKYO STOP PLEASE SEND ME BANGKOK RUPEE EQUIVALENT OF HUNDRED DOLLARS AND ADDITIONAL FIFTY US DOLLARS STOP LEAVING INSPECTION TRIP NORTH SEVENTEENTH RETURNING BANGKOK NOVEMBER TWENTYSECOND

SPOTTSWOOD

Mr. Spottswood is being notified.

Mr. Borch must know about the meeting! g

Duplicate
ORIGINAL

12/20

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INCOMING WIRE

DATE OF WIRE: NOVEMBER 17, 1956 1150

TO: INTERNATIONAL BANK FOR RECONSTRUCTION AND DEV.
FROM: BANGKOK

ROUTING
Decoded By
INFORMATION COPY TO MR. [illegible]
ACTION COPY TO TECH. DEPT.

TEXT:

Handwritten: Check out and send cable regarding the
situation in Bangkok. Will meet Marshall tomorrow.

STILL NEW DELHI DECEMBER EIGHTH AND LEAVE FOURTEENTH STOP WILL CABLE
MINISTRY POWER AND IRRIGATION CONTINUING MEETING DECEMBER TENTH
STOP FIFTEENTH SIXTEENTH BANGKOK THEN LEAVING FOR WASHINGTON VIA
JIMIC HOPE TO ARRIVE ABOUT TWENTY-THREE WITH DAY REST TOKYO STOP
PLEASE SEND ME BANGKOK RUBBER EQUIVALENT OF HUNDRED DOLLARS AND
ADDITIONAL FIFTY US DOLLARS STOP LEAVING INSPECTION TRIP NORTH
SEVENTEENTH RETURNING BANGKOK NOVEMBER TWENTYSECOND

DISPATCHED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

SPOTTSMOOD

Mr. Spottsmood is being notified.

ORIGINAL
Duplicate

11/17/56

OUTGOING WIRE

CLASS OF SERVICE: LETTER TELEGRAM

20A

DATE: NOV. 16, 1956

TO: MARSHALL
TAJ MAHAL HOTEL
BOMBAY

COUNTRY (INDIA

TEXT:

Cable No. SIX.

NEHRU LEAVES TOMORROW FOR INDIA ARRIVING NEW DELHI TWENTY-FIFTH WILL
TRY TO SET MEETING ON DVC AROUND DECEMBER TENTH AT MINISTRY IRRIGATION AND
POWER IN NEW DELHI AND NOT (REPEAT NOT) CALCUTTA STOP WILL CABLE SOON AS
DATE IS CONFIRMED.

CHADENET

Signed:

AUTHORIZED BY:

NAME: Bernard Chadenet
DEPT: Technical Operations
SIGNATURE: B. Chadenet

Cleared with & copy to Dr. Basch, Area Dept. 103

For Use by Archives Division

Checked for Dispatch

ORIGINAL (File Copy)

(IMPORTANT: See over for guide in preparing Outgoing Wire)

GUIDE FOR PREPARING OUTGOING WIRES

1. Class of Service

Type in class of service desired. Each class is described as follows:

Letter Telegram Letter telegrams are normally delivered the morning after day of despatch. The cost is half the cost of full rate messages with a minimum charge for 22 words including address and text.

Full Rate Full rate messages are normally transmitted and delivered immediately. There is a minimum charge for 5 words, including address and text.

IBF Govt. This is a preferential rate extended to the Bank by some of its member countries. Messages are sent at full rate speed and at about half the cost. This rate normally should be used whenever available. It is at present available for the following countries:

Bolivia	Cuba	Guatemala	* Peru
Brazil	Dominican Republic	Honduras	* Syria
Burma	Ecuador	Jordan	Uruguay
Chile	El Salvador	* Lebanon	Venezuela
* China	* Ethiopia	Nicaragua	Yugoslavia
Colombia	* France	Pakistan	
Costa Rica	Greece	Panama	

* In these countries the letter telegram rate is lower than IBF government rate and should be used for messages when immediate transmission is not required.

Code Code messages are transmitted at full rate (or IBF Govt.) speed and cost. This rate should be used only for confidential messages to staff members having a code with them.

Day Letter Day letters are delivered during the day of transmission and should be used only for messages in the United States and to Mexico and Canada. There is a minimum charge for 50 words in text.

Teletype To be used only for messages to the New York Office, United Nations, and certain commercial firms. For information, call Cable Post (Ext. 2008).

2. Address

Use only last name of addressee and cable address whenever possible. The Bank cable address "INTBAFRAD" is registered in Paris, Beirut, Rio de Janeiro, Bogota, and Guatemala City. The name of the country of destination must always be added. (No charge is made for the name of a country).

3. Text

Messages to Bank Missions and to Resident Representatives should be numbered. These numbers may be obtained by calling Ext. 2008.

Type text in capital letters and double space between lines. The text should be edited to eliminate unnecessary words and unnecessary punctuation. If punctuation is needed, spell out the words "Comma," "Stop," etc.

Use common abbreviations whenever possible, i.e. reourlet, reurfive, etc. Write as one word hyphenated words, hyphenated names, and certain two-word groups, e.g. Airmail, Newyork, enduse.

4. Signature

Type in last name of sender. Use INTBAFRAD as part of the signature only when addressee does not know the address of the sender.

5. Authorization

Type in name and department of staff member authorizing message and have authorizing staff member sign the original (pink copy). A list of authorized signatures is kept in the cable office.

Forward messages in triplicate in a cable envelope to Room 210 for despatch. The cable service is open from 9:00 a.m. to 5:45 p.m. on working days. Special arrangements should be made for the despatch of cables outside of these hours.

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RECEIVED
INTERNATIONAL BANK FOR
CONSTRUCTION AND DEVELOPMENT
NOV 16 1955

NOV 16 11 39 AM 1955

RECEIVED
INTERNATIONAL BANK FOR
CONSTRUCTION AND DEVELOPMENT

OUTGOING WIRE

CLASS OF SERVICE: LETTER TELEGRAM

DATE: NOV. 16, 1956

TO: SPOTTSWOOD
INTBAFRAD
BANGKOK

COUNTRY (THAILAND

TEXT:

Cable No. FOUR.

NEHRU LEAVES TOMORROW FOR INDIA ARRIVING NEW DELHI TWENTY-FIFTH WILL
TRY TO SET MEETING ON DVC AROUND DECEMBER TENTH AT MINISTRY IRRIGATION AND
POWER IN NEW DELHI AND NOT (REPEAT NOT) CALCUTTA STOP WILL CABLE SOON AS
DATE IS CONFIRMED.

CHADENET

Signed:

AUTHORIZED BY:

NAME: Bernard Chadenet
DEPT: Technical Operations

SIGNATURE: *Bernard Chadenet*
Cleared with & copy to Dr. Basch, Area Dept.

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ORIGINAL (File Copy)

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Chile	El Salvador	* Lebanon	Venezuela
* China	* Ethiopia	Nicaragua	Yugoslavia
Colombia	* France	Pakistan	
Costa Rica	Greece	Panama	

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Use common abbreviations whenever possible, i.e. reourlet, reurfive, etc. Write as one word hyphenated words, hyphenated names, and certain two-word groups, e.g. Airmail, Newyork, enduse.

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DISPATCHED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

NOV 16 1955

NOV 16 11 39 AM 1955

AUTHORIZED BY: [Signature]
NAME: [Signature]
TITLE: [Signature]
DEPT: [Signature]
SIGNATURE: [Signature]
RECEIVED: [Signature]

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INCOMING WIRE

DATE OF WIRE: NOVEMBER 15, 1956 1545

TO: INTERNATIONAL BANK FOR RECONSTRUCTION
& DEVELOPMENT

FROM: BANGKOK

TEXT:

ROUTING	
ACTION COPY TO	TECH OP.
INFORMATION COPY TO	MR RUCINSKI
Decoded By	

FOR CHADENET YOUR THREE AND LETTER OF NOVEMBER SEVEN RECEIVED. SEE
MY FOUR REGARDING ROVANI. BY CUTTING SHORT WORK HERE CAN LEAVE FOR
CALCUTTA ABOUT DECEMBER NINE SPEND FOLLOWING WEEK THERE RETURN BANGKOK
ABOUT DECEMBER SIXTEEN TO CLEAN UP LOOSE ENDS. WILL CABLE MARSHALL
ACCORDINGLY AND IF SATISFACTORY WITH HIM WILL ARRANGE MEETING WITH
AVC SEP MISSION LEAVING BANGKOK SEVENTEEN FOR TRIP THROUGH CENTRAL
PLAIN TO DAM SITE RETURNING TWENTYTHREE I SHALL RETURN SOONER IS

SPOTTSWOOD

Families being advised.

Above message end with word "is" - however word count is correct and
therefore message must have been received in full

Copies sent to Messrs. Clark & Street 11/21/56

DUPLICATE

INCOMING WIRE

ROUTING
ACTION COPY TO
INFORMATION COPY TO
REMARKS

DATE OF WIRE	NOVEMBER 15, 1956
TO	INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
FROM	NEW YORK
TEXT	

FOR CREDIT YOUR BANK AND THE USE OF YOURS HAVE BEEN ADVISED, AND
MY BANK IS REQUESTING YOU TO ADVISE US OF THE RESULTS OF YOUR
CONFERENCES WITH THE BANK OF AMERICA AND THE BANK OF MONTREAL.
ABOUT THE BANK OF AMERICA, WE WOULD BE INTERESTED TO KNOW IF
YOU HAVE ANY INFORMATION CONCERNING THE BANK'S POSITION WITH
REGARD TO THE BANK OF AMERICA AND THE BANK OF MONTREAL.
PLEASE TO THE BANK OF AMERICA AND THE BANK OF MONTREAL.

RECEIVED

Handwritten notes and signatures, including "Cable to New York" and "Cable to London".

NOV 15 3 10 PM 1956
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

OUTGOING WIRE

Ref

CLASS OF SERVICE: LETTER TELEGRAM

DATE: NOV. 14, 1956

TO: MARSHALL
TAJ MAHAL HOTEL
BOMBAY

COUNTRY (INDIA

TEXT:

Cable No. FIVE.

LIPKOWITZ ON MISSION BUT BELIEVE DATA OUTLINED YOUR TERMS REFERENCE
ADEQUATE FOR TOD ECONOMIC PROJECT APPRAISALS IF SUPPLEMENTED BY
INFORMATION SHOWING ADVANTAGE OF PROJECT OVER THERMAL ALTERNATIVE.

CHADENET

Signed:

AUTHORIZED BY:

NAME: Bernard Chadenet
DEPT: Technical Operations
SIGNATURE:

Bernard Chadenet

For Use by Archives Division

Checked for Dispatch

ORIGINAL (File Copy)

(IMPORTANT: See over for guide in preparing Outgoing Wire)

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Teletype To be used only for messages to the New York Office, United Nations, and certain commercial firms. For information, call Cable Post (Ext. 2008).

2. Address

Use only last name of addressee and cable address whenever possible. The Bank cable address "INTBAFRAD" is registered in Paris, Beirut, Rio de Janeiro, Bogota, and Guatemala City. The name of the country of destination must always be added. (No charge is made for the name of a country).

3. Text

Messages to Bank Missions and to Resident Representatives should be numbered. These numbers may be obtained by calling Ext. 2008.

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Use common abbreviations whenever possible, i.e. reourlet, reurfive, etc. Write as one word hyphenated words, hyphenated names, and certain two-word groups, e.g. Airmail, Newyork, enduse.

4. Signature

Type in last name of sender. Use INTBAFRAD as part of the signature only when addressee does not know the address of the sender.

5. Authorization

Type in name and department of staff member authorizing message and have authorizing staff member sign the original (pink copy). A list of authorized signatures is kept in the cable office.

Forward messages in triplicate in a cable envelope to Room 210 for despatch. The cable service is open from 9:00 a.m. to 5:45 p.m. on working days. Special arrangements should be made for the despatch of cables outside of these hours.

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DISPATCHED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT
NOV 14 3 13 PM 1956

OUTGOING WIRE

CLASS OF SERVICE: Full Rate ~~URGENT~~

DATE: November 13, 1956

TO: Mr. A. D. Spottswood
c/o William M. Gilmartin
Bank of Thailand
Bangkok, Thailand

COUNTRY (

TEXT:

Cable No. THREE.

RCA

YOU WILL RECEIVE LETTER NOVEMBER SEVENTH GIVING DETAILED INFORMATION FOR
PROPOSED MEETING WITH MARSHALL AND DVC STOP ROVANI READY TO LEAVE
THIS THURSDAY FOR ARRIVAL BANGKOK ABOUT MONDAY STOP CONFIRM BY
URGENT CABLE YOUR AGREEMENT TO HIS DEPARTURE.

CHADENET

~~TELETYPE~~

Signed:

AUTHORIZED BY:

NAME: Bernard Chadenet

DEPT: Technical Operations

SIGNATURE:

Bernard Chadenet

For Use by Archives Division

Checked for Dispatch

ORIGINAL (File Copy)

(IMPORTANT: See over for guide in preparing Outgoing Wire)

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DISPATCHED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

5:53 PM 1956

10/17

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INCOMING WIRE

DATE OF WIRE: NOVEMBER 12, 1956 1445

TO: CHADENET INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

FROM: BANGKOK

ROUTING	
ACTION COPY TO	TECH OP.
INFORMATION COPY TO	
Decoded By	

TEXT:

THREE

DO NOT UNDERSTAND YOUR TWO REGARDING MEETING DVC. WAS IT INTENDED FOR
MARSHALL IN INDIA

SPOTTSWOOD

DUPLICATE

INCOMING WIRE

ROUTING
ACTION COPY TO
INFORMATION COPY TO
RECORDED BY

DATE OF WIRE: NOVEMBER 12, 1956

TO: DIRECTOR, INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

FROM: BUREAU

TEXT

DO NOT REPLY TO THIS WIRE. USE TELEPHONE OR MAIL FOR REPLY.

RECEIVED IN INDIA

RECEIVED

NOV 12 11 06 AM 1956

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

DUPLICATE

Mr. B. K. Nehru

November 9, 1956

Joseph Rucinski *JR*

Loans 23 and 72

Please refer to our conversations regarding the follow-up on the report of the Bank dated August 22, 1956, and the preliminary reply from the Government of India dated September 6, 1956, and your suggestion that Bank representatives should attend meetings with the representatives of the Ministry of Irrigation and Power and of the Damodar Valley Corporation which you will call shortly after December 1, 1956. I am glad to inform you that we will send our representatives to Delhi and that we have already made arrangements with the members of our staff, one of whom is at present in Bangkok and the other in Bombay, to attend the meetings. As our staff members are expected to return to the U.S.A. in the first half of December, I would appreciate it if you would inform us by cable, after your return to Delhi, the date of the proposed meetings. Upon receipt of your cable, we would ask the two members of our staff to proceed to Delhi.

JRucinski:mmar

cc: Messrs. Perry
deWilde
Basch

OUTGOING WIRE

per

CLASS OF SERVICE: LETTER TELEGRAM

DATE: NOV. 9, 1956

TO: *Gray* MARSHALL
TAJ MAHAL HOTEL
BOMBAY

COUNTRY (INDIA

TEXT:

Cable No. FOUR.

FOLLOWING LETTER SENT NOVEMBER SEVENTH SUBJECT PROPOSED DVC MEETING
EARLY DECEMBER B.K. NEHRU ARRIVING INDIA NOVEMBER TWENTY-FOURTH WILL
INFORM BANK MOST SUITABLE DATES STOP WILL CABLE YOU IMMEDIATELY.

CHADENET

Signed:

AUTHORIZED BY:

NAME: Bernard Chadenet
DEPT: Technical Operations
SIGNATURE: *B. Chadenet*

cc: Area Dept.

For Use by Archives Division

Checked for Dispatch

ORIGINAL (File Copy)

(IMPORTANT: See over for guide in preparing Outgoing Wire)

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RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT
NOV 9 2 17 PM 1956

OUTGOING WIRE

RW

CLASS OF SERVICE: LETTER TELEGRAM

DATE: NOV. 9, 1956

TO: SPOTTSWOOD
CAPE GILMARTIN
~~BANK OF THAILAND~~
BANGKOK

(INTRAIRAI)

COUNTRY (THAILAND

TEXT:

Cable No. TWO.

FOLLOWING LETTER SENT NOVEMBER SEVENTH SUBJECT PROPOSED DVC MEETING
EARLY DECEMBER B.K. NEHRU ARRIVING INDIA NOVEMBER TWENTY-FOURTH WILL
INFORM BANK MOST SUITABLE DATES STOP WILL CABLE YOU IMMEDIATELY.

CHADENET

Signed:

AUTHORIZED BY:

NAME: Bernard Chadenet
DEPT: Technical Operations Dept.
SIGNATURE: *B. Chadenet*

cc: Area Dept.

ORIGINAL (File Copy)

(IMPORTANT: See over for guide in preparing Outgoing Wire)

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DISPATCHED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

NOV 9 3 03 PM '55

RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT
NOV 9 2 17 PM 1955

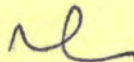
November 7, 1956

Dear Spotty:

Mr. Rucinski and Mr. Aldewereld had a meeting to discuss the situation of the Damodar Valley Corporation, particularly in regard to the new loan application. They came to the conclusion that the quickest way to form any valid opinion about the situation of D.V.C. would be to organize a meeting in Calcutta. It would be attended by the Chairman of D.V.C., by members of the Board of the Corporation and by a mission of the Bank. Mr. B. K. Nehru welcomed the suggestion and has let us know that any date after December 1st would be suitable to D.V.C.

Considering your presence in Thailand and Gray's presence in Bombay, we wondered whether it would be a major inconvenience to you to organize and attend the said meeting. If he can manage to add this mission to his present activity, Gray Marshall, who has been active with Mr. Biaggi on the last end-use mission, would assist you. If not, we may try to ask Mr. Biaggi to go to India. I would therefore appreciate it if you would get in touch with D.V.C. and with Gray Marshall in order to try to set up a date suitable to all. We are sending you and Gray the papers and documents which you will need for this meeting and you will find enclosed with this letter the Terms of Reference for this proposed mission.

Cordially,



Bernard Chadenet

Mr. A. D. Spottswood
c/o Mr. William Gilmartin
Bank of Thailand
Bangkok, Thailand

P.S. #1. Gray may be reached in care of the Taj Mahal Hotel, Bombay.
The address of the D.V.C. is Anderson House, Calcutta 27, India.
P.S. #2. Copy of this letter is being sent to Mr. Marshall.

BChadenet:rha

cc: Area Dept.

November 7, 1956

Dear Gray:

I am sending you a copy of a letter to Spotty to inform you that he will organize a meeting with D.V.C. in Calcutta shortly after December 1st to discuss the situation of the Corporation in the light of the recommendations you made after your mission with Mr. Biaggi. As you were well acquainted with all the problems of D.V.C., your presence would be most helpful, and I hope you can work out a date with Spotty without any major inconvenience to your former plans.

I am sending you copies of the letters and documents which you may need.

Cordially,

Bernard Chadenet

Mr. L. Gray Marshall
c/o Taj Mahal Hotel
Bombay, India

P.S. Spotty may be reached in care of Mr. Gilmartin, Bank of Thailand, Bangkok.
The address of the D.V.C. is Anderson House, Calcutta 27.

BChadenet:ra

cc: Area Dept.

October 25, 1956

The Chairman
Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27, India

Dear Sir:

Loans Nos. 23-IN and 72-IN

We do not appear to have received any reports from the Corporation since the engineering progress report of March 1956 and the financial progress reports for the period up to February 29, 1956, both of which were received in this office on July 10, 1956.

We must urgently request you to submit further reports as soon as possible and must further state that the Bank views with concern the considerable time lag which exists between the end of the period to which a report relates and the time of its submission. We would be very grateful if you could expedite the submission of the reports.

Very truly yours,

W. Lionel Jago
Public Utilities Division
Department of Technical Operations

WLJago:mec

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

OFFICE MEMORANDUM

TO: Files

DATE: October 23, 1956

FROM: W.D.S. Fraser *Wf*

SUBJECT: INDIA - Loans 23 IN & 72 IN (Damodar Valley Corporation)

On Thursday, October 18, at 11:00 a.m., I was present at a meeting in Mr. Rucinski's office, at which the following were present:

IBRD
Messrs. Basch
Rembert
Wright
Fraser
Rucinski*

Government of India
Messrs. B.K. Nehru
P.P. Srivastava

*Present for the latter part of the meeting.

1. The purpose of the meeting was to discuss the points raised in (a) Mr. Knapp's letter of August 17, 1956, which had been sent to the Government of India, and (b) the interim reply to Mr. Nehru prepared by the Ministry of Irrigation and Power.

2. Discussion took place on the various points as follows:

A. Load Utilization at Bokaro. It was pointed out that it had taken three years to develop the load of 85MW at Bokaro, which seemed to the Bank indicative of managerial shortcomings. When the first loan to DVC was made, all were convinced that power from Bokaro would be rapidly absorbed because the market was there. The Bank felt that, had the proper attention been given by DVC to advising potential customers of when facilities would become available, this delay would never have arisen. In view of this record, it would be hard to convince the Bank that power from the proposed 4th unit at Bokaro and from the Durgapur plant would be absorbed as quickly as was assumed by the Government when it attempted to justify the immediate placing of orders for those plants.

B. Panchet Hill. The reason the Bank suggested that part of the work at Panchet Hill might be subcontracted was the belief that the engineering staff of DVC was already extended. In many countries subcontracting was normal procedure in works of this kind. The fact that DVC had already invested a large sum of money on construction equipment was immaterial, because such equipment could be turned over to the subcontractors. It was pointed out that the peak staffing requirements of DVC were likely to be during the next two years, so that if DVC were to hire additional constructional staff in order to do everything departmentally, it would mean a great deal of labor retrenchment when those two years had elapsed.

C. Durgapur Barrage. It seemed to the Bank that getting the cultivators to sign the leases was a matter which should have been settled long ago and not allowed to come to a head until part of the canal system had been completed. It was suggested again that good DVC management would have foreseen the situation and taken the matter up earlier with the West Bengal Government.

D. Organization and Management. The Bank considered that most of the shortcomings of DVC stemmed from one thing -- a lack of strong leadership at the top. At the same time there had been lack of continuity in the top posts. The fact was that the DVC had operated for long periods with only a temporary Chairman. Such a situation existed today.

The Bank had pressed for many years to have the constructional activities of DVC separated from the operational activities. It had been pointed out by the Bank many times that, as projects neared completion, operational activities became progressively more important. The Bank felt that the DVC had been slow in adapting itself to this change. The attention of Mr. Nehru was drawn to the fact that DVC had undertaken to adopt a form of organization at the time of the second loan negotiations which would have separated the constructional activity and operational activity of DVC. However, this organizational change had never been carried out.

Regarding the appointment of an Additional Chief Engineer, the Bank had accepted this proposal on the assumption that the Chief Engineer would be responsible for all constructional activity, including electrical and mechanical works. In fact, the Chief Engineer was limited to the construction of one project, i.e. the Maithon Project. The Chief Electrical Engineer appeared to be responsible for the electrical and mechanical works in both their constructional and operational aspects. The Bank felt that the present arrangement was not conducive to efficiency, and the Bank's contention seemed to be borne out by results.

E. Consulting Engineers. The Bank noted that DVC called upon the CW&PC when necessary to give expert engineering advice. What the Bank felt was necessary was more than advice; some degree of supervision of construction was necessary to insure that work was carried out in accordance with specifications, and the CW&PC was not equipped for supervisory work of this kind.

3. The discussion then turned to the future DVC projects proposed for Bank consideration, namely the 4th unit at Bokaro and the Durgapur thermal plant. The Bank did not know the details of the contract with the consultants, Messrs. Kuljian Corporation. Because there was little experience in India of designing and building modern high pressure steam plants, the Bank's view was that the designs, specifications, advice in awarding contracts, etc., and the supervision of construction should be made the responsibility of the consultants. To avoid destroying the morale of Indian engineers, who might feel confident of their ability to do such work, a system

of joint responsibility could be evolved. Mr. Rembert agreed to discuss with Mr. Nehru later how such systems had been evolved in other countries to everyone's satisfaction. It was pointed out that in the long run the hiring of consultants usually saved money.

4. To summarize, there were four main points on which the Bank wanted some satisfaction: (a) the DVC had to be provided with strong and continuous management, and its organization adapted so as to separate the responsibilities for constructional and operational work; (b) there had to be greater willingness by DVC and by Government to retain consulting engineers for works of a type in which Indian engineers had little experience; (c) there had to be willingness by DVC to subcontract certain works, rather than try to do everything departmentally; and (d) the Bank had to know more about the review of rates now in progress, and receive an indication of when this review would be completed.

5. Mr. Nehru was informed that the Bank would be prepared to examine the 4th unit at Bokaro, the Durgapur thermal plant and also the Rihand Hydro-Electric project, (a) when the four points mentioned above were dealt with to the Bank's satisfaction; and (b) when a comprehensive technical report on each project had been prepared by DVC and submitted to the Bank. The Bank would then be ready to send a mission to review these three projects. The type of information required by the Bank in the comprehensive reports could be prepared by DVC with the help of its consulting engineers on the lines of the report prepared by the Bank in 1953 when it appraised the present Bank-financed projects. In the meantime, the Bank was interested in receiving the final comments of the Central Government to Mr. Knapp's letter to Mr. Kamat, and to the Report of the Mission which had followed it.

copy
Tender
DVC Exp

cc. . IBRD members present.*

Messrs. Perry
Street
Clark/Scott

* Dr. Rembert's copy sent to Mr. Alderson.



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 19 October, 1956	Document Type Memorandum			
Correspondents / Participants To: Dr. P. J. Pinto From: Mr. Antonin Basch				
Subject / Title Damodar Valley Corporation - Report on End-Use Mission to India				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

October 11, 1956.

AIRMAIL

Dear Mr. Ganguli,

Reference Your Letter D.O.No.W/Disp-32/55-2013

We were pleased to receive your letter of September 24 enclosing a list of construction equipment purchased by DVC with IBRD funds and the number of units that DVC considered surplus to their present needs. Undoubtedly, this same list was sent to the Ministry and has been reviewed by them so that the Bank can expect to receive a letter from them in this connection in the near future. However, we are letting you have our comments directly in order to speed up the release of equipment.

We assume this list to be a preliminary report, and that a comprehensive final report is being drawn up for submission to the Bank. This should include a clear description of the equipment, type, size, hours used, general condition, original cost and depreciated value. As you can realize, it is impossible for us to determine the adequacy of the equipment unless we know the sizes and condition of the equipment. When the surplus equipment has been released, we also expect to receive a statement showing the amount of money received from the sale of the equipment. There is mention in the letter that another list will be compiled to be appended to the monthly progress report, but it is not felt that this will be necessary when the above list has been completed and arrangements made for it to be re-submitted every six months.

The Bank feels that it would also like to receive an assurance from the management of DVC that the equipment is considered surplus and that the release will not have any adverse effect on the Bank projects still under construction. It is assumed that the assurance would be confirmed by the Chief Engineer. We would appreciate your withholding release of the equipment considered surplus until the Bank has had time to examine the complete report mentioned above and DVC has received the Bank's comments.

Kindest personal regards,

Cleared with area
LSM

LSM
L. Gray Marshall
Public Utilities Division
Department of Technical Operations

ack Dec 26

Mr. A. B. Ganguli,
Damodar Valley Corporation,
Anderson House, Alipore,
Calcutta, 27,
India.



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 04 October, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. J. Burke Knapp From: G. R. Kamat				
Subject / Title Loan No. 72 IN				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

Mr. S. Aldewereld

September 25, 1956

P. A. Reid

India - 72 IN - DVC irrigation

The irrigation aspects of this Project as described in the technical report were to provide an increase in the irrigated area from 185,000 to 1,025,000 acres for summer crop, of which 600,000 acres would also grow winter crops. No information is given in the technical report concerning the amount of water to be available for irrigation, water requirements, the suitability of the soils for irrigation or drainage requirements. One third, or \$60 million equivalent of the total cost of the DVC Project, was allocated to irrigation.

Gross benefits were assessed on the basis of an increase in yield of summer rice from 900 lb. to 1400 lb. per acre, the increase being valued at Rs. 150 per acre at 1953 prices. The winter crop was estimated at Rs. 140 per acre which would be a net addition. The report stated that the additional supplies would not be forthcoming unless an efficient research, extension and farm credit program were carried out and that marketing systems must also be greatly improved.

The rate to be charged farmers for water was to have been increased from an existing Rs. 6 to Rs. 10 per acre for each crop, summer and winter and at a flat rate irrespective of the amounts used. Revenues on this basis were estimated at Rs. 18 million by 1960-61 (including about Rs. 1 to 2 million from navigation charges). Direct operating expenses were estimated at Rs. 2.9 million.

The End Use Mission's Report of August 22, 1956 does not deal closely with agriculture but provides the following information:

The Durgapur Barrage has been completed and the main and navigation canals are expected to be completed by mid 1957. The distributaries will not be completed until the end of 1958. DVC proposes to dispose of all distributary and drainage canals to the State of Bengal and sell water to the State wholesale from the main canals. The Bank would want to be satisfied concerning terms of disposal.

Investment in irrigation is now estimated at Rs. 328 million (\$69 million equivalent) including Rs. 84 million for canals to be sold to the State of Bengal.

DVC is insisting that water should eventually be sold on a per acre foot basis and at a varying price according to season. This has led to difficulties with the State of Bengal concerning the price to be paid to DVC. Water is at present sold in that State on an acreage basis irrespective of usage and the State lacks the power to collect bills for water on a quantity basis if the farmer refuses to sign a contract. Legislation to correct the position is recommended. In the meantime, collections made will be handed over to DVC.

DVC is expecting to sell .43 million acre feet for Rs. 2.1 million in 1956-57. Revenue in 1960-61 is now estimated at Rs. 11.2 million, from 2.25 million acre feet to be sold. Direct operating expenses in 1960-61 are estimated at Rs. 3.3 million.

The wholesale charge for water is apparently about Rs. 5 per acre foot as against the previously proposed farmer price of Rs. 10 per acre cropped.

To date only one experimental farm has been set up by the Corporation.

If, as we understand but are not certain, water rather than land is the limiting factor, the proposed system of charging for water on a quantity basis should lead to a more efficient usage and greater production. However, due to lack of data we have no way of assessing:

- a) The influence of proposed changes in water sale and distribution on DVC revenues and operational costs.
- b) The cost to farmers for water per acre foot. If the State adds retail distribution losses and distribution costs to the unit charge to farmers, the cost per acre foot would be well over Rs. 5.
- c) The cost to farmers for water per acre cropped. Requirements per crop are not known but for the dry season crop they will probably be well over 2 acre feet. The average cost seems likely to be considerably in excess of Rs. 10 per crop.
- d) How the water would be measured at farm delivery.
- e) How much land would be irrigated with 2.25 million acre feet in 1960-61 and how much in subsequent years. At 2 acre feet per acre cropped, only 1.1 million acres would be cropped in 1960-61 as against the appraisal estimate of 1.6 million acres cropped.

- f) Arrangements to relate water supplies to cropping patterns and crop requirements.
- g) What steps have been taken to provide technical services and farm credit to project farmers and to improve marketing systems.
- h) The production response likely to be attained vis-a-vis appraisal estimates.

The project has not been visited by any member of the agricultural staff and no end use requirements concerning agricultural results have been set up. If, and when circumstances are considered appropriate, it seems most desirable that one of the agricultural staff should make an end use visit.

PAREID:dnh

cc: Agricultural Division

Air Mail

September 25, 1956

Dr. Francantonio Biaggi
Societa Dinamo
Via Principe Eugenio 1
Milano, Italy

Dear Franci:

As mentioned in my letter of August 23, a letter summarizing the DVC end-use report was submitted to the Indian Government around the 20th of August, and the report was made available to them on about the 25th of August. I am not sure when the report was actually delivered to them.

I am sorry that there has been such a delay in sending you a copy of the report for your own personal information, but I was fortunate enough to be able to get a month's holidays, which ended the first of this week. I would appreciate your reviewing the report and I would like to receive your comments. You will note that it has been doctored up considerably from the one that we prepared while you were here, primarily because we knew that it would be delivered to the Indian Government and our report appeared to be a little bit too strongly worded.

It so happened that Andy Komora, in view of his extending his contract for another six months, induced the DVC to allow him a month's vacation in this country, and he was here around the end of July. Although I did not give him a detailed account of what we had included in our report, I did, in a general way, infer what I believed would be included in the report. To me it was a fortunate state of affairs for him to be able to come to the Bank at that particular time, because in his discussions with the officials of the Bank he confirmed in general the important facts that we had included in the report. He took a month's vacation and returned to the Bank around the fifth of September, but inasmuch as I was on leave, no formal discussions took place. He was to arrive back in Calcutta on the 13th of September.

To date we have not had any response to the letter that was submitted formally to the Indian Government (by the way, the report was apparently delivered informally and is considered an internal Bank report). However, the annual meeting of the directors of the Bank is taking place this week and we anticipate that at the end of the meeting that B. K. Neru will visit the Bank for about two weeks to discuss possible financing of additional projects, among which will be the fourth unit at Bokaro and the Durgapur thermal power plant. Undoubtedly, at this time the report will be discussed in detail.

Not sent to files - too personal.

Dr. Francantonio Biaggi

- 2 -

September 25, 1956

While my plans are not complete, it appears that I will be returning to India about the middle of next month to review the Koyna project. I look forward to it with a little bit more interest, due to the fact that the monsoon will be over and the weather in Bombay should be fairly good. I anticipate that I will be out there for at least six weeks to two months. When my plans are finalized, I will let you know. However, it appears now that the only chance that I would have to visit Italy would be on the return trip.

Hoping you and the family are all in good health and that your political duties are not putting too much of a strain on your normal business activities,

Sincerely yours,

LGM

Gray

IGMarshall:peg

Enclosure: Copy No. 17 of DVC report.



Shri A.B. Ganguli, I.C.S.,
Member.

GRAM: DAVALLEC

PHONE: ALIPORE 1765

DAMODAR VALLEY CORPORATION.

ANDERSON HOUSE, ALIPORE
CALCUTTA-27

D.O.No. W/Disp-32/55 - 9013

September 24, 1956.

Re : List of Surplus machinery.

Dear Mr. Marshall,

Would you kindly refer to my D.O. letter No. Disp-32-4348 dated the 22nd May 1956, wherein it was stated that a list of surplus machinery would be sent to you as soon as finalised ?

2. It appears from a letter of Mr. J.S. Raj of the IBRD to the Ministry of Finance (DEA) that the question of transfer of surplus machinery from DVC to other Projects in India has been discussed recently between yourself and Dr. Antonin Basch and that you desired to have a list of equipment which the DVC intends to retain for the next six months in order to complete the projects on schedule and the equipment declared surplus with an indication of the manner of its disposal. A list has accordingly been prepared and sent to the Ministry of Irrigation and Power. A copy of my letter to Venkataraman together with the list and the Explanatory Note is attached herewith for your information.

3. According to the arrangement previously agreed to by the Bank, a list will also be appended to our Monthly Progress Report to the Bank showing the machinery that have already been surplus and the machinery likely to become surplus during the following two months.

4. I am sorry that this has taken some time to finalise.

Yours sincerely,
A.B. Ganguli
(A.B. Ganguli)

Gray Marshall Esq.,
International Bank for
Reconstruction & Development,
1818 H Street, N.W.,
Washington 25, D.C.

NNR:SKC.
24.9.56.

ack Oct 11

*Operational
Files
Marshall*

*acknowledged
Oct 11
JSM*

DAMODAR VALLEY CORPORATION
ANDERSON HOUSE, ALIPORE
CALCUTTA-27



D.O. No. W/Disp-32/55 - 9013
September 24, 1956

Re : List of Surplus Machinery

3. It appears from a letter of Mr. J.S. Ray of the IBRD to the Ministry of Finance (DEA) that the question of transfer of surplus machinery from DVC to other projects in India has been discussed recently between yourself and Dr. Antonin Basch and that you desired to have a list of equipment which the DVC intends to retain for the next six months in order to complete the projects on schedule and the equipment declared surplus with an indication of the manner of its disposal. A list has accordingly been prepared and sent to the Ministry of Irrigation and Power. A copy of my letter to Venkataraman together with the list and the Explanatory Note is attached herewith for your information.

3. According to the arrangement previously agreed to by the Bank, a list will also be appended to our Monthly Progress Report to the Bank showing the machinery that have already been surplus and the machinery likely to become surplus during the following two months.

4. I am sorry that this has taken some time to finalise.

(A.B. Ganguli)

Gray Marshall Esq.,
International Bank for
Reconstruction
1818 H Street,
Washington 25,
RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION
WASHINGTON 25
OCT 1 10 34 AM 1956

NMR:SKC
24.9.56

Shri A.B. Ganguli, ICS.,
Member.

D.O. No. W.Disp-32/55 - 9012 September 24, 1956.

My dear Venkataraman,

Please refer to your D.O. letter No.6(10)/55-Policy dated the 16/17th July 1956 regarding the disposal of machines financed by the IBRD which are surplus to the requirement of the Corporation.

2. As desired by the IBRD a statement is attached showing (1) the total number of machines held by the Bank financed Projects as on 1st July 1956 (2) the number of machines required during the next six months and (3) the number surplus to requirement. An explanatory note explaining the position is also enclosed.

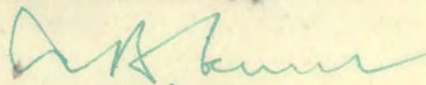
3. The Bank desired to have a separate statement showing the equipment declared surplus with an indication of the manner of its disposal. For the sake of convenience the number of surplus machines has been indicated in the last column of the statement enclosed herewith and a separate statement for this purpose has not been prepared. The manner of disposal of the surplus equipment is stated in the Explanatory note. It will be seen from the statement that some machines purchased out of the Bank loan have already been disposed of without the approval of the Bank. The circumstances in which these machines were disposed of are stated in the Explanatory note. To regularise the action taken, formal approval of the Bank may now be obtained.

4. In regard to the suggestion contained in the last sentence of your letter regarding suspension of transfer of the surplus machinery, I would draw your attention to Shri Gongules's D.O. letter No.6(10)/55-Policy dated the 4th May 1956 to Kshetrapal. According to the procedure stated therein, the Corporation is

contd:

required to append to its Monthly Progress Report to the Bank a list of machinery that may be already surplus as well as a list of machinery likely to become surplus during the following two months. The DVC is also authorised to proceed with disposal of the machinery if after receipt of the list the Bank raises no objection. It is presumed that this arrangement still stands. This may kindly be confirmed.

Yours sincerely,



(A.B. GANGULI)

Shri S. Venkataraman,
Deputy Secretary to
the Government of India,
Ministry of Irrigation & Power,
New Delhi.

NNR/sbs.
24.9.56.

OCT 1 10 30 AM 1956

RECEIVED
MINISTRY OF IRRIGATION & POWER
NEW DELHI

required to appear to the Monthly Progress Report
to the Bank a list of machinery that may be already
acquired as well as a list of machinery likely to
become surplus during the following two months. The
IWC is also authorized to proceed with disposal of
the machinery if after receipt of the list the Bank
raises no objection. It is presumed that this
arrangement will stand. This may kindly be confirmed.

Yours sincerely,


(A.R. GANGULI)

Shri S. Venkatesan,
Deputy Secretary to
the Government of India,
Ministry of Irrigation & Power,
New Delhi.

MR/ops.
24.9.56.

OCT 1 10 39 AM 1956

RECEIVED
INTERNATIONAL BANK
ECONOMICS AND DEVELOPMENT

**STATEMENT OF MACHINES FOR THE HALF YEAR
FROM 1ST JULY TO 31-ST DECEMBER, 1956.**

Sl. No.	Description of Machine	Total Number of machines at the commencement of the half-year.			Number required during the next six months.	Surplus
		IBRD	Others	Total No.		
1	2	3	4	5	6	7
1.	Tractors	75	10	85	49	36(a)
2.	Dumpers	53	39	92	55	37(b)
3.	P. & H. and other Shovels	8	12	20(c)	15	5
4.	Draglines	7	1	8(d)	3	5
5.	Motor Graders	3	2	5(e)	2	3
6.	Loader 9BV <i>Enclid</i>	1	-	1	1	-
7.	Cranes	5	3	8	6	2 (f)
8.	Angledozer	16	4	20	19	1 **
9.	Tournadozers, Bulldozers, Tipdozers & Dosecasters	12	2	14	12	2
10.	Hydraulic Grade Builders	3	1	4	3	1 (g)
11.	Power Control Units	34	5	39	25	14 (h)

- (a) Includes nine IBRD machines temporarily placed at the disposal of the Durgapur Project of the Govt. of West Bengal, two at the disposal of the Kosi Project of the Govt. of Bihar and four made over to Konar contractors in terms of the Agreement with DVC.
- (b) Includes one IBRD machine lent to the Durgapur Project of the Govt. of West Bengal.
- (c) Includes two IBRD machines relating to Bokaro now in use at Maithon and two Konar Machines now working in the Bermo Mines Divin. of the DVC.
- (d) Includes two IBRD machines relating to Konar taken over by Maithon & Panchet Hill Projects on completion of work at Konar.
- (e) Includes one IBRD machine relating to Konar at present in use at Panchet Hill Project
- (f) Includes one IBRD Crane temporarily placed at the disposal of Kosi Project of the Govt. of Bihar.
- (g) This is an IBRD Unit at present in use by the Durgapur Project of the Govt. of West Bengal.
- (h) Includes two IBRD machines placed at the disposal of the Kosi Project of the Govt. of Bihar.
- ** Lent temporarily to the Durgapur Project of the Govt. of West Bengal.

Contd.....

Sl. No.	Description of Machine	Total Number of machines at the commencement of the half-year.			Number required during the next six months	Surplus
		IBRD	Others	Total No.		
1	2	3	4	5	6	7
12.	Wagon Drills	43	5	48	25	23
13.	Joy Diamond Core Drill	2	-	2	2	-
14.	Dry Rock & Sinker Drills	14	13	27	27	-
15.	Skillsaw Electric Drills	4	-	4	4	-
16.	Grinder Drill Sharpener	1	-	1	-	1
17.	Skillsaw Drill Grinder	1	-	1	1	-
18.	Pneumatic Drills	2	-	2	2	-
19.	Tampo Sheep foot Rollers	11	7	18	16	2
20.	Amco Cylinder Grinder	1	-	1	1	-
21.	Welding Sets	21	7	28	23	-
22.	Concrete Vibrator	21	24	45	40	5
23.	Pumps	7	15	22	14	8
24.	Oil Rite Piston Pump with Farman Diesel Engine	1	-	1	1	-
25.	Concrete Mixers	7	8	15	9	6(1)
26.	Rippers	2	-	2	2	-
27.	Alternators - Mercedes Benz	9	-	9	9	-
28.	Rock Crushers	2	-	2	2	-
29.	Conveyors, Belts and Screens	1 Set	-	1	-	1
30.	Demolition tools	5	-	5	5	-
31.	Pavement Breaker	1	5	6	6	-

(1)

Includes two IBRD Mixers taken over by the Chambal Project of the Govt. of Madhya Pradesh.

Sl. No.	Description of Machine	Total Number of machines at the commencement of the half-year.			Number required during the next six months.	Surplus
		IBRD	Others	Total No.		
1	2	3	4	5	6	7
32.	Letourneau Rooter	2	-	2	2	-
33.	Letourneau touna-packer	2	-	2	-	2
34.	Air Compressors	10	44	54 (j)	36	18
35.	Radial Drilling Machine	1	-	1	1	-
36.	Valve Face Grinder, Hand Grinder and Rock Master Grinder.	6	-	6	6	-
37.	Air Receiver	2	-	2	2	-
38.	N.M. Bending Machine	2	-	2	2	-
39.	Bench Grinder, Drill Press etc.	8	-	8	8	-
40.	Low Bed Trailers	3	2	5	4	1
41.	Hydraulic Jack-12 Ton Capacity	1	-	1	1	-
42.	Trailer - 5 Ton Capacity	1	-	1	1	-
43.	Fordson Thames Tipping Truck	1	5	6	6	-
44.	Scrapers	1	9	10	5	5 (k)
45.	Utility Hoists	4	-	4	4	-
46.	Simplex Spiral Classifier	1	-	1	1	-
47.	Fork Lift Truck with Crane Boom	1	-	1	1	-
48.	Diesel Engines	4	-	4	4	-
49.	All - Geared Lathe and Screw cutting Lathe	2	-	2	2	-

(j) Includes one IBRD machine now in use in M.E.M. Division of the DVC,

(k) Includes one IBRD machine lent to the Durgapur Project of the Govt. of West Bengal.

Contd

Sl. No.	Description of Machine	Total number of machines at the commencement of the half-year.			Number required during the next six months	Surplus
		IBRD	Others	Total No.		
1	2	3	4	5	6	7
50	Willy's Jeep	1	5	6	6	-
51	Studebaker Pick up	3	1	4	4	-
52	Power Expansion Arbers	1	-	1	1	-
53	Torque Meter	3	-	3	3	-
54	Sprayers	11	-	11	11	-
55	Lugh Hammer	1	-	1	1	-
56	Concrete Bucket	5	20	25	25	-
57	X-ray Apparatus & Transformers	1	-	1	1	-
58	Euclid Dumper Top Extension	10 pairs	-	10	10	-
59	Dodge Power Wagons	4	-	4	4	-
60	WSG Lever Bar	1	-	1	-	1
61	P&H 955A Shovel attachment	3	-	3	2	1
62	Trench Hoe attachment	1	-	1	1	-
63	Tanker - Truck Servicing	3	-	3	3	-
64	Street Plates for Allis Chalmers Tractors	6 Sets	-	6 Sets	6 Sets	-

EXPLANATORY NOTE

The statement has taken into account only such categories of machines as have been purchased solely or partly out of the IBRD loan. The classes of machines which have not at all been financed by the Bank have been excluded. The statement has been prepared after assessing the overall requirement of the Maithon, Panchet and Barrage and Irrigation Projects for the next six months upto 31st December 1956.

2. It will be seen that some of the loan machines have been in use by Projects other than those for which they were procured. The details of such machines are furnished below :

(a) Four Tractors were made over to Konar Contractors in terms of the Agreement with them which provided that the Corporation would take over from the Contractors on residual value only such machines as had worked less than two-thirds of their working life. As these tractors had worked more than two-thirds of their life, they were taken over by the Contractors against payment by them of the full value.

one Angle Digger (b) Nine Tractors, one Dumper, one Hydraulic Grade Builder and one Scraper have been temporarily placed at the disposal of the Durgapur Project of the Government of West Bengal; Two Tractors, one Crane and two Power Control Units have been placed at the disposal of the Kosi Project of the Government of Bihar and two Concrete Mixers taken over by the Chambal Project of the Government of Madhya Pradesh.

3. Approval of the Bank has not unfortunately been obtained before disposal of these machines. The Durgapur Project, the Kosi Project and the Chambal Project were very urgently in need of the machines and they were issued in anticipation of the Bank's approval. The Konar

contd:

RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT
WASHINGTON, D.C. 20540
SEP 24 1956

Contractors took over the four Tractors in terms of the Agreement which had been executed before the First Loan Agreement was finalised.

4. In respect of the machinery found surplus to the requirements of the Projects for which they were purchased, it is proposed to take disposal action in the following order of priority :

- (1) By transfer to other Projects of the DVC.
- (2) By transfer to other River Valley Projects in India.
- (3) By disposal to Government sponsored Projects, Government Departments, Railways and local bodies in India.
- (4) By sale to the public.

5. It is hoped that the Bank will not object to transfer of machines from one DVC Project to another outside the scope of the particular loan subject to a report being made to them.

NNR/sbs.
24.9.56.

RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT
MAY 10 1955

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- (4) By sale to the public.

5. It is hoped that the Bank will not object to transfer of machines from one DVC Project to another outside the scope of the particular loan subject to a report being made to them.

NR/sps.
24.9.55.

List of 'absolute surplus' equipments of KONAR pending disposal.

<u>Sl.No.</u>	<u>Description.</u>	<u>Qty.</u>	<u>Book Value.</u>	<u>Dep.Value.</u>	<u>Remarks</u>
1.	Refrigerator(Electrical)	1			
2.	Winget Batching Plant Sl.No.BP-I	Rs.	73,817/-	Rs.	60,835/-
3.	Sl.No.BP-II	Rs.	73,817/-	Rs.	56,486/-
4.	Tournapull Trailor Sl.No.AC3T309CIF	Rs.	91,923/-	Rs.	76,769/-
		Rs.	20,000/-	Rs.	2,408/-(Tyres)
5.	" AC3T346CIF	Rs.	95,434/-	Rs.	74,048/-
6.	" AC3T348CIF	Rs.	95,434/-	Rs.	72,601/-
7.	" AC3T347CIF	Rs.	95,434/-	Rs.	68,478/-
8.	" AC3T345CIF	Rs.	95,433/-	Rs.	74,044/-
9.	" AC3T349CIF	Rs.	95,433/-	Rs.	71,815/-
10.	9 Cu.yd.A.B.Dumper	" SC00145	Rs.1,15,778/-	Rs.1,02,243/-	
	"	Rs.	7,800/-	Rs.	2,938/-(Tyres)
11.	" SC00148	Rs.1,12,789/-	Rs.	90,796/-	
12.	" SC00153	Rs.1,12,791/-	Rs.1,10,089/-		
	"	Rs.	7,800/-	Rs.	6,802/-(Tyres)
13.	" SC00157	Rs.1,12,781/-	Rs.	91,272/-	
14.	Euclid Rear Dumper	" BI68	Rs.1,47,559/-	Rs.1,18,000/-	
15.	" BI72	Rs.1,47,558/-	Rs.	99,421/-	
16.	P&H Excavator 2½cyd.	" 13908 NB	Rs.3,13,595/-	Rs.1,63,806/-	Pur-
17.	" 13909 NB	Rs.3,13,594/-	Rs.1,35,136/-		chased
18.	-do- 1½ cyd.	" 14737 NB	Rs.2,41,195/-	Rs.1,50,781/-	out of
19.	" 14738 NB	Rs.2,41,196/-	Rs.1,66,080/-		D.B. R.
20.	Euclid Bottom Dumper	" 67FDT11374 NB	Rs.1,28,861/-	Rs.	57,245/-
21.	" 67FDT11375 NB	Rs.1,28,860/-	Rs.	64,104/-	"
22.	" 67FDT11376 NB	Rs.1,28,860/-	Rs.	70,497/-	"
23.	" 67FDT11377 NB	Rs.1,28,860/-	Rs.	62,211/-	"
24.	" 67FDT11373 NB	Rs.1,28,323/-	Rs.	72,488/-	"
25.	Allischalmer Model HD-20	Sl.No.3257 NB	Rs.1,26,338/-	Rs.	73,165/-
26.	" Sl.No.3258 NB	Rs.1,26,338/-	Rs.	61,623/-	"
27.	-do- Model HD-#9	Sl.No.2486 NB	Rs.1,01,097/-	Rs.	36,481/-

List prepared by Store Department

March 31st 1956

List of 'Absolute Surplus' equipments of M.E.M.Division Construction Plant Circle, pending disposal :

<u>Sl.No.</u>	<u>Description.</u>	<u>Book Value.</u>	<u>Depreciated Value.</u>	<u>Remarks.</u>
			Nil.	
1.	Monipolia Molin Tractor 012480077	11459- 5-0	7312-14-0 7312-14-0	
2.	-do- 0174842535	11459- 5-0	12729--2-0	
3.	Allischalmer HD10 9025	38862- 9-0	17729- 2-0	
4.	-do- 9027	38762- 9-0	28042- 4-0	
5.	-do- 9190	54547- 2-10	44550- 7-10	
6.	-do- 9639	54547- 2-10	36754-10-10	
7.	-do- 9642	54547- 2-10	41883- 2-10	
8.	-do- 9564	54547- 2-10	49256- 2-10	
9.	Onion CCU for HD-10 1002	6344- 5- 9	6344- 5- 9	
10.	1009	6344- 5- 9	6089- 5- 9	
11.	-do- 471RC5	6344- 5- 9	6344- 5- 9	
12.	Cargo Straight Blade for HD-19	27064- 0- 0	27064- 0- 0	
13.	Allischalmer HD 5 With Dozer 10519	39638- 0- 0	35791-13- 0	
14.	-do- 11654	39638- 0- 0	33357- 9- 0	
15.	-do- 11642	39638- 0- 0	32461- 4- 0	
16.	-do- 11864	39638- 0- 0	33237- 9- 0	
17.	-do- 11866	39638- 0- 0	32149- 0- 0	
18.	-do- with Tractor Shovel 10576	51450- 0- 0	44357- 1- 0	
19.	Crane Hack for HD5	630- 0- 0	630- 0- 0	
20.	Trench Hoc for HD5	4830- 0- 0	4830- 0- 0	
21.	Front CCU for D7 No.24 80-6228	4594-12- 9	2988-12- 9	
22.	-do- 8D6211	4594-12- 9	4421-12- 9	
23.	-do- 8D-6210	4594-12- 9	4594-12- 9	
24.	Onion Empire Angle Dozer for HD-10	10735-15- 0	10735-15-0	
25.	-do-	10033- 0- 0	10033- 0- 0	
26.	D Roadster Tournapull 7223	93442- 0- 0	53541- 3- 0	
27.	-do- 7224	93442- 0- 0	63540- 3-0	
28.	-do- 7226	93442- 0- 0	64959- 2- 0	
29.	-do- 7229	93442- 0- 0	79828- 0- 0	
30.	International TD14 29172	45755- 3-0	30390- 0- 0	
31.	-do- 29905	45338- 5-0	33515- 8- 0	
32.	-do- 23376	41145- 0- 0	30042- 1- 0	
33.	-do- 32852	50973- 4- 0	42205- 4- 0	
34.	Dozer for TD14P924D8	17349- 0- 0	16629- 8- 0	

35.	Dozer for TV P924D10	17349- 0- 0	15739- 8- 0
36.	-do- 85416	17349- 0- 0	15025- 0- 0
37.	Hanomag with Power take off pulley		
	29002	23257-14- 0	20642-14- 0
38.	-do- 29183	23397-10- 0	21575-12- 0
39.	-do- 29139	23397-10- 0	21756-12- 0
40.	-do- 29137	23397-10- 0	20773- 2- 0
41.	Power Take off Pulley	415- 0- 0	415- 0- 0
42.	Generating Set 73277	1575- 0- 0	Nil.
43.	-do- (Kohler) 86987	1575- 0- 0	1130- 0- 0
44.	-do- 16 KW.	15134- 8- 0	15134- 8- 0
45.	Mobile Workshop	42780- 9- 0	20074- 9- 0
46.	Willy's Jeep BRM 2994	12806-11- 9	Nil.
47.	-do- BRM 2948	11830- 0- 0	Nil.
48.	Bedford Truck BRM 2674	15316-12- 3	1428-12- 3
49.	Caravan Trailor	8860-12- 0	7384-12- 0
50.	Stiff legged Derrick	8159- 0- 0	8159- 0- 0
51.	Adams Leaning Wheel Grader	4507- 3- 0	4501- 3- 0
52.	V.G.Uni Disc. & P.G. Unit Carrier	4681- 9- 6	4309- 9- 6
53.	Ransome 5 Furro Plough Disc. Dragon TD-11B	2874- 0- 0	2705- 8- 0
54.	-do-	3237- 0- 0	3068- 8- 9
55.	John Deere Killefer Disc.6 BX	7019- 0- 0	6647- 0- 0
56.	Ransome Marquias 3FMB Plough Heavy duty.	2271- 1- 6	1899- 1- 6
57.	John Deere Killefer Pan Breaker	16298-15- 0	16298-15- 0
58.	Denning Grain Fertiliser Drill	1890- 0- 0	1518- 0- 0
59.	John Deere Spring Tooth CC Cultivator	2688- 0- 0 6728-0-0	2485- 8- 0
60.	John Deere 5BX Combination Unit	6728- 0- 0	6728- 0- 0
61.	Whrilwind Terrecer 2 Nos.	6909- 0- 0	6537- 0- 0
62.	D Roadster Tournapull Sr.No.7215	93442- 0- 0	72415- 0- 0
63.	-do- Sl.No. 7227	93442- 0- 0	66060- 2- 0
64.	Austin Western 99H Power Grader 2750	54323- 9- 0	45068- 5- 0
65.	Bull Dozer for Power Grader 1947	2525-15- 0	2508-15- 0

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haul 31⁴ 1956

List of 'absolute surplus' equipments of B & I pending disposal.

<u>Sl.No.</u>	<u>Description.</u>	<u>Qty.</u>	<u>Book Value.</u>	<u>Dep.Value.</u>	<u>Remarks.</u>
1.	Auto Truck 35 ton cap.	1	Rs. 14,850/-	Rs. 14,850/-	
2.	Ambulance Van	1		Rs. 14,737/-	No action to be taken as per instructions of P.M., B&I.
3.	Pristman Wolf MackIII Crane	1	Rs. 59,922/-	Rs. 55,082/-	
4.	Millers Concrete Mixer (Non tilt) Sl.No.25868		Rs.	Rs. 9,427/-	
5.	Sl.No.25867		Rs. Rs. 12,238/-	Rs. 9,358/-	
6.	Sl.No.25863		Rs. 12,238/-	Rs. 9,554/-	
7.	Ransome Rapier Concrete Mixer type 10 NT				
8.	Sl.No.13444		Rs. 11,380/-	Rs. 10,395/-	
9.	Sl.No.13446		Rs. 11,380/-	Rs. 9,968/-	
10.	Ido-type 24/28 RGCH 140 Sl.No.13745		Rs. Rs. 19,346/-	Rs. 47,041/-	
11.	Goodwin Model 75 Sl.No.16411		Rs. 7,590/-	Rs. 6,496/-	
12.	Sl.No.16413		Rs. 7,590/-	Rs. 6,278/-	
13.	Super Victoria Concrete Mixer Sl.No.MK1899		Rs. 11,340/-	Rs. 9,429/-	
14.	Sl.No.MK3020		Rs. 9,900	Rs. 7,133/-	
15.	Winget Concrete Mixer (tilting) Sl.No.329LD		Rs. 7,799/-	Rs. 7,357/-	
16.	Sl.No.362LD		Rs. 7,799/-	Rs. 6,591/-	
17.	Sl.No.431LD		Rs. 7,799/-	Rs. 6,330/-	
18.	Sl.No.7TH/351/LD		Rs. 7,799/-	Rs. 6,920/-	
19.	(Non-tilt) Sl.No.7TH/457/LD		Rs. 10,080/-	Rs. 9,701/-	
20.	Parker Concrete Mixer Sl.No.26948		Rs. Rs. 11,717/-	Rs. 11,245/-	
21.	Sl.No.26810		Rs. 11,717/-	Rs. 9,996/-	
22.	Sl.No.26613		Rs. Rs.		
23.	Sl.No.26809		Rs. 11,717/-	Rs. 40,282/-	
24.	Sl.No.26808/		Rs. 11,717/-	Rs. 10,140/-	
25.	Sl.No.26947		Rs. 11,717/-	Rs.	
26.	Sl.No.27079		Rs. 11,717/-	Rs. 8,900/-	
27.	Anderson's hand operated Concrete Mixer (Tilting) Sl.No.BM/2387				
28.	Blaw-Knox Concrete Mixer(Non tilt)				
29.	Gravel Washing Machine	1	Rs.	Rs. 17,329/-	excluding the value of pipes.
30.	Ruston Diesel Locomotives	2	Rs. 17,068/-	each.	
31.	Monkey	2	Rs. 112/-	each	112/- each

<u>Sl.No.</u>	<u>Description.</u>	<u>Qty.</u>	<u>Book Value.</u>	<u>Dep.Value.</u>	<u>Remarks.</u>
32.	Harlans Pumps Sl.No.CZ2867		Rs. 2,915/-	Rs. 1,952/-	
33.	Sl.No.CZ2869		Rs. 2,915/-	Rs. 1,914/-	
34.	Sl.No.CZ2866		Rs. 2,915/-	Rs. 1,780/-	
35.	Sl.No.CZ4533		Rs. 2,815/-	Rs. 1,994/-	
36.	Sl.No.CZ4541		Rs.	Rs. 1,918/-	
37.	Sl.No.CZ4531		Rs. 2,915/-	Rs. 1,976/-	
38.	Sl.No.A0908		Rs. 2,563/-	Rs. 2,449/-	
39.	Sl.No.A0849		Rs. 2,563/-	Rs. 2,437/-	
40.	Sl.No.A0848		Rs. 2,563/-	Rs. 2,420/-	
41.	Sl.No.A0909		Rs. 2,563/-	Rs. 2,434/-	
42.	Deming Pump Sl.No.DC179968		Rs. 2,637/-	Rs. 1,998/-	
43.	Sl.No.DC184209		Rs. 2,637/-	Rs. 1,844/-	
44.	Sl.No.DC194546		Rs. 2,637/-	Rs. 2,005/-	
45.	Sl.No.DC194540		Rs. 2,637/-	Rs. 2,029/-	
46.	Sl.No.194547		Rs. 5,419/-	Rs. 4,462/-	
47.	Sl.No.DC184208		Rs. 2,637/-	Rs.	
48.	Ruston Pump Sl.No.332236		Rs. 3,012/-	Rs. 4,869/-	
49.	Motor No.BH887G		Rs. 3,012/-	Rs. 1,799/-	
50.	-do- BH830G		Rs. 3,012/-	Rs. 1,508/-	
51.	Sl.No.332270		Rs. 3,012/-	Rs. 2,143/-	
52.	Sl.No.332250		Rs. 3,012/-	Rs. 1,819/-	
53.	Sl.No.332239		Rs. 3,042/-	Rs. 1,600/-	
54.	Sl.No.332240		Rs. 3,012/-	Rs. 1,660/-	
55.	Jyoti Pump	1			
56.	G.E.C. Pump Motor No.HE866/11		Rs. 985/-		
57.	Motor No.HF866/19				
58.					
59.	Mather & Platt Pump	1	Rs. 4,510/-	Rs. 3,951/-	
60.	A.E.I.M. Pump	1	Rs.	Rs. 3,921/-	
61.	Ruston Pumps Sl.No.332238		Rs. 4,552/-	Rs. 4,125/-	
62.	Sl.No.332225		Rs.		
63.	332221 Sl.No.		Rs.	Rs. 3,552/-	
64.	Sl.No.332223			Rs. 3,853/-	
65.	Motor No.331437				
66.	Deming Pump 5" Sl.No.194345		Rs. 5,418/-	Rs. 5,099/-	
67.	Worthington Simpson Pump				
	Sl.No.5068112		Rs. 5,977/-	Rs. 5,484/-	
68.	Sl.No.5068114		Rs. 5,977/-	Rs. 5,559/-	
69.	Sl.No.5068113		Rs. 5,977/-	Rs. 5,808/-	
70.	Sl.No.5068116		Rs. 5,977/-	Rs. 4,633/-	
71.	Sl.No.5068117		Rs. 5,977/-	Rs. 5,446/-	
72.	Motor No.50643				
73.	Pegson Pump Sl.No.16707	Rs.	2,074/-	Rs. 1,975/-	
74.	Sl.No.13915	Rs.	2,074/-		
75.	Sl.No.16711	Rs.	2,074/-		

<u>Sl.No.</u>	<u>Description.</u>	<u>Qty.</u>	<u>Book Value.</u>	<u>Dep.Value.</u>	<u>Remarks.</u>
76.	Kelly & Lewis Pump Motor No.449631		Rs. 5,720/-	Rs. 5,619/-	
77.	Motor No.500073		Rs. 5,720/-	Rs.	
78.	Chrysler Pump	1	Rs. 12,525/-		
79.	French Grouting Pump	1	Rs. 3,396/-		
80.	Millar's 6" Well Point pump & accessories.	3		Rs. 20,520/- each Rs. 14,600/- accessories.	
81.	Portable Diesel De-watering Pump.	2		Rs. 39,185/- each.	
82.	"SKYKES" de-watering pump.	2		Rs. 39,467/14/- each(New).	
83.	50'x60' Steel frame with timber decking	2	Rs. 58,234/-		
84.	N.W.Shovel	1	Rs. 67,505/-	Rs. 51,811/-	
85.	EK-9 Onion Scraper	2			
86.	HD-9 Tractor with PCU and Scraper.	2			
87.	Petrol Winch	1		Rs. 11,999/-	
88.	Vibrators.				
89.	Millar 6" Well Point Pump	1		Rs. 21,481/-	lying at Dermoo.

March 24, 1956

List of 'Absolute Surplus' equipments of Bokaro pending disposal:

<u>Sl.No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Book Value</u>	<u>Depre- ciated Value</u>	<u>Remarks</u>
1.	NCK Excavator, Model 304, ¾ cu.yd. Sl.No.1160	- 3 Nos.	Rs.78,694/8/-	Rs. 33,645/14/-	
2.	-Do- Sl.No.1159	-	Rs.78,694/8/-	Rs. 54,437/3/-	
3.	-Do- Sl.No.1168	-	Rs.78,694/-	Rs. 32,704/10/-	
4.	NCK Crane 1½ cu.yd. Sl.No.6003	-	1,83,200/7/-	Rs.1,64,517/-	
5.	Bay City Crawler Crane 1½ cu.yd. with Shovel attachment and Bucket	-	2,07,775/-	Rs.1,38,516/-	
6.	Mall Saw	-	Rs. 950/-	Rs. 750/-	
7.	Portable Chain saw	-	Rs.2,450/-	Rs. 2,450/-	
8.	Batching Plant	- 2 Nos.	Rs.90,627/- <i>each</i>	Rs. 58,909/-	each.
9.	Hollow concrete Block manufacturing Plant	- 1 No.	1,13,333/-	Rs. 92,250/-	
10.	Millar Concrete Mixer with Lister Diesel Engine	- 1 "	Rs. 4,216/-	Rs. 1,350/-	
11.	Centrifugal Pumping Set	- 1 "	Rs.18,126/-	Rs. 4,250/-	
12.	Tangy Duplex steam pump	- 1 "	Rs. 8,200/-	Rs. 4,000/-	
13.	Caterpillar Pump	- 1 "	Rs. 4,300/-	Rs. 2,100/-	
14.	Jaegar Portable centri- fugal Pump	-	Rs. 6,925/-		Scrap
15.	Starling Pump 2"x2"	- 1 "	Rs. 2,100/-	Rs. 1,000/-	
16.	-do- 3"x3"	- 1 "	Rs. 2,400/-	Rs. 1,150/-	
17.	Bukh Pump 4"x4"	- 3 Nos.	Rs. 3,283/-	Rs. 1,666/-	Each.
18.	Crysler Pump	- 1 No.	Rs. 4,850/-	Rs. 2,425/-	
19.	Manhain diesel 3"x3"	- 1 No.	Rs. 2,960/-	Rs. 2,200/-	
20.	Centrifugal Pump 3"x2½"	- 1 "	Rs. 2,950/-	Rs. 700/-	
21.	C.P.Pump	- 2 3	Rs. 1,008/-	Rs. 575/-	Each.
22.	Hand Pumps	- 4	Rs. 850/-	Rs. 500/-	Each.
23.	Allam Vibrator	- 2	Rs. 2,110/-	Rs. 1,050/-	Each.
24.	Kohler Vibrator	- 2	Rs. 1,936/-	Rs. 968/-	Each.
25.	Mall Vibrator	- 2	Rs. 1,936/-	Rs. 968/-	Each.
26.	Rotary Drill	- 6	Rs. 2,625/-	Rs. 1,312/-	Each.
27.	Henderson Steam Derrck Crane 15 tons with Farrer Boiler	- 1	Rs.15,000/-	Rs. 11,200/-	

<u>Sl.No.</u>	<u>Description:</u>	<u>Quantity:</u>	<u>Book value</u>	<u>Depreciated value</u>	<u>Remarks</u>
28.	Wagon Platform	- 6	500/- (lot)	-	
29.	Muir Hill Dumper	- 18	6,916/-	1,500/- 3,512/-	Each
30.	40 Tons Farauhalf-Trailor	- 1	3,512 -	3,518/-	
31.	4 Wheel Trailer	- 1	-	1,500/-	
32.	Parker Model tilting Drum Concrete Mixer	- 1	6,450/-	1,710/-	
33.	Ransome Steam Concrete Mixer	- 1	7,500/-	2,250/-	
34.	-do- with cyl. dia 5½x8 stroke PD/154	- 1	7,500/-	2,250/-	
35.	Ansaldo Bulldozer TCA 70	- 1	52,310/-	16,500/-	
36.	Goodwing Concrete Mixer with Lister diesel engine	- 2	9,521/-	4,762/-	Each.
37.	Blow Knox Concrete Mixer, with diesel engine cav.eng.	- 1	8,380/-	2,510/-	
38.	-do- Ruston and Hornby diesel Engine	- 1	8,380/-	2,510/-	
39.	-do- with Petrol Engine	- 1	8,380/-	2,510/-	
40.	Carter Trailer Pump	- 1	6,018/-	3,005/-	
41.	Pump Carter complete	- 1	2,104/-	1,052/-	
42.	Pump sulzer	- 1	602/-	300/-	
43.	Centrifugal Pump 2½x1½ 4 cycle engine on Trailer	- 1	2,925/-	1,470/-	
44.	Ingersall Rand Vibrator	- 4	1,282/-	625/-	Each.
45.	C.P.Vibrator	- 5	1,197/-	575/-	Each.
46.	Jack Hammer	- 6	3,125/-	1,558/-	Each.
47.	Paving Braker	- 19	1,580	736/-	Each.
48.	Chipping Hammers	- 5	460/-	230/-	Each.
49.	P.H.Crawler mounted crane	- 1	-	35,335/8/-	Lying at Tilaiya

'BM'/1.5

March 31st 1956

List of 'Absolute Surplus' equipments of Maithon pending disposal:

<u>Sl.No.</u>	<u>Description.</u>	<u>Quantity</u>	<u>Book value</u>	<u>Depreciated Value</u>	<u>Remarks</u>
1.	Breco Ropeway components - 201 items	-	-	Rs. 14,970/-	
2.	Hollow concrete Block making machine	- 1 No.	-	Rs. 14,970/-	
3.	Sheet Pile Driving Plant with 120'ft. frame boiler & winch machine. Machine No.1450	- 1 "	-	Rs.1,02,682/-	
4.	-Do- Machine No.1451	- 1 "	-	Rs.1,04,432/-	
5.	Mc Terry Hammer size: 10B 3. Sl.No.1542	- 1 "	-	Rs. 16,326/-	
6.	-Do- Sl.No.1570	- 1 "	-	Rs. 16,605/-	
7.	-Do- Sl.No.1571	- 1 "	Rs.18,552/9/8	Rs. 18,552/9/8	New
8.	Failing Drilling Machine	- 1 "	-	Rs. 40,427/-	
9.	Ball Mill	- 1 "	Rs.53,653/-	Rs. 53,653/-	New.
10.	Cedar Rapid stone crusher-	1 "	-	Rs. 60,779/12/-	
11.	G-300 medium weight Wagon- 8 Nos. Drills, equipped 60N 3½ Drifter - Sl.No.995	- 8	-	Rs. 13,003/-	
12.	-do- Sl.No.996	-	-	Rs. 12,267/-	
13.	-do- Sl.No.99 1011	-	-	Rs. 13,984/-	
14.	-do- Sl.No. 1012	-	-	Rs. 12,267/-	
15.	-do- Sl.No. 1013	-	-	Rs. 13,739/-	
16.	-do- Sl.No. 1015	-	-	Rs. 11,531/-	
17.	-do- Sl.No. 1016	-	-	Rs. 13,248/-	
18.	-do- Sl.No. 1020	-	-	Rs. 13,248/-	
19.	Ross Fork Lifter	- 1 No.	-	Rs. 4,000/-	**

** Location: Engine Spare
Stores, Constn.Plant
Divn., Maithon.

March 31. 1956

List of 'Absolute Surplus' equipments of Panchet pending disposal:

<u>Sl.No.</u>	<u>Description</u>	<u>Qty.</u>	<u>Book value</u>	<u>Depreciated Value</u>	<u>Remarks.</u>
1.	(a) Log Band Saw	- 1	75,822/7/6	75,822/7/6	New.
	(b) Band Saw size: 34"x7"x17G	- 1			
2.	Electric Motor Trolley	- 1	5,878/6/-	5,878/6/-	New.
3.	Gardner Denvar Drill Sharpner		25,146/4/-	25,146/4/-	New.
4.	"Lincolin" Volume Pump	- 25	110/-	110/-	New - each
5.	Failing Drilling Machine	- 1	-	39,427/-	
6.	"OSTER" No.502 Pipe Master threading machine	- 1	-	2,237/4/-	
7.	Steam Road Roller cap.8/10 tons. Make: Tata Marshall	- 1	-	38,908/-	

List of 'Absolute Surplus' equipments of Central Mechanical & Fabricating Shop, Maithon.

<u>Sl.No.</u>	<u>Description.</u>	<u>Qty.</u>	<u>Book value</u>	<u>Depreciated value</u>	<u>Remarks</u>
1.	OCTLIBD & CIE Bench Lathe 2' M/C No.630/SP/EW-667/5525	1	467/-	467/-	These were purchased from disposal authorities & lying unused.
2.	-do- M/C No .632/SP/EW-669/5524		467/-	467/-	
3.	KEOPFER Gear cutting machine	-1	1,548/-	1,548/-	As recommended by the S.E., Mech. the equipments have been circulated with their Book values.
4.	KARL FRANK Vertical Drilling machine	- 1	100/-	100/-	
5.	Hand Operated Bench Drilling machine	- 3	259/- each	259 each	
6.	4 Ton still legged Derrick Crane	- 1	7,434/-	7,434/-	New.

March 31st 1956

2nd DVC.

(not 2nd IISCO)
per WDSF

LETTER TELEGRAM

SEPT. 14, 1956

DAVALIEG
CALCUTTA

INDIA

— see under 2nd IISCO.

WOULD APPRECIATE REPLY OUR CABLE AUGUST TWENTY-NINE REGARDING POWER
SUPPLY FOR IISCO.

REMBERT
INTRA FRAD

R. Wayne Rembert
Technical Operations

cc: Messrs. Basch & Armstrong

EWRembert:rha

✓
10/16

ROUTING SLIP		Date 10/10/56
NAME Files		ROOM NO.
Action		Note and File
Approval		Note and Return
Comment		Prepare Reply
Full Report		Previous Papers
Information		Recommendation
Initial		Signature
Remarks copies have been made for Asia Rept & for T O D		
From A. Moore		

IMMEDIATE.

New Delhi , the 6th Sept. 1956.

My dear Sivasankar,

I write in continuation of my D.O. of the same number dated the 25th August 1956 regarding the Damodar Valley Corporation. I send you a copy of a further letter from Kamat, No. DVC 4/56 dated the 24th August 1956 and three copies of the Confidential Report of the Bank End-Use Mission.

2. As requested in my earlier letter, I will be grateful if I could receive before the 10th September an interim note on this affair so that I could remove some of the Bank's misgivings while I am in Washington. You will appreciate that from the point of view of the next loan extremely rapid action on the Bank's report is required.

Yours sincerely,

(B.K. Nehru.)

Shri T. Sivasankar, I.C.S.,
Secretary,
Ministry of Irrigation and Power,
New Delhi.

Encl: 1. Copy of letter with encl.
2. Three copies of report (Nos. 43-45).



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 11 September, 1956	Document Type Letter			
Correspondents / Participants To: Mr. B. K. Nehru, ICS From: S.D.				
Subject / Title Loan No. 72 IN				
Exception(s) Information Provided by Member Countries or Third Parties in Confidence				
Additional Comments.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

OFFICE MEMORANDUM

TO: Files

DATE: August 22, 1956

FROM: W.D.S. Fraser *Wf*

SUBJECT: INDIA - DVC (Loans 23 IN & 72 IN)

Notes of meeting held on Thursday, August 16, 1956 at 2:30 p.m. in Room 1024. Present were: Messrs. Knapp, Armstrong, Fraser, Marshall, Perry, Rembert, Rosen and Wright.

1. The purpose of the meeting was to discuss a draft of representations concerning DVC which it was proposed to send to Mr. Kamat. This draft was a revision by TOD of a draft previously prepared by the Working Party.
2. The question arose whether the end-use report of Messrs. Marshall and Biaggi should be sent to the Government of India or to DVC. The opinion of the Working Party and of the Area Department had been that the report should not go officially to the Government of India because it was felt that there were some criticisms in it which might be difficult to substantiate fully, and which would only lead to recriminatory correspondence. However, the representatives of TOD felt that there was nothing in the report which could not be substantiated, and the consensus of the meeting was that the report should go to the Government of India through Mr. Kamat as soon as it was ready.
3. As far as the organization was concerned, it was agreed that greater emphasis should be placed on the need for appointing a competent Secretary who, according to the Act, should be the chief executive officer of DVC. In practice, the present Secretary had not been acting as a chief executive officer; he was literally not much more than a secretary. Mr. Marshall was of the opinion, however, that the present incumbent, Mr. Kshetrepal, was not the caliber of man to be made the chief executive officer. The Working Party had felt that if a strong board were appointed, the present Secretary could be eased out. It did not feel that the Bank could very well imply in the letter that Mr. Kshetrepal be fired.
4. The draft representations were agreed and it was decided to send them in the form of a letter to Mr. Kamat.



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 21 August, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. G. R. Kamat From: Mr. G. Neil Perry				
Subject / Title Loan No. 72 IN				
Exception(s) India - DVC Proposed Fourth Unit for Bokare and Two-Unit Plant at Durgapur				
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			



Record Removal Notice

File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 17 August, 1956	Document Type Letter			
Correspondents / Participants To: Mr. Kamat From: Mr. J. Burke Knapp				
Subject / Title Damodar Valley Corporation - Loans 23 IN and 72 IN				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
Withdrawn by Tonya Ceesay	Date June 13, 2017			

End-Use Report Summary
August 1956

OFFICE MEMORANDUM

TO: Mr. Burke Knapp
FROM: G. Neil Perry *gmp.*
SUBJECT: D.V.C. End-use Mission Report

DATE: August 14, 1956

*

The attached abbreviated summary of findings and recommendations of the end-use mission has been produced by the Working Party this afternoon. The proposal is that, instead of releasing the full text of the end-use mission report to Mr. Kamat, that only this abbreviated summary statement should be delivered to him. We understand that the TOD has not yet had an opportunity to consider this abbreviated summary statement, nor the suggested procedure. We have asked that TOD should, as soon as possible, consider the matter in order that a joint meeting with yourself could be promptly arranged.

att.

* for whole report see
To 118

India



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 14 August, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. G. R. Kamat From: Mr. J. Burke Knapp				
Subject / Title D.V.C. End-Use Mission				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

Working Party

W.D.S. Fraser

August 9, 1956

INDIA - Loans 23 IN & 72 IN - End-Use Mission Report

I attach herewith copies of Mr. Gray Marshall's draft End-Use Mission Report, dated August 7, 1956, on the DVC projects. The Management is concerned with the shortcomings of the DVC, especially as concerns the administration of DVC and the non-employment of consulting engineers. The Working Party has been asked to discuss thoroughly this report with a view to presenting it to the Government of India next week along with an appropriate letter of representation. I would be grateful, therefore, if the Working Party would give this report close study and be prepared to discuss it at a meeting on Monday, August 13, at 2:30 p.m. in Room 510.

cc. Messrs. Clark/Scott, Street, Rembert/Marshall/Jago, Wright

Mr. Perry

WDSF:cvb

*no file copy
as all copies were
distributed.
CVB.
(Final & all report
will come
to files)*

R/F. /
2nd DVC
Aug 7, 56

The Damodar Valley Corporation is expanding its power capacity by (a) installing 1 additional unit of 75 MW in the Bokaro Thermal Plant and (b) constructing a thermal plant with 2 units of 75 MW each at Durgapur. This expansion project has been included in the Second Five-Year Plan.

2. Total foreign exchange cost is estimated at an equivalent of Rs. 157 million (approximately U.S.\$32 million).

3. Tenders for the main plant have been received and are open till the 15th August. As this additional power is required for steel plants, it is necessary to place orders before the 15th August so that the plants are completed in time.

4. Particulars of the orders are as follows:-

Bokaro - one unit 75 MW

Boilers	£ 925000
Turbo-Generators	DM 5550000
Condensers	\$ 560000
Feed Water Heaters	\$ 600000
Consultants services (Kuljian Corp.)	\$ 105000
Miscellaneous unallocated (tenders not yet called for)	Rs. 91 lakhs
Total	Rs. 338 lakhs.

Durgapur - two units 75 MW each

Boilers	£ 1870000
Turbo-Generators	DM 11100000
Condensers	\$ 1120000
Feed Water Heaters	\$ 1120000
Consultants services	\$ 595000
Miscellaneous unallocated (tenders not yet called for)	Rs. 355 lakhs
Total	Rs. 870 lakhs.

These papers were discussed
at meeting in Knapp's office
on August 7.
ws

87
34
121
21
252
121
252

W 23-IN
W 72-IN
SUMMARY P.P

INDIA: D.V.G. LOANS NOS. 23-IN AND 72-IN

Summary Progress Report to July 31, 1956

Prepared by:

Joseph Filippi

Loan No. 23-IN

Date of Loan Agreement:

April 18, 1950

Amount of Loan (after parts cancelled):

\$16,720,500.00

Loan Fully Disbursed

Loan No. 72-IN

Date of Loan Agreement:

January 23, 1953

Amount of Loan (after part cancelled):

\$10,500,000.00

Amount Withdrawn:

6,989,372.97

Undisbursed Balance:

3,510,627.03

Of Which Irrevocably Committed:

The status of the projects is as follows:

1. Engineering and Construction

a) Bokaro Steam Plant

The first unit was ready for operation in February 1953, the second in August and the third in October 1953. The first unit was about 8 months behind the original schedule; the other two were originally scheduled for mid-1953. (A)

b) Konar Dam

The dam was completed in 1955, while originally scheduled for completion in mid-1953. (B)

c) Transmission System

As of May 1956, all except 20 miles of line and two substations had been completed. The line to Calcutta which, although not Bank financed, was brought into the project early in 1955, will probably be completed by the middle of 1957.

d) Maithon

Construction work on the dam and the dykes was practically complete in May 1956. The limiting factor in the completion of the Maithon scheme is (was) the installation of the equipment in the underground power house, which (was) several months behind schedule. The entire plant is expected to be in operation by the Spring of 1958. / (C)

e) Panchet Hill

The original date for completion was about the first quarter of 1956 but DVC now estimates that the power house will not go into operation until mid-1958.

Total progress to May 1956 is up to the revised schedule. However, any delays in the work at Maithon could delay the transfer of construction equipment from Maithon to Panchet Hill and thus delay the latter project.

f) Durgapur Barrage and Irrigation Systems

The barrage and head regulators have been completed and water is flowing through some of the canals. The original date for completion of the whole project was about the first quarter of 1956, but DVC (now estimates) that the canal work will not be finished until at least the middle of 1958. subsequently estimate

^{January 1957}
At (May 1956) total progress was up to the revised schedule. (However, the existing failure to employ contractors who possess mechanical equipment, combined with the unavailability of sufficient hand labor may cause delays.)

2. Financial

a) Cost Estimates

The cost estimates were revised in late 1955, showing substantial increases in all project sections, as summarized below:

	Estimate at Time of Loan (in lakhs of rupees)	1955 Estimate
Bokaro	1500	1521
Konar	543	994
Maithon	1390	1674
Panchet Hill	1490	1825
Durgapur & Irrigation	1980	2286
Transmission Lines	(not avail.)	1468

The 1955 estimates are now considered to be about 10% to 15% low on the projects still under construction. It should also be noted that they do not include the Board's administration and overhead expenses, or interest during construction.

The reasons for such increases in estimates for the hydro projects are:

Konar - Change in design, inexperience of engineers in estimating costs on Indian projects.

Maithon, Panchet Hill and Durgapur - Inexperience in estimating under Indian conditions. To a lesser extent, price increases of steel and cement.

b) Disbursements

The first loan is fully disbursed but in the case of the second loan disbursements to October 1955 were only about \$2.8 million while DVC foreign exchange expenditure amounted to about \$7.5 million. The position is slowly improving, but only about \$6 million had been disbursed by the end of June 1956. Thus \$1.5 million of expenditure to last October, plus expenditures from November to June, remain to be disbursed. Most of the expenditures are actually made in rupees but are for the purchase of imported goods. The delay in submitting disbursement applications appears to be due partly to DVC's difficulties in obtaining documentation evidencing payment and country of origin from suppliers, and partly to the slowness of the India Supply Mission in Washington which prepares the applications.

3. Management and Organization

DVC's management and organization remain deficient in many respects, and it is hoped that a complete reorganization will be undertaken in the near future. DVC is experiencing difficulties in retaining foreign personnel and in training a sufficient number of Indian engineers. The autonomy of the corporation is not sufficiently respected by the Central Government, and members of the Board do not have enough responsibility and experience in the field of public utilities. It is essential that corrective measures be taken to ensure the successful completion and operation of the projects. 7

4. Consultants

The Board of Consultants set up in 1950 was dissolved in 1955. Responsibilities of the Harza Engineering Company were reduced to the completion of the engineering on the Panchet Hill power plant. The supervision of construction on all other parts of the project is now done departmentally by DVC itself. In spite of this, the Corporation will not extend the Contract of the Chief Engineer beyond mid-1957. It seems essential that a competent firm, suitable to the Bank, be retained to supervise the complete construction of the Maithon and Panchet Hill projects.

5. Construction Equipment

There is evidence which indicates that DVC has disposed of construction equipment prematurely and without the approval of the Bank. The Corporation is also planning to dispose of construction camps at Maithon and Durgapur at dates which seem too early in relation to probable construction dates. The Bank has called the attention of DVC's management to these points.

6. Operation

a) Financial Results

The financial results of DVC's electrical operations have been

disappointing. In the 12 months February 1955 to February 1956 (inclusive, but omitting April 1955 for which figures are not available) revenues amounted to Rs. 12.6 million and operating expenses, without any charge for depreciation or interest, to Rs. 9.9 million, giving a net revenue of only Rs. 2.7 million.

The 1953 estimates in TOD Report No. 2-B for the same period were, by apportionment, revenues of Rs. 21 million, operating expenses of Rs. 9.0 million, and thus a net operating revenue of Rs. 12 million.

The very poor results are mainly due to the load developing much more slowly than had been expected. In February 1956 the load had only reached about 69,000 kw, less than half of the capacity of Bokaro (150,000 kw). The sales in the 12 months to February 29, 1956 were only about 272 million kwh, as compared with the 1953 estimate of sales in the period of about 500 million kwh. But the operating expenses were not far short of those envisaged for sales double the actual sales.

The causes of the present state of affairs are, as regards low sales, delays by consumers in obtaining equipment to enable them to be connected to the grid; delays by DVC in completing transmission lines and substations; the past failure of DVC to organize an efficient commercial department 1/; and tariff rates which probably will be raised.

The high operating costs appear to be largely due to the employment of more personnel than is required and to the high cost of coal at the Bokaro steam plant.

b) Coal Supply

It was recently announced that the government intends to set up a Company which will take over all government mining activities throughout India. There remains a doubt as to whether this would include DVC's operations at the Bermo coal mine. ~~In any case,~~ the cost of coal is expected to be reduced somewhat in the next few years as a result of the mechanization of mining and handling facilities at the Bermo mine, and the completion in 1958 of a government coal washing plant in the same area. 9

c) Load and Earnings Forecast

After developing (very) slowly up to now, the load on the DVC electric system is expected to grow at a much faster rate in the near future, due to the vast expansion of industrial schemes in the area served by the Corporation. From 69 mw (in February) 1956, the peak load is expected to increase to 161 mw in 1957-58, 255 mw in 1959-60 and over 300 mw after 1961. (The problem will soon be to develop generating capacity in pace with requirements.) H

at the beginning of

7. General Comments

The projects covered by the first loan were carried out in a generally satisfactory way, although their completion was somewhat behind schedule. I

1/ Commercial activities have recently been segregated.

The projects covered by the second loan, primarily constructed departmentally, are (far) behind schedule and will cost much more than had been estimated. This is partly due to a deficient organization and other conditions which DVC has been asked to correct, so as to minimize the delays and cost increases. I

8. End-use Inspection

Because of the difficulties which have arisen in connection with the project and the defects in the organization of DVC, Mr. Marshall and an outside consultant, Mr. Biaggi of the Societa Edison of Milan, conducted in April and May 1956 a special end-use inspection into the affairs of the Corporation.

cc: Mr. Rucinski (2)



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 27 July, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. S. J. Raj From: Mr. W.D.S. Fraser				
Subject / Title India - Loan 72 IN - Conversion of French Francs				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

KF
2nd DVC

OFFICE MEMORANDUM

TO: MR. W. D. S. FRASER

FROM: GORDON M. STREET 

SUBJECT: LOAN IB 72 IN - CONVERSION OF FRENCH FRANCS

DATE: JULY 26, 1956

Mr. Riley has today been informed by Mr. Perousse, Commercial Counsellor of the French Embassy, that the Banque de France has approved the conversion of the following transactions:

Frs. 69,995,179 - IBRD Check No. 1039
dated 2-17-56 for Frs. 35,405,340

IBRD Check No. 1057
dated 2-17-56 for Frs. 34,589,839
Frs. 69,995,179

(refers to applications 23,27,31,33,40,43 and 46)

Frs. 22,082,622 - IBRD Check No. 1070 dated 4-23-56
(refers to application no. 65)

These transactions represent reimbursement for payments made by D.V.C. under Loan IB 72 IN for goods originating in France and I.S.M. wish to convert them to sterling.

We understand that the Banque de France is writing to us to inform us as to the manner in which they wish future transactions of this nature to be handled.

Would you kindly inform Mr. Raj accordingly as on March 26, 1956, Mr. Pendharkar requested information on this and as you know on July 9 Mr. Raj asked to be kept informed of further developments.

L
nt

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

OFFICE MEMORANDUM

TO: Files

DATE: July 25, 1956

FROM: W.D.S. Fraser *Wf*

SUBJECT: INDIA - DVC (Loan 72 IN)

Notes of meeting held on Thursday, July 19, 1956, at 11:15 a.m. in Room 319. Present were: Messrs. Cargill, Fraser, Marshall, Mehaffey and Perry.

1. The purpose of the meeting was to achieve an understanding between T.O.D. and the Area Department on an approach to the Government of India concerning the shortcomings of the DVC, as reported by Messrs. Biaggi and Marshall. Mr. Marshall explained how a draft memorandum had been prepared for the guidance of the Vice President in a proposed talk with the Indian Ambassador. The intention was to seek the Ambassador's advice on how the problem should be tackled, bearing in mind the Bank's desire not to encourage the Government to "eat away" at the autonomy of DVC. The reason for doing so before the report had been discussed in the Bank was Mr. Garner's desire to get something done promptly, presumably before his duties as President of IFC occupied all his time.

2. Mr. Cargill gave his view that most of the shortcomings of the DVC stemmed from one thing: poor management at the top. Mr. Varma, who was at present Acting Chairman, was not of the caliber required. He felt that the Bank ought not to imply that the Government was guilty of "eating away" at the autonomy of DVC; on the contrary, it was a case of weak and vacillating management always referring to Government on minor matters. While it was true that the Government influenced the DVC when it came to appointing the top posts, it would be difficult to substantiate interference by Government in the day-to-day operations of DVC.

3. It was suggested that Mr. Komora, the Chief Engineer, was mainly responsible for the delays in the projects. He had persistently made it difficult for any deputy to work under him and he had been responsible for the removal of Harza Engineering as the consultants. The result was that he had to do work which normally should be done by 5-6 expert engineers. It was suggested that perhaps the solution to the problem would be to have Mr. Komora removed, but General Mehaffey pointed out that it would be very difficult to obtain the services of another Chief Engineer willing to take over the projects in the middle of construction. It had to be remembered that Mr. Komora was appointed after consultation with the Bank, so that he was virtually a Bank nominee. It was therefore rather difficult for the Bank to criticize the DVC or the Government for delays and other technical shortcomings if the reasons for them were the inadequacies of Mr. Komora. Mr. Marshall felt that the best had to be made of the situation, and Mr. Komora should stay on at least until the Panchet Hill project was completed. In Mr. Komora's favor was the fact that he had the full confidence and respect of his Indian colleagues.

4. Rather than take up all the matters outlined in Mr. Marshall's paper and report, it was felt that it would be better if the approach made to the Government now were limited to the one important matter, namely, the need for strengthening the top management of the DVC. This could take the form of pressing for a new Chairman, or strengthening the post of Secretary, who was the chief executive. To press for a stronger Secretary would entail a substantial increase in salary, and would deviate from Indian practice, and hence present a problem. Under the circumstances, the Bank would be better advised to press for a high caliber Chairman. The matter could be regarded as urgent because the Government was presumably contemplating candidates for the chairmanship. The other matters in the report needed further discussion in the Bank before they could be communicated to the Government.

5. General Mehaffey agreed to suggest to Mr. Knapp that, as a result of this meeting, (a) the only urgent matter that ought to be taken up with the Government now was the question of the chairmanship of DVC, and (b) the Government should be asked to defer any action in appointing a new Chairman until the Bank had studied Mr. Marshall's report and was able to convey the findings in it to the Government.

cc. Those present and
Messrs. Knapp, Street and Clark/Scott.

OFFICE MEMORANDUM

TO: Mr. M. Perry

DATE: July 24, 1956.

FROM: I.P.M. Cargill

SUBJECT: DAMODAR VALLEY CORPORATION.

A thought struck me after discussions last week. At the present time the Government of India seems to be particularly conscious of the importance of good management in all public enterprises. In a speech dated May 18 the Prime Minister expounded on this point particularly to rebutt the criticisms of high salaries being paid to foreigners. I think therefore that this would be a particularly good time at which to urge the Government to overhaul completely the management and organization of the Damodar Valley Corporation. I should think that this point could be made separately in a letter (rather than left as part of the end-use report) to ensure that sufficient emphasis was given to it.



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 20 July, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. W.D.S. Fraser From: Mr. S. J. Raj				
Subject / Title India - Loan 72 IN - List of Goods				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

OFFICE MEMORANDUM

TO: J. Burke Knapp

DATE: July 18, 1956

FROM: Joseph C. Mehaffey *JCM*

SUBJECT: End-Use Memorandum on DVC

Attached is a draft of a memorandum that Mr. Garner requested in connection with the end-use mission to DVC. We would appreciate receiving comments, and we would be pleased to discuss this with you if you feel that it would be of advantage.

Attachment

cc: Mr. A. Broches, Mr. Gordon Street, Mr. N. Perry

India

1. The Bank has made two sizeable loans to the Government of India to assist in the development of the Damodar Valley northwest of Calcutta. The first loan of \$18.5 million was made in April, 1950, and the second loan of \$19.5 million was made in January, 1953. These loans, however, were subsequently reduced to ~~\$16.7~~ ^{\$16.7} million and \$10.5 million respectively because of India's foreign exchange position in regard to sterling balances. The first loan covered the foreign exchange costs of the Bokaro thermal plant (150 MW), construction equipment for the Konar dam, which regulates the flow of water to the Bokaro thermal plant, and a transmission system. The second loan was to cover the foreign exchange costs of the Maithon Hydroelectric plant (60 MW), Panchet Hill Hydroelectric plant (40 MW), and the Durgapur barrage and irrigation system.
2. The first unit of the Bokaro plant was put into service practically according to original schedules, but the completion of the Konar dam was considerably behind the original schedule, although not far enough behind to create any problem in connection with the storing of water for the thermal plant. While the cost of Bokaro was within 5% of original estimates, the Konar dam exceeded the original estimates by 83%. This was caused by changes in design which resulted in an increase in quantities of materials required. The load on the Bokaro power plant has failed to materialize as projected at the time the loan was signed. The reasons for this were late deliveries of some equipment, primarily transformers, and the failure of DVC to coordinate their customers' construction activities with their own work.
3. The Maithon, Panchet Hill, and Durgapur barrage and irrigation systems are all running approximately two years behind original schedules.

In general this was known to be attributable
~~This has been~~ attributed to the inexperience of the Chief Engineer and Consulting engineers with Indian conditions including the failure to properly take into consideration the monsoon season. There has also been a large amount of trouble with the construction equipment, primarily because DVC failed to order the necessary repair and spare parts at the proper time. The estimated cost of Maithon and Panchet Hill is approximately 20% over original estimates, largely because of the increased construction period.

4. All of these matters have given the Bank great concern, and it was decided, in view of the failure of DVC to take the necessary corrective measures as recommended by the Bank in the past, that a complete re-appraisal of the last loan and the projects should be made. Accordingly, the Bank engaged the services of one of the executives of the Italian Edison Company of Milan, Dr. Francantonio Biaggi, and he, in the company of a member of our staff, visited the DVC during the first part of May to make this re-appraisal.

5. A report is in preparation, but in order to save time, we believe that it is well to give you an outline of the principal findings of the mission in order that immediate attention may be drawn to the deficiencies needing attention. We are gravely concerned over the present conditions, and we feel that the Indian Government should share this same opinion. It is highly important, according to our views, that the autonomy of the DVC be retained for we feel that in that way the greatest benefit may be derived by the Indian people. While the Bank feels that all of the points covered in the mission report are very important, there are some that warrant special mention, and we are outlining these below.

TP on situation

6. Today the Bank does not feel that the real objective of establishing an autonomous organization has been achieved. It is our belief, however, that this can be achieved within the framework of the 1948 DVC Act by the strengthening of the top organization. This would call for the appointment of a Chairman of the Board with the proper administrative experience and ability, a leader, and an individual who would demand the utmost respect of the entire organization. This would preferably be a person with prior administrative experience outside the Government and whose responsibility would be entirely to the DVC and not divided with the state or the Central Government. After the proper determination of policies by the Central Government, he should be given full authority for carrying out these policies without interference. In order to further achieve this autonomy, the Secretary, as the Chief Executive Officer and General Manager of the Corporation, should be appointed for an indefinite period in order to have a continuity of management. The person selected for the post should be acceptable to the Board and be a capable executive, preferably with experience in the operation of a utility somewhat similar to DVC.

with some

7. With the above accomplished, the form of organization should be changed from a primarily construction organization to an operating organization along the lines of sound, modern utility practices. [A suggested outline of such an organization is attached, but it is imperative that three principal departments should be established, (a) Engineering and Construction, (b) Administration, and (c) Operation. During the past eight years, DVC has trained a sizeable number of capable executives who can successfully carry out the important posts. The DVC also has ample capable executives to fill the Junior Executive positions.]

8. The position of Financial advisor appears to have increased activities over that originally intended. The functions of the position should be limited to advising the Board on financial matters, particularly the capital expenditures and it should not include interference on technical matters such as the requirements for spare parts, changes in design of spill-ways, and so forth. The Board should rely for advice on this phase of the operations on their competent engineers.

9. Over-employment is prevalent in all phases of DVC operations and a concerted effort must be made to reduce the personnel to a size in line with sound utility practices.

10. A thorough study should be made of the Panchet Hill projects with an aim to having a large part of the remaining construction work done by contract. This should result in the release of some well-trained engineers for the normal operational duties of the Corporation.

11. It is essential that the services of a capable chief engineer be retained until the entire completion of the Maithon and Panchet Hill projects. Because of the knowledge of local conditions and for continuity, it would be better to retain the present chief engineer, but if this is not possible, a person with comparable knowledge and experience must be obtained.

12. It is absolutely essential that the supervision of construction be performed for the entire construction period by a qualified engineering firm. For continuity, it would naturally be better to retain the original designers.

13. Accounting procedures should be adopted in line with sound utility practices so that an accurate determination of direct costs of operation will be readily available.

14. A forecast of earnings and expenses as prepared by the mission shows that little or no profit is expected during the next five years to assist in financing future developments. Rates for power, in the mission's opinion, should be increased, which will not result in decreased sales.

15. For efficient construction and reliable operation it is necessary that the DVC accept a policy of providing sufficient spare parts for construction equipment and for the operation of the Bokaro and other generating plants.

16. It is expected that the expansion of the DVC generating capacity will be primarily thermal plants. Under these conditions, in order to have low generating costs, the Bermo coal mines must be further mechanized.

17. In order to intelligently expand the DVC activities, it is considered necessary that the present advisory board be expanded to include internationally known consulting engineers.

July 18, 1956

L. Gray Marshall



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 16 July, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. J.S. Raj From: Mr. W.D.S. Fraser				
Subject / Title India (Loan 72 IN)				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
Withdrawn by Tonya Ceesay	Date June 13, 2017			

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

OFFICE MEMORANDUM

TO: Files

DATE: July 16, 1956

FROM: W.D.S. Fraser *wf*

SUBJECT: INDIA - Loan 72 IN (Second DVC)

Notes of Working Party meeting held on Thursday, July 12, 1956 at 3:00 p.m. in Room 510. Present were: Messrs. Fraser, Jago, Marshall, Scott and Street.

1. The meeting was held to discuss the difficulty experienced by the Treasurer's Department with the List of Goods. According to the List of Goods of April 20, 1955, against which the Treasurer's Department is now disbursing, two categories would be overdrawn if disbursements were made under pending applications.

2. It was noted that a revised List of Goods had been submitted informally by Mr. Pendharkar on May 7, 1956, and he had stated that this revised list would be communicated through regular channels at a later date. If this List of Goods were approved by the Bank, it would automatically take care of the difficulties now experienced by the Treasurer's Department. Under the circumstances, the Working Party agreed to permit disbursements under the applications concerned, even though two categories would be temporarily overdrawn.

3. Mr. Marshall expressed the view that the amount given in the revised List of Goods, under the category of engineering services -- \$215,000 -- was not adequate for what was required, though the DVC could always use its own funds for Engineering Services. The inclusion of a larger amount in the List of Goods for this item would help the Bank to bring pressure to bear, and he suggested that \$200,000 to \$300,000 could be transferred from the "Materials and Equipment" category.

4. Mr. Fraser agreed to remind the Indian Executive Director that some time had elapsed since the Bank had been informed that a revised List of Goods would be communicated through regular channels. At the same time, he would point out the reservations of the Bank concerning the amount allocated for engineering services.

cc. Mr. Perry
Those present.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

RF

Incl DVC

OFFICE MEMORANDUM

TO: Dr. Antonin Basch

DATE: July 10, 1956

FROM: Gordon M. Street

SUBJECT: IB 72 IN

Reference the attached this would seem to be a matter for discussion by the Working Party.

I would be glad if you would arrange a meeting.

L
13/7

21 DVC

OFFICE MEMORANDUM

TO: G. M. Street
FROM: A. Casson
SUBJECT: IB 72 IN

DATE: July 10, 1956

I understand from Mr. Gray Marshall that there is the possibility of a list of goods problem developing on this loan.

DVC have proposed a revision to the List of Goods which would take care of our immediate disbursement problems summarized below; but in Mr. Marshall's opinion would not allow sufficient funds for Engineering Services.

Mr. Marshall says that DVC is proposing to discontinue the engineering services but that he is opposed to this and is recommending in his report that these services be continued. For this reason he feels we should go slow in making further disbursements in excess of the existing list of goods.

The following are the categories immediately affected:-

<u>Category I(b)</u>		\$ 5,000.
<u>Application 131 pending</u>		
Rs. 1,463,167 @ .21		\$307,265.
		<u>\$302,265</u>
Proposed revision allocated to this category		<u>\$309,000.</u>
<u>Category 2(a)</u>		\$461,750
Disbursed to date	\$820,877	
<u>Applications pending</u>	<u>\$286,690</u>	<u>\$1,107,567</u>
(134, 135, 136, 143)		
	Difference	<u>\$ 645,817</u>
Proposed allocation in new list of goods		\$2,283,000.

Mr. Marshall said he would be glad to discuss the matter at your convenience.

13/7

New list of goods (submitted informally by Rndharkar in May) will take care of above difficulties.

7/12

WT



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 09 July, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. W.D.S. Fraser From: S. J. Raj				
Subject / Title India - Loan 72 IN - Reimbursement				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

~~Mr. Ingham~~ RF
wt
Ind DVC

Files

July 3, 1956

G. M. Street

Loan No. IB 72 IN - D.V.C. - Application No. 149 for Reimbursement of Czech Crowns Equivalent to Rupees 13,833.14.5.

Mr. Fraser and I talked to Mr. Raj, the Acting Alternate Executive Director of India, this morning. I explained that while the new Loan Regulations which prohibit the financing of goods purchased in non-member countries other than Switzerland do not apply to this loan, we did prefer not to reimburse expenditures for goods purchased in Czechoslovakia and asked whether Mr. Raj could arrange to have the application withdrawn. He said he understood our embarrassment and would contact the India Supply Mission and let us know the results.

In the meantime, we are to hold the application, awaiting word from Mr. Raj or a request from the India Supply Mission that the application be withdrawn.

MS set:jg

cc: Mr. Riley
Mr. Casson

File: Application No. 149
Forms and Procedures

NOTE: Mr. Raj telephoned me later in the day to say that he has found that India Supply Mission has no authority to withdraw the application. This must come from D.V.C. Mr. Raj said that he would write to Mr. Kanat, who is now in India, with a view to settling the matter. Mr. Raj also asked that we hold up all action until he has had a chance to hear from Mr. Kanat.

4/13/7



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 28 June, 1956	Document Type Letter			
Correspondents / Participants To: Mr. Srivastava From: J.S. Raj				
Subject / Title India - Loan 72 IN - Reimbursement				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

Note to Operational Files:

Memo, May 22, 1956, from Pendharkar to Basch, subj: Reimbursement on Loan 72-IN, re difficulties in connection with the reimbursements in French francs and Italian lire received for expenditures under this loan:

This memo is being temporarily held in Dr. Basch's office.

CB.
C. Baber
June 27, 1956

* Memo had never been sent to
Files.

OFFICE MEMORANDUM

RF
Ind DVC
(72 IN)

TO: Antonin Basch

DATE: June 21, 1956

FROM: L. Gray Marshall *LSM*

SUBJECT: DVC Surplus Construction Equipment

Referring to Mr. Pendharker's memorandum of May 14 in regard to the surplus equipment at Konar Dam, it is impossible to give a definite decision at this time. While in India I discussed thoroughly with the DVC the situation in regard to the approval of the Bank for the disposition of surplus construction equipment. I have received a list of equipment that the DVC accepts as being surplus to its requirements, but because I noticed a scarcity of construction equipment at Panchet Hill, I requested the DVC to supply me with a complete list of equipment that they anticipated retaining for at least the next six months on the Maithon, Panchet Hill, and Durgapur Barrage projects. It is difficult to determine whether equipment is surplus to the needs of DVC until we have this list. As this list was requested more than a month ago, we should be receiving it shortly. For your information, it does seem as if the Euclid Bottom Dumpers could be used to advantage at Panchet Hill as I noticed that they only had 24, and it is my belief that at least 35 will be required if they are to complete the project according to the present schedule. I will inform you as soon as I have received the list from DVC.

Mr. Toren w.

4/6/26

72 IN
(2nd DVC)

JUNE 14, 1956

NETHERBANK
AMSTERDAM (THE NETHERLANDS)

X

REUR CABLE JUNE 11 CHEQUE GUILDERS 27,726.11 OUR ACCOUNT A ORDER INDIA SUPPLY
MISSION REPRESENTS PAYMENT UNDER IBRD LOAN 72 DANODAR VALLEY CORPORATION, INDIA
FOR DUTCH GOODS DELIVERED THROUGH INDIAN IMPORTERS TO DVC STOP TO OUR KNOWLEDGE
DUTCH SUPPLIERS WERE PAID THROUGH STERLING STOP APPRECIATE BALANCE A NOT
TRANSFERABLE AT PRESENT HOWEVER CONVERSION INTO STERLING IN THIS CASE WILL
PLACE YOU AS IF IBRD HAD PAID 18% GUILDERS DIRECTLY TO DUTCH SUPPLIERS STOP
PLEASE RECONSIDER CLEARING CHEQUE 799

INTBAFRAD

PETER G. RAMM

TREASURER'S
PGRamm/bg

cc: Dr. Liefstinck
Mr. Riley
Mr. Stevenson
Mr. Folk ✓

Mr. Prins
Mr. Cavanaugh
Mr. Casson

NL
6/20

Messrs. Prins and Street(3)

June 13, 1956

Walter C. P. Rutland

LOAN 72 INDIA - Extension of Closing Date

Please note that the Bank has agreed to extend the Closing Date on subject Loan from June 30, 1956 to June 30, 1958. (Refer borrower's undated letter confirmed by the Bank on May 31, 1956 signed by Mr. Joseph Rucinski.)

Kindly amend your records accordingly.

cc: Mr. Cavanaugh
Mr. Rutland (2)
Mr. Perez
Miss Charalambous

WCPR/pio



OFFICE MEMORANDUM

TO: Files

DATE: June 12, 1956

FROM: L. Gray Marshall

SUBJECT: Telephone conversation with A. Ackerman in regard to engineering work for D. V. C.

1. Before I left for India Mr. Ackerman called to say that at the time he was acting on the Board of Consultants he had been authorized to proceed with some preliminary engineering for Konar Hydroelectric. This report had been delivered to the D. V. C. in January of this year and favorable comments had been made.
2. Just before I left for India Mr. Ackerman called at the office to say he was writing to D. V. C. to request their approval to come to India to discuss the report.
3. Today he called to say that he received approval to come to India on about May 3. In return he cabled for arrangements with Pan American to supply his transportation at D. V. C.'s expense. In return he received a reply stating that because they had called off the test borings for a while he should defer his visit for a number of months. He wished to get advice as to what to do.
4. I informed him that D. V. C. had told me that he had been invited to come out but that I had not discussed the matter because the Konar development was not being financed by the Bank.
5. He appeared to feel that he had a commitment to go even though he had been asked to defer his visit, and he wanted my opinion. My answer was that I had no opinion and could not advise him on the matter except to say that I felt he ought to have satisfactory financial arrangements before embarking on such a long trip.
6. He then wanted to know if the Bank could assist him in receiving payment for his previous work, whereupon I informed him that I doubted very much whether the Bank was in a position to concern itself with this matter, particularly in view of the fact that we had no immediate interest in the Konar project.
7. His final statement was that he was cabling again stating his intention to arrive in India at the end of June and asking D. V. C. to make the necessary travel arrangements.

LGMarshall/pg

cc: E. Wayne Rembert
A. D. Spottswood

In D2C.

X Ackerman

June
~~May~~ 11, 1956

Dear Mr. Ackerman:

I have received your letter of May 25 with which were enclosed a copy of the letter from the Secretary of the Damodar Valley Corporation dated May 8, 1956 and a copy of your reply to that Corporation dated May 25, 1956.

With best personal regards.

Sincerely yours,



Robert L. Garner

Mr. Adolph J. Ackerman
Consulting Engineer
1250 Sherman Avenue
Madison 3, Wisconsin

OK
Reg

SA:am

J. N. Goswami
Chief Electrical Engineer.



GRAM : DAVALLEC

PHONE: ALIPORE 1765

DAMODAR VALLEY CORPORATION.

ANDERSON HOUSE, ALIPORE
CALCUTTA-27

BY SEA MAIL

No.CEE-10/1- 9931

June 9, 1956
76

Mr.Gray Marshall,
International Bank for Reconstruction & Development,
1818 H Street,
Washington 25 D.C.,
USA.

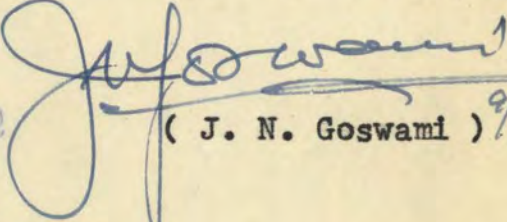
Dear Mr.Gray Marshall,

As arranged, I send herewith by sea mail
the "Statement showing amendments proposed to the
DVC Service Regulations" which you had left with me
during your last visit to Calcutta.

I also take this opportunity of request-
ing you to send us early your report and recommendations
etc. regarding the Bokaro Thermal Station operational
set-up, cost etc. which you discussed in detail at
this office.

I hope you had a comfortable journey back home.
With kind regards,

Yours sincerely,


(J. N. Goswami) 2/6/56

Encl: 1

REC'D 10 02 AM 1956

RECORDED AND DELETED
INTERNATIONAL BANK FOR

JNG:s

11G:2

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

ENCL: 1

MIG 9 10 03 AM 1956

(J. H. GOSWAMI)

[Handwritten signature]

Yours sincerely,

With kind regards,

I hope you had a comfortable journey back home.

this office.

Self-imp. cost etc. which you discussed in detail at
etc. regarding the Bokaro Thermal Station operation
the you to send us early your report and recommendations

I also take this opportunity of re-emphasizing

your last visit to Calcutta.

DAC General Regulations, which you had left with me
the statement showing amendments proposed to the
as attached. I send herewith by air mail

Best Wishes, Sir,

Yours,

Washington 22 D.C.

1818 H Street,

International Bank for Reconstruction & Development,

Mr. C. S. Mahapatra,

NO. CEE-TO/1- 6621

June 8, 1956

BY SEA MAIL

CALCUTTA-31

VANDERSON HOUSE, VIPORE

DAMODAR VALLEY CORPORATION

BRANCH: DAVANAGER

PHONE: VIPORE 1222



Chief Electrical Engineer.

J. H. GOSWAMI

Report filed in India documents -
D/C VI - 70

100 118
Report -

End-Use Report, May/56
Messrs. Messership Bazaar

2472
D.V.C. File
pls.

June 4, 1956

Dear Mr. Balan:

✓ I was very pleased to receive your letter of April 18 and to learn how much you were pleased with the recent visit of Mr. Bennett. I conveyed your message to him and he expressed appreciation of your efforts to make his stay both a pleasant and rewarding one.

Thank you again for your very kind remarks.

Sincerely yours,

Antonin Basch
Department of Operations
Asia & Middle East

Mr. C. Balan
Public Relations Officer
Damodar Valley Corporation
Anderson House
Alipore
Calcutta 27

ABasch:fc

Mr. E. Clark

May 31, 1956

W.D.S. Fraser

INDIA - Loan No. 72 IN

Attached is a letter, duly confirmed, from Mr. Kalkat, requesting extension of the Closing Date on the above loan to June 30, 1958.

I would appreciate it if you would see that the appropriate people are notified in the usual manner.

WDSF:cvb *WJ*



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 31 May, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. G. R. Kamat From: Mr. Joseph Rucinski				
Subject / Title India - Loan 72 IN - Reimbursement				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			



INDIA SUPPLY MISSION

2536 MASSACHUSETTS AVENUE, N. W.

WASHINGTON 8, D. C.

DIRECTOR OF
THE MISSION

TELEPHONE: COLUMBIA 8-8200

International Bank for Reconstruction
and Development,
1818 H Street, N.W.
Washington 25, D.C.

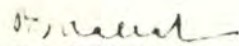
Dear Sir:

Loan Number IB 72 IN

I hereby request your agreement that the Closing Date provided for in Section 8.01 of the Loan Agreement (Damodar Project), dated January 23, 1953, between India and the International Bank for Reconstruction and Development, be extended from June 30, 1956 to June 30, 1958.

Please indicate your agreement by signing the form of confirmation on the enclosed copy of this letter and returning such copy to me.

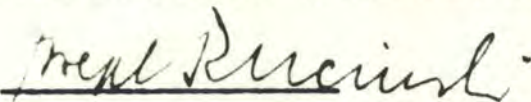
Very truly yours,


B.S. Kalkat
Director
India Supply Mission

AGREED:

Date: May 31, 1956

International Bank for Reconstruction and Development

By: 

Joseph Rucinski

HYDRO-ELECTRIC
DEVELOPMENT

PLANNING
FINANCING
DESIGN
CONSTRUCTION

Mr. Ackerman
ADOLPH J. ACKERMAN

CONSULTING ENGINEER

1250 SHERMAN AVENUE
MADISON 3, WISCONSIN

MEMBER
—
AMER. INST. OF
CONSULTING
ENGINEERS
A. S. C. E.
A. S. M. E.
A. I. E. E.

May 25, 1956

Mr. Ackerman
Mr. Robert L. Garner, Vice-President
International Bank for Reconstruction and Development
1818 H Street, N. W.
Washington 25, D. C.

Subject: Damodar Valley Corporation
Consulting Board

Dear Mr. Garner:

About three years ago when the Damodar Valley Corporation of India was inquiring about suggestions to fill a vacancy on their Board of Consulting Engineers, my name was suggested through the good offices of Lt. General R. A. Wheeler, who was then serving as Engineering Adviser to the World Bank, and his suggestion was adopted.

In view of the Bank's interest in this matter, I am enclosing a copy of a letter just received from the Secretary of the Damodar Valley Corporation dated May 8, 1956, recording the fact that the Consulting Board is to be regarded as dissolved. For your information, I am also enclosing a copy of my reply to Damodar Valley Corporation.

I wish to take this occasion to thank you and the International Bank for the opportunity of serving on this interesting assignment.

Sincerely yours,

A. J. Ackerman
A. J. Ackerman

AJA:dkh
2 Encs.

ack June 11/56

S EDCB •
VIV:qKV

• • • WCKELTUN

STUCCELA LOMIS

C
O
P
Y

DAMODAR VALLEY CORPORATION
Anderson House, Alipore
Calcutta 27, India

C
O
P
Y

No. WG-98/54(Pt.III)-3874

May 8, 1956

From: Shri G. D. Kshetrapal, IAS, Secretary

- To: 1. S. O. Harper, Esqr.,
5800 Buena Vista Avenue
Oakland, California, USA
2. A. J. Ackerman, Esqr.,
1250 Sherman Avenue
Madison 3, Wisconsin, USA
3. Sri Kanwar Sain,
Chairman, C.W. & P.C.
Government of India
Bikanir House, New Delhi
4. Sri M. S. Thirumale Iyengar,
Chief Engineer
Hirakud Dam Project
P.O. Burla, Dist. Sambalpur

Subject: DVC Board of Consulting Engineers

Sir:

I am directed to say that the DVC Board of Consultants was set up in 1950 to advise the Corporation on all major technical and policy matters incidental to the planning and execution of the Damodar Valley Project. The Corporation has been considering whether in the present state of progress of the works in general there would still be sufficient scope for utilizing the services of the Consultants. Some of the Projects have already been completed and major decisions on the design of both Maithon and Panchet Hill Projects have since been taken. The advice of the Board of Consultants has to be restricted now mostly to general technical matters. The Corporation does not consider that it is desirable to occupy the time and attention of the Consultants for such general advice.

2. It has accordingly been decided that there should be no further meetings of the Board which should be regarded as dissolved. The Corporation will however seek the advice of the Consultants in their individual capacity on any technical matters concerning the DV Project when necessary and it is hoped that you will continue to favour the Corporation with your valuable advice.

3. I am also to convey to you the thanks of the Corporation for the valuable services rendered by you as a member of the Board of Consultants.

Yours faithfully,

/s/ G.D.Kshetrapal
G.D.Kshetrapal
S E C R E T A R Y

Copied 5/25/56 -dkh

HYDRO-ELECTRIC
DEVELOPMENT
—
PLANNING
FINANCING
DESIGN
CONSTRUCTION

ADOLPH J. ACKERMAN
CONSULTING ENGINEER
1250 SHERMAN AVENUE
MADISON 3, WISCONSIN

MEMBER
—
AMER. INST. OF
CONSULTING
ENGINEERS
A. S. C. E.
A. S. M. E.
A. I. E. E.

May 25, 1956

Shri G. D. Kshetrapal, IAS, Secretary
Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27, India

Subject: DVC Board of Consulting Engineers

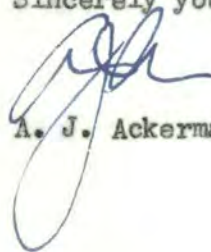
Dear Sir:

I wish to acknowledge receipt of your letter, No. 3874 of May 8, 1956, which is addressed to the members of the DVC Board of Consulting Engineers, and informing them that the Board is now to be regarded as dissolved.

I fully understand the circumstances leading to this conclusion and, as suggested in your letter, I shall be pleased to consider the possibility of serving in an individual capacity in the event the Board should wish independent consulting advice on some specific matter. I have already received a letter from the Chief Engineer informing me of the DVC's desire to have my consulting services on the Konar Hydro-electric Scheme on which I recently submitted my report. I am planning to arrive in Calcutta during the last week of June and look forward to meeting you at that time.

With best wishes for the continued success of Damodar Valley Corporation, I am

Sincerely yours,


A. J. Ackerman

AJA:dkh

MAY 25 10 53 AM 1956

RECORDED & INDEXED
MAY 25 1956

MAY 28 10 26 AM 1956

WVA:qcy

V. J. VASKERMAN
Sincerely yours,

Dear Mr. Vaskerman, I am
with best wishes for the continued success of

and look forward to meeting you at that time.
am planning to arrive in Santiago during the last week of June
electric scheme on which I recently submitted my report. I
DAC's desire to have my consulting services on the Canal Hydro-
received a letter from the Chief Engineer informing me of the
sent consulting advice on some specific matter. I have already
written separately in the event the Board should wish to be
be pleased to consider the possibility of retaining in an inde-
to this connection and as indicated in your letter, I shall
I fully understand the circumstances leading

that the Board is now to be regarded as dissolved.
of the DAC Board of Consulting Engineers, and informing them
No. 3814 of May 8, 1956, which is addressed to the members
I wish to acknowledge receipt of your letter.

Best regards

Subject: DAC Board of Consulting Engineers

Santiago 21, June
Vanderbilt House, VTBone
Democrat, Liberty Corporation
Sgt. G. D. Kerezhber, IVS, Secretary

MAY 28, 1956

CONSTRUCTION
DESIGN
FINANCING
PLANNING
—
DEVELOPMENT
HYDRO-ELECTRIC

MADISON 3, WISCONSIN
1520 SHERMAN AVENUE
CONSULTING ENGINEER
ADOLPH J. VASKERMAN

A. I. E. E.
A. S. M. E.
A. S. C. E.
ENGINEERS
CONSULTING
AMER. INST. OF
—
MEMBER

Dear Wayne

CC
advised
Ranch
Banc

Thursday the 24th May 1957
Bombay, India

As I told you I came here to get passage to Colombo so as to avoid the India Airlines. Two accidents with practically all killed in two successive days & another crash landed. I had to take IAC from Calcutta as no one other than IAC can take passengers. I covered the points of my terms of reference with Tata yesterday afternoon & evening and then visited the plant and substation. All planning to take TWA out tonight. However the flight is indefinitely delayed so I may have to take IAC after all tomorrow.

DVC) I believe I covered all the points in your telegram with the exception of the surplus equipment at Konar. I have seen the equipment & feel that some bottom dumper Excavators could be used at Ranchit. I have a list of all surplus equipment now at all projects.

However as the number of machines of this type were limited at Ranchet I asked for a list of equipment to be retained. This was to be given to me before I left but was not received. Possibly as a result of my discussions on the subject with the board they want the list thoroughly checked. Before any equipment is disposed of they have to get Delhi approval which usually takes months as Delhi circulates the list to all government projects before giving approval. This has also been before they notify us of the situation. I feel we should have the list to be retained before the final answer is given to Kamat. DVA agreed to mail the list this week. If they do then there is no reason for any long delay.

2) I have already told you 150^{9MW} has been approved and Bengal is going ahead with 600MW from Siemens. A letter of intent has been issued by Bengal as has been previously approved by Rau before DVC planned to build Durgapur.

{ for rest of letter }
{ see India. Tata }

Sgd.
L. G. Marshall



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 22 May, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. Antonin Basch From: Mr. V.G. Pendharkar				
Subject / Title India - Loan 72 IN - Disbursement				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INCOMING WIRE

DATE OF WIRE: MAY 22, 1956 2055

TO: INTERNATIONAL BANK FOR RECONSTRUCTION AND
DEVELOPMENT

FROM: CALCUTTA

TEXT:

ROUTING
ACTION COPY TO TECHNICAL OPERATIONS
INFORMATION COPY TO
Decoded By

THREE 150 MW DURGAPUR PLANT APPROVED FIRST UNIT FEBRUARY 59.
BOKARO FOURTH END 58. PROCESSING MADE FOR SINDRI 30 MW AND BOKARO
22 MW HYDROGEN COOLED. SURE POWER WILL BE AVAILABLE FOR TATA BY
MAY 58. LEAVING FOR COLOMBO TOMORROW BIOGGI LEFT TONIGHT

MARSHALL

Apparently "Powers"

cc
Ripman } *5/25/56*
Bauch }
Rosenberg }

ORIGINAL



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 22 May, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. G. R. Kamat From: Mr. J. Rucinski				
Subject / Title India - Loan 72 IN				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

2472
copy - Tala

OUTGOING WIRE

RCA

CLASS OF SERVICE: LETTER TELEGRAM

DATE: MAY 21, 1956

TO: MARSHALL
GRAND HOTEL
CALCUTTA

COUNTRY (INDIA

TEXT:

Cable No. ONE.

✓ may 17
RETEL TWO APPROVAL OF RETAINED LIST OF EQUIPMENT SATISFACTORY STOP
PLEASE REVIEW LIST OF SURPLUS EQUIPMENT FROM KONAR RECENTLY SUBMITTED
THROUGH KAMAT CONSISTING OF TWELVE ITEMS EXCAVATORS DUMP TRUCKS AND
TRACTORS AND CABLE RECOMMENDATIONS STOP EXPECT BANK WILL APPROVE CHANGE
IN CLOSING DATE STOP BEFORE LEAVING CALCUTTA CABLE DECISION REACHED IN
DELHI CONFERENCE REGARDING DATE AT WHICH DVC CAN SIGN WITH TATA TO PROVIDE
REQUIRED POWER ON PROPOSED SCHEDULE AND SOURCES TO BE AVAILABLE SUCH AS
SINDRI WITH YOUR OPINIONS AS TO WHETHER ARRANGEMENTS ARE ADEQUATE.

REMBERT

Signed:

AUTHORIZED BY: E.W. Rembert
NAME: E. W. Rembert
DEPT: Technical Operations
SIGNATURE:

For Use by Archives Division

Checked for Dispatch

ORIGINAL (File Copy)

(IMPORTANT: See over for guide in preparing Outgoing Wire)

GUIDE FOR PREPARING OUTGOING WIRES

1. Class of Service

Type in class of service desired. Each class is described as follows:

Letter Telegram Letter telegrams are normally delivered the morning after day of despatch. The cost is half the cost of full rate messages with a minimum charge for 22 words including address and text.

Full Rate Full rate messages are normally transmitted and delivered immediately. There is a minimum charge for 5 words, including address and text.

IBF Govt. This is a preferential rate extended to the Bank by some of its member countries. Messages are sent at full rate speed and at about half the cost. This rate normally should be used whenever available. It is at present available for the following countries:

Bolivia	Cuba	Guatemala	* Peru
Brazil	Dominican Republic	Honduras	* Syria
Burma	Ecuador	Jordan	Uruguay
Chile	El Salvador	* Lebanon	Venezuela
* China	* Ethiopia	Nicaragua	Yugoslavia
Colombia	* France	Pakistan	
Costa Rica	Greece	Panama	

* In these countries the letter telegram rate is lower than IBF government rate and should be used for messages when immediate transmission is not required.

Code Code messages are transmitted at full rate (or IBF Govt.) speed and cost. This rate should be used only for confidential messages to staff members having a code with them.

Day Letter Day letters are delivered during the day of transmission and should be used only for messages in the United States and to Mexico and Canada. There is a minimum charge for 50 words in text.

Teletype To be used only for messages to the New York Office, United Nations, and certain commercial firms. For information, call Cable Post (Ext. 2008).

2. Address

Use only last name of addressee and cable address whenever possible. The Bank cable address "INTBAFRAD" is registered in Paris, Beirut, Rio de Janeiro, Bogota, and Guatemala City. The name of the country of destination must always be added. (No charge is made for the name of a country).

3. Text

Messages to Bank Missions and to Resident Representatives should be numbered. These numbers may be obtained by calling Ext. 2008.

Type text in capital letters and double space between lines. The text should be edited to eliminate unnecessary words and unnecessary punctuation. If punctuation is needed, spell out the words "Comma," "Stop," etc.

Use common abbreviations whenever possible, i.e. reourlet, reurfive, etc. Write as one word hyphenated words, hyphenated names, and certain two-word groups, e.g. Airmail, Newyork, enduse.

4. Signature

Type in last name of sender. Use INTBAFRAD as part of the signature only when addressee does not know the address of the sender.

5. Authorization

Type in name and department of staff member authorizing message and have authorizing staff member sign the original (pink copy). A list of authorized signatures is kept in the cable office.

Forward messages in triplicate in a cable envelope to Room 210 for despatch. The cable service is open from 9:00 a.m. to 5:45 p.m. on working days. Special arrangements should be made for the despatch of cables outside of these hours.

ANY QUESTIONS REGARDING INCOMING AND OUTGOING WIRES SHOULD BE REFERRED TO THE CABLE POST, EXT. 2008.

MAY 21 2 49 PM 1956
RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

En 72
copy. Tia

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INCOMING WIRE

DATE OF WIRE: MAY 17, 1956 1755

TO: INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

FROM: CALCUTTA

ROUTING	
ACTION COPY TO	TECH. OP.
INFORMATION COPY TO	
Decoded By	

TEXT:

TWO

REFERENCE CONSTRUCTION EQUIPMENT HAVE TENTIVELY AGREED BANK
APPROVE LIST. RETAINED INSTEAD LIST SURPLUS EVERY SIX MONTHS
CONCURRENCE REQUESTED. CLOSING DATE JUNE 1958 REASONABLE.
GOODS LIST STILL BEING CHECKED. ROUGH CHECK INDICATES NO
CONCERN WARRENTED OVER STEEL MILL REQUIREMENTS. LEAVING
23RD

MARSHALL

MRS. MARSHALL BEING NOTIFIED.

CC
Aldwinereld
Ruaniki
Basah
Jaro
Chadwick

ORIGINAL

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

MAY 19 11 34 AM 1956

MRS. MURKOVITZ BEING MOLLIFIED

MURKOVITZ

83RD

CONCERN MURKOVITZ'S OLDER SISTER WITH RESERVATIONS. TELLING
GOODS FIRST SISTER BEING CHECKED. MOTHER CHECK INDICATES NO
CONCERN RECORDED. STORING DATE SOME 1928 BECAUSE
MURKOVITZ FIRST BELIEVED IMMEDIATE FIRST SISTER'S ELDER SIX WOMEN
BEFORE COMMISSION ESTABLISHED HAVE JUDICIAL MURKOVITZ BANK
AND

1941

FROM SWITZERLAND

VIA DELEGATION
TO INTERNATIONAL BANK FOR RECONSTRUCTION

DATE OF APRIL MAY 13, 1956 1956

RECEIVED BY	
DATE OF RECEIPT	
RECEIVED BY	
DATE OF RECEIPT	

INFORMING MURKOVITZ

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 14 May, 1956	Document Type Memorandum			
Correspondents / Participants To: Dr. Antonin Basch From: Mr. V.G. Pendharkar				
Subject / Title Disposal of Surplus Equipment				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

Particulars of surplus machines acquired for the Konar Project
out of funds provided by the International Bank

Sl. No.	Particulars of machinery	Serial No. of machines	Call No.	Cost Rs.	Life in hours	Actual Working hours	Depre- cia- tion Rs.	Residual value Rs.	RE MA RKS
1.	P.H. Excavator (Harnish Finger Coron. U.S.A.) 2½ cu. yd. capacity model 955 A, 250 H.P. Engine.	13908	R 1	3,13,595	16,000	7,643	1,49,789	1,63,806	
2.	-Do-	13909	R 2	3,13,594	16,000	9,105	1,78,458	1,35,136	
3.	-do- 1½ cu. yds. capacity model 655 B, 120 H.P.	14738	R 7	2,41,196	20,000	6,228	75,116	1,66,080	
4.	-Do-	14737	R 8	2,41,195	20,000	7,497	90,414	1,50,781	
5.	Euclid Botton Dumper (Euclid Road Machinery & Co., U.S.A.) 13 cu yds. capacity model 67 FDT/89W-170 H.P.	67 FDT 11377	U 1	1,28,860 22,600	16,000 3,000	8,275 8,275	66,649 22,600	62,211	
6.	-do-	67 FDT 11375	U 2	1,28,860 22,600	16,000 3,000	8,040 8,040	64,756 22,600	64,104	
7.	-do-	67 FDT 11374	U 3	1,28,861 22,600	16,000 3,000	8,892 8,892	71,616 22,600	57,257	45
8.	-do-	67 FDT 11376	U 4	1,28,860 22,600	16,000 3,000	7,247 7,247	58,363 22,600	7,04,97	
9.	-do-	67 FDT 11373	U 5	1,28,323 22,600	16,000 3,000	6,962 6,962	55,835 22,600	72,488	

Continued

Particulars of surplus machines acquired for the Konar Project
out of funds provided by the International Bank.

Sl. No.	Particulars of machinery	Serial No. of machines	Call No.	Cost Rs.	Life in hours	Actual Working hours	Depreciation Rs.	Residual value Rs.	RE MA RKS
10.	Tractor (Allis Chalmer Mfg. & Co.) model 19, 150 H.P.	2486	AC 4	1,01,097	8,000	5,137	64,916	36,181	
11	Tractor (Allis Chalmer Mfg, & Co.) model 20, 175 H.P.	3258	AC 5	1,26,338	8,000	4,099	64,715	61,623	
12.	-- Do --	3257	AC 6	1,26,338	8,000	3,368	53,173	73,165	

=====

'T' indicates tyres and tubes.



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan - Loan 0072 - P009589 - Negotiations - Volume 1		Barcode No. 1847781		
Document Date 07 May, 1956	Document Type Memorandum			
Correspondents / Participants To: Dr. Antonin Basch From: Mr. V.G. Pendharkar				
Subject / Title Revised Forecast of Withdrawals under the Second D.V.C. Loan				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 14, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 14, 2017
Withdrawn by Tonya Ceesay	Date June 14, 2017			

(Figures in thousand U.S. Dollars)

Revised Forecast of Withdrawals from International
Bank Loan No. 72-IN for Damodar Project

1. Materials and equipment for Dams, Barrage, Locks, etc.

Total anticipated withdrawals expressed in U.S. \$	Withdrawals by I.S.M. up to 28.2.56 as per present indica- tion -U.S. \$		<u>Probable future withdrawals expressed in U.S. \$</u>									
			<u>1956</u>				<u>1957</u>				<u>1958</u>	
			<u>2nd Qr.</u>	<u>3rd Qr.</u>	<u>4th Qr.</u>	<u>1st Qr.</u>	<u>2nd Qr.</u>	<u>3rd Qr.</u>	<u>4th Qr.</u>	<u>1st Qr.</u>	<u>2nd Qr.</u>	
1723	312	Germany	30	120	100	50	50	50	50	23		
		France	307	54	40	40	30	20	7	-	-	
		Austria	-	75	56	60	60	60	60	64	-	
		U.S.A.	-	-	5	-	-	-	-	-	-	
			<u>337</u>	<u>249</u>	<u>201</u>	<u>150</u>	<u>140</u>	<u>130</u>	<u>117</u>	<u>87</u>	<u>-</u>	

2. Materials & Equipment for Power Houses
and

3. Materials & Equipment for Power House Sub-stations & Transmission Lines

3217	439	U.S.A.	-	10	2	2	2	12	2	-	1
		Germany	100	100	200	200	200	200	100	200	67
		France	-	100	-	100	-	100	-	30	28
		Italy	-	-	-	50	30	20	7	5	5
		Holland	-	-	2	-	-	-	-	-	-
		Sweden	-	100	150	150	150	50	50	50	33
		Switzerland	-	-	-	7	5	4	5	8	-
		Continental Countries	-	-	-	-	-	40	40	40	21
			<u>100</u>	<u>310</u>	<u>354</u>	<u>509</u>	<u>387</u>	<u>426</u>	<u>204</u>	<u>333</u>	<u>155</u>
4. Construction Equip. & Spares											
5120	3185		494	200	200	200	200	200	200	200	41
5. Engineering Services											
215	53		13	-	10	-	90	20	10	12	7
6. Misc. Goods											
225	132		30	-	30	10	8	5	5	3	2
<u>5560</u>	<u>3370</u>		<u>537</u>	<u>200</u>	<u>240</u>	<u>210</u>	<u>298</u>	<u>225</u>	<u>215</u>	<u>215</u>	<u>50</u>

April 16, 1956.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INCOMING WIRE

2 addressed In 72
5/5/56

DATE OF WIRE: MAY 5, 1956 1750

TO: INTERNATIONAL BANK FOR RECONSTRUCTION AND
DEVELOPMENT

FROM: CALCUTTA

ROUTING
ACTION COPY TO TECHNICAL OPERATIONS
INFORMATION COPY TO
Decoded By

TEXT:

RETURNED CALCUTTA FROM JAMSHEDPUR. FOUND NO PROBLEMS CONCERNING
ENGINEERING ASPECTS OF PROJECT. CONTINUING DISCUSSIONS HERE AND
DELHI CONCERNING MARKET AND TRANSPORT PROBLEMS. STARTING WITH
IISCO SEVENTH EXPECT FINISH MAY FIFTEEN

REMBERT

cc: Dr. Basch

ORIGINAL

RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

MAY 7 10 29 AM 1956

MEMORANDUM

TO: DIRECTOR, INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
FROM: [illegible]
SUBJECT: [illegible]
[illegible text follows]

RE:

FOR: [illegible]

DATE: [illegible]

BY: [illegible]

DATE OF AIR: MAY 2, 1956

TO: [illegible]
FROM: [illegible]
SUBJECT: [illegible]
DATE: [illegible]

INCOMING MAIL

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 25 April, 1956	Document Type Memorandum			
Correspondents / Participants To: Dr. Antonin Basch From: Mr. C. R. Kamat				
Subject / Title Loan No. 72 IN				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
Withdrawn by Tonya Ceesay	Date June 13, 2017			

OFFICE MEMORANDUM

TO: Mr. S. Aldewereld

DATE: April 25, 1956

FROM: E. Wayne Rembert

SUBJECT: D.V.C. Earnings Position

To supplement my memorandum of January 16, 1956, I give below some additional information.

In the 12 months September 1954 to September 1955 (inclusive, but omitting April 1955 for which figures are not available) revenues amounted to Rs. 10.1 million and operating expenses, without any charge for depreciation or interest, to Rs. 9.5 million, giving a net revenue of only Rs. 0.6 million.

The 1953 estimates in TOD Report No. 2-b for the same period were, by apportionment, revenues of Rs. 21 million, operating expenses of Rs. 9.0 million, and thus a net operating revenue of Rs. 12 million.

The sales in the 12 months to September 1955 were only about 227 million kwh, as compared with the 1953 estimate of sales in the period of about 500 million kwh. But the operating expenses were not far short of those envisaged for sales of $2\frac{1}{2}$ times the actual sales.

Attempts have been made to forecast D.V.C.'s future earnings and to compare them with the estimates made in 1950 and again in 1953 (when Loan No. 72-IN was granted). These forecasts were based on data relating to events up to October 1955, but information recently received shows that the load growth is so unpredictable that no realistic forecast can be made without a careful study in the field.

During Mr. Gray Marshall's visit to D.V.C. an attempt will be made to obtain a reasonable forecast of operations.

ROUTING SLIP		Date April 19, 1956	
NAME Dr. A. Basch		ROOM NO. 508-A	
Action		Note and File	
Approval		Note and Return	
Comment		Prepare Reply	
Full Report		Previous Papers	
Information		Recommendation	
Initial		Signature	
Remarks Both Street and Clark have approved the attached. Street suggested I review the list of goods which has been added.			
From L. G.M.			

OFFICE MEMORANDUM

TO: Messrs. Clark, Street, Fraser
FROM: Antonin Basch *AB*
SUBJECT: Terms of Reference - End-use Mission, India

DATE: April 19, 1956

I would appreciate having your comments on the attached
Terms of Reference for the D.V.C. End-use Mission, if possible,
to-day.

Attachment

AB/js

WLC

4/15

DRAFT
EWRembert
4/18/56

TO: Mr. Francantonio Biaggi
Mr. L. Gray Marshall

FROM: E. Wayne Rembert

SUBJECT: Terms of Reference - End-use Mission, India

You should plan to arrive in Calcutta about May 3 to undertake an investigation of the present situation in the Damodar Valley Corporation with respect to organization, management, construction progress, financial procedures and other matters relating to the execution and operation of the projects for which the Corporation is responsible.

The Bank has made two loans: IN #23 in April 1950 of \$18.5 million and IN #72 in January 1953 of \$19.5 million, to the Indian Government for the development of the Damodar Valley. These loans have since been reduced to about \$17 million and \$10.5 million respectively. Progress of construction work involving these loans has generally been far behind schedule and this situation is becoming worse. Also, the Bokaro steam station which is in operation has failed to produce revenues even approximating those estimated at the time the loans were made. It is necessary, therefore, that many of the aspects of the construction and operational activities of DVC be reappraised.

In your investigation, particular attention should be given to the following points:

1. The progress of construction work and the reasons for delays in the execution of projects with recommendations for improvement in the future.

2. A review of the DVC construction program outside of the Bank-financed projects.

3. A review of cost estimates and construction schedules with recommendations as to necessary changes.

4. The suitability of the present organization for the execution of the projects with particular reference to the adequacy and competence of staff, procedures, use of consultants and the use of contractors. Special attention should be given to future plans for staffing and re-organization. Provide recommendations for strengthening and improvements.

5. The availability and condition of construction equipment, spare parts and repair facilities and personnel and the possibility of transfer of surplus equipment to other projects with the procedures to be followed.

6. The suitability of the present organization for the operation of completed projects with particular reference to adequacy and competence of staff and procedures. Provide recommendations for strengthening and improvement.

7. A review of the market projects for power and irrigation water with recommendations as to how sales can be accelerated. In the case of irrigation water, particular attention should be given to the use of experimental farms and agricultural education.

8. A review of the present rates for power and irrigation water with recommendations for changes.

9. A review of the reasons for slow disbursements of Bank funds with recommendations for improvement.

10. Up-to-date projections of income and expenses and cash over the next five years with comments and suggested revisions if necessary.

11. The extent to which DVC is encountering outside interference in the setting of policies and in the conduct of its business with recommendations for eliminating such interference, if any.

Upon completion of your investigations, you should return to Washington to finalize a report covering your findings.

WARMEST REGARDS
FROM
C. BALAN,
PUBLIC RELATIONS OFFICER,
D. V. C.

DAMODAR VALLEY CORPORATION,
ANDERSON HOUSE, ALIPORE,
CALCUTTA - 27.

Sve
 Addison House, Newport,
 Calcutta 27. 22 April 1986

Dear Mr. Basch,
 Two recent visits from the World Bank
 have left behind such pleasant memories,
 particularly for me as Pres of the NTC,
 that I feel I should write a line in my own
 hand to convey my sense of satisfaction and
 gratitude to you and the Bank. The visitors
 were Mr. William Bennett of the Information
 Division, and Mr. Irving Bercuson of the NW Radio
 whose appointment he told us, included tape
 recording on your behalf also. The two
 gentlemen will continue to linger in my thoughts
 decades after I leave the NTC, for they were
 quite unmistakably among the most genial,
 generous and gentlemanly of the visitors I have been
 privileged to receive and host round ever since
 I joined the NTC staff in 1957. They left
 my return from the NWRC in Korea. They are,
 of course, valuable words of honest comment,
 very effective good-will ambassadors for the Bank
 the functions of which are not always as fully
 understood and appreciated as they deserve to be.

What makes them so likable? Well, two
 things which officials the world over do not

acknowledge

P.D.D.

always possess in high measure, but two things
 which, if they were to, would make the world
 a happier place for all mankind! They are
 practical reforms & the art of a delightfully
 dramatic approach to men and nations; they have
 a sense of humor and warm-hearted generosity
 which, in times of distress, are among the
 world's Bank's best investments! I can say
 of what I say - mark you, I am writing
 of two men, not two women!

So kind give them my warmest regards
 and tell them that I shall always love to look back
 on my time with them in the Samodan Valley
 of which I hope I shall be privileged to have
 many more in the days to come.

With kind regards both to the Corporation
 and my own,

I am,

Yr. Friend
 E. Salan

Attn: Basch Esq.,
 Lem. A. Operation, 1200 Middle St.,
 The World Bank,
 Washington D.C.

RC 298



STONE & WEBSTER SERVICE CORPORATION

90 BROAD STREET

NEW YORK 4, NEW YORK

loan 72-1N

RICHARD N. BENJAMIN
PRESIDENT

April 12, 1956

Dr. Walter Rembert
World Bank
1818 H Street
Washington, D.C.

Dear Dr. Rembert:

I am returning, under separate cover, the material you were kind enough to loan me on the Damodar Valley project. I was glad to hear that you were able to get the European firm you contacted and I am sorry we were unable to arrange our plans in time to be of assistance to you.

I do hope you will communicate with us if you think we can be of help in any other respect.

With best regards.

Sincerely

Richard N. Benjamin

Air Mail

April 19, 1956

Damodar Valley Corporation
Anderson House
Calcutta 27, India

Attention: Mr. P. P. Verma, Chairman

Gentlemen:

As you are aware, it is our policy to make periodic visits to Bank financed projects to determine the progress that is being made. Accordingly, it is our intention to have Mr. Francantonio Biaggi and Mr. Marshall visit DVC. They expect to arrive by S.A.S. Airlines early Friday morning, May 4, and they will visit your office the same day. If by chance their plans are changed, they will cable to you.

Very truly yours,

E. Wayne Rembert
Chief, Public Utilities Division
Department of Technical Operations

IGMarshall:fmc

Cleared with area

OFFICE MEMORANDUM

TO: DR. ANTONIN BASCH
FROM: GORDON M. STREET *W*
SUBJECT: LOAN IB 72 IN

DATE: APRIL 17, 1956

We have received applications for withdrawal of the equivalent of Rs. 1,916,772 against Category 2 of Loan 72 IN. As the balance in this category is \$297,885 payment will exceed the amount allocated by about \$104,637.

However, as it is unlikely that the loan will be fully disbursed, unless the list of goods is revised, we suggest that the payments be made and the list of goods revised later.

M. Thurn - please look into it and

let me know -

A. J.

4/15

C O P Y

I N C O M I N G W I R E

APRIL 13, 1956

REMBERT INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

ACTION COPY: TECH. OP.

FROM: MILAN

RETEL DEPARTURE DATE SATISFACTORY. PLEASE ARRANGE FOR INDIA VISA
AS ENCOUNTERING DIFFICULTIES LOCALLY REGARDS.

BIAGGI

cc:

Mr. Aldewereld
Dr. Basch
Mr. Fowler

✓
4/18

2nd DVC

LETTER TELEGRAM

APRIL 12, 1956

DIAGGI
SOCIETA EDISON
MILAN

DVC

ITALY

RETEL. VERY GLAD YOU ARE ABLE PARTICIPATE IN MISSION TO INDIA STOP
STAFF ENGINEER COULD MEET YOU IN MILAN ABOUT APRIL THIRTIETH FOR BRIEFING
AND YOU COULD TRAVEL TOGETHER ABOUT MAY FIRST STOP DO NOT THINK IT
NECESSARY YOU COME TO WASHINGTON ON WAY OUT BUT WOULD LIKE YOU HERE FOR
FEW DAYS AFTER COMPLETION OF INVESTIGATION STOP PLEASE ADVISE IF
DEPARTURE DATE SATISFACTORY STOP REGARDS.

REMBERT

cc: Dr. Basch; Mr. Fowler

E. Wayne Rembert
E. Wayne Rembert
Technical Operations

✓
4/18

Ind DVC

H. Thayer
DVC

DRAFT
EW Rembert
4/12/56

BIAGGI
SOCIETA EDISON
MILAN

RETEL VERY GLAD YOU ARE ABLE PARTICIPATE IN MISSION TO INDIA STOP
STAFF ENGINEER COULD MEET YOU IN MILAN ABOUT APRIL THIRTIETH FOR
BRIEFING AND YOU COULD TRAVEL TOGETHER ABOUT MAY FIRST STOP DO NOT
THINK IT NECESSARY YOU COME TO WASHINGTON ON WAY OUT BUT WOULD LIKE YOU
HERE FOR FEW DAYS AFTER COMPLETION OF INVESTIGATION STOP PLEASE ADVISE
IF DEPARTURE DATE SATISFACTORY STOP REGARDS.

REMBERT

4/4/56

2nd DVC

C O P Y

I N C O M I N G W I R E

APRIL 10, 1956 1020

REMBERT INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

FROM: MILANO

ACTION COPY: TECH. OP.

ACCEPT PARTICIPATE MISSION DAMODAR LIMITED THREE WEEKS. PLEASE INFORM
IF STAY WASHINGTON ALSO REQUIRED. THANKS AND REGARDS.

BIAGGI

DVC

cc: Personnel Dept.
Dr. Basch

✓
4/18



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 09 April, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. C. R. Kamat From: Dr. Antonin Basch				
Subject / Title Sale of D.V.C. Surplus Equipment				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
Withdrawn by Tonya Ceesay	Date June 13, 2017			

LETTER TELEGRAM

APRIL 6, 1956

BINAGGI
SOCIETE EDISON
MILAN

ITALY

Please file to DVC

BANK INTENDS TO MAKE IMPORTANT INVESTIGATION CONNECTED WITH EXISTING
LOANS ON DEVELOPMENT OF DAMODAR VALLEY IN INDIA STOP INVESTIGATION WILL
COVER ORGANIZATION AND MANAGEMENT OF CORPORATION BOTH FOR CONSTRUCTION AND
OPERATIONS, POWER MARKET, ELECTRICITY RATES, ACCOUNTING AND OTHER PROCEDURES
AND SIMILAR MATTERS STOP MISSION SHOULD ARRIVE IN INDIA EARLY MAY AND
WILL REQUIRE THREE TO FOUR WEEKS TO COMPLETE ASSIGNMENT STOP WE FEEL YOU
ARE PARTICULARLY QUALIFIED FOR THIS INVESTIGATION AND WOULD LIKE TO HAVE
YOU PARTICIPATE IN IT STOP MISSION WOULD CONSIST OF YOURSELF AND STAFF
ENGINEER FROM BANK WHO IS FAMILIAR WITH PROJECT STOP PLEASE ADVISE BY
CABLE STOP REGARDS.

REMBERT

ERRembert
E. W. Rembert
Technical Operations

Cleared with Mr. Aldersfeld and Area Dept.
cc: Dr. Basch; Mr. Fowler

✓
4/18

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

OFFICE MEMORANDUM

TO: Files

DATE: April 6, 1956

FROM: L. Gray Marshall *LGM*

SUBJECT: Damodar Valley Corporation (Loans 23 and 72 IN)

We have learned from reliable sources that Mr. P. S. Rau resigned as Chairman of the Board of DVC on April 24. He is to assume the government's post as head of the Travancore-Cochin province on a Presidential appointment. At the last election the government was overthrown and the election for Governor will not be held until after the first of the year.

No successor has been announced.

Mr. Rau held a similar post in Pepsu after serving as chairman of the Rau Committee and before becoming Chairman of DVC.

LGM:fmc

Dr. Antonin Basch

March 21, 1956

L. Gray Marshall *LGM*

Suggested Way of Handling Surplus DVC Equipment

In order to expedite the disposal of surplus equipment which was requested by the Indian Government the following is suggested:

"DVC will attach to each monthly Progress Report a list of construction equipment classified by the chief engineer as surplus or within two months to be declared surplus to the needs of the DVC. DVC will not dispose of the equipment listed until DVC has been assured the report has been received and reviewed by the Bank. If the Bank has entered no objections, the DVC can proceed with the disposal of the equipment and then supply the Bank with relevant information, such as the description of the equipment, original cost, hours of use, general condition, last location on a project, to whom sold and for what purpose to be used, and the salvage or sale value."

In the past the reports from DVC have not been received by the Bank until approximately two and a half months after the close of the reporting period. If the above is to be worked successfully and to the advantage of DVC, it will be necessary that all progress reports be submitted to the Bank shortly after the close of the reporting period.

This is all to be done in accordance with Section 3.02 of the loan agreement.

LGM:fmc

Done by Rumbert



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 21 March, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. G.R. Kamat From: Dr. Antonin Basch				
Subject / Title Sale of D.V.C. Surplus Equipment				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
Withdrawn by Tonya Ceesay	Date June 13, 2017			

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

OFFICE MEMORANDUM

TO: Mr. Joseph Rucinski
FROM: Antonin Basch *G-B*
SUBJECT: Sale of D.V.C. Surplus Equipment

DATE: March 19, 1956

The Technical Operations Department agrees with the following new proposal by Mr. Kamat which changes somewhat what was agreed by the Working Party.

"D.V.C. will attach to each Progress Report a list of equipment classified as surplus. If the Bank does not object to items on such list, D.V.C. will proceed with the sale of such equipment and will inform the Bank about these sales."

The Technical Operations Department expects that the Progress Reports will be submitted to the Bank in time and not as was often the case in the past with a substantial delay.

*Mr. Basch
will implement
Mr. Kamat. U 3.19.56*

*V
4/18*

DRAFT

*filed
3.15.56* March 9, 1956

SECOND D.V.C. LOAN

1. As reported in the "Second Loan Administration Report", dated August 12, 1955, which was circulated to the Executive Directors, it was expected that the completion of the various parts of the D.V.C. project will be greatly delayed.

(a) The Maithon project is now not expected to be completed before the end of 1957 instead of in July, 1955, as originally estimated. Shortage of spare parts for construction equipment and inexperienced repair work has been primarily responsible for the slow progress.

(b) The completion of the Panchet Hill project is now expected in the middle of 1958 as against originally estimated July, 1956. The completion has been delayed because of late transfer of the construction equipment to come from Maithon.

(c) The Durgapur barrage should be completed this year or not much later than was the original estimate.

(d) The Canal system should be finally completed in 1958 as against originally estimated 1956.

2. The Bank has been informed recently that the D.V.C. expected to utilize only \$4.365 million out of the loan up to June 30, 1956. The amount actually disbursed until the end of February, 1956, was \$4.12 million.

3. Orders in respect of certain equipment, particularly those relating to Maithon and Panchet Hill Hydro Stations, were expected to be finalized about the end of June, 1956, and most of the payments for these orders will be spread over a period of two years.

4. Because of the delay in the project, probably less than one-half of the loan of \$10.5 million will be disbursed up to the closing date which is June 30, 1956.

Files

March 5, 1956

L. Gray Marshall

Telephone Discussion with Mr. Bruce Johnson of the Harza Engineering Co., Chicago, in regard to the DVC (India) projects.

Harza
Mr. Johnson has just returned from Calcutta and informed me that DVC desire to cancel out the services of their Resident Engineer in June, 1956. Mr. Waldorf, who has been their chief Resident Engineer for the past year, contemplates leaving India in June. DVC, however, still desire to continue the services of the Harza organization to a limited degree, mainly to check the work of the DVC engineers. Mr. Johnson has informed the Board that Harza Engineering cannot afford to submit drawings to the DVC which may be altered by DVC and still be held responsible for the engineering and design. The only reason given for decreasing the services of Harza is because of the amount of money involved. Mr. Johnson believes that the retention of the services of Harza would definitely continue to control the costs of engineering and construction. He states that DVC is continuing to lose some of their best engineers and he is very doubtful as to whether DVC could assume the increased burden of work that they now anticipate. The Harza organization submitted proposals to cover the rest of the engineering work on the Maithon and Panchet Hill projects but no action has been taken by the Board.

2. The Maithon Project is still running way behind original construction schedules. With the present speed of construction of the project, it might possibly be put into operation in the middle of 1957 but he feels the more realistic schedule would be towards the end of 1957. The DVC are experiencing difficulty with the Indian contractor that is building the intake works for the underground power plant and they may have to take over the work. A large amount of power house excavation is still being handled by manual means. Mr. Johnson and the other Harza men are impressed with the know-how of the new construction superintendent, Mr. McClenagan.

3. Panchet Hill. This project is also running two years behind the original schedules. The engineering is behind because of the failure of DVC to force the manufacturer to supply dimensions and so forth to the Harza concern. The present construction schedule calls for a total excavation of the power house foundations by the end of May, but because of the failure to receive the dimensions, it will only be possible to give DVC drawings for one block of the power house. The difficulty that DVC experienced with rock under section 4 of the dam is expected to create additional difficulties, but it is felt that this can be overcome before Mr. Waldorf leaves in June.

4. Mr. Komora's contract expires at the end of 1956 but he anticipates that he will be retained for at least another year.

4/31/4

5. Inasmuch as it is a little difficult to handle such an important discussion over the telephone, Mr. Johnson anticipates that he will be in Washington to discuss this matter with the Bank in the very near future.

6. From the discussion it is felt that the possibilities of having an end-use inspection in the next few months should be explored.

cc: Dr. Basch ✓

LC Marshall; fmc



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 05 March, 1956	Document Type Memorandum			
Correspondents / Participants To: Dr. Antonin Basch From: Mr. C. R. Kamat				
Subject / Title Second DVC Loan - Reference Conversation Today				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
Withdrawn by Tonya Ceesay	Date June 13, 2017			

PRESS CLIPPING SHEET

ROUTING LIST		ROOM	FROM	COUNTRY	FILE
1.	<i>Mr. Marshall</i>	<i>310</i>	<i>A. Basch</i>	INDIA	
2.	<i>Dr. Basch</i>	<i>508</i>	One of the following MUST BE CHECKED before returning the attached clipping to Research Files:	SOURCE	
3.			RETAIN 6 MONTHS ☐	THE STATESMAN	
4.			RETAIN 1 YEAR ☐		
5.			RETAIN (SPECIFY) _____ YEARS	DATE	
6.	RESEARCH FILES	1215	DISCARD ☐	March 3, 1956	

D.V.C. POWER FOR CALCUTTA - Supply Next Year

The Damodar Valley Corporation will probably be in a position to supply power to Calcutta and Dalmianagar by April, 1957, and to Patna by October of the same year, said Mr. P.S. Rau, the Chairman, addressing a Press conference in Calcutta last week.

He added that it was hoped also to supply Gaya with electricity before the 2,500th anniversary of the birth of Budha which will be celebrated there in May this year.

Referring to the progress made so far by the Corporation, he said that with the completion of the Durgapur Barrage, the Bokaro Thermal Station and the Tilaiya and Konar Dams, the centre of activity had shifted to the two key dams and hydro-electric stations at Maithon and Panchet Hill, the connected irrigation-cum-navigation canal and the network of irrigation channels, apart from the power transmission and distribution system.

The Maithon Dam was expected to be completed by June this year and one of its three underground hydro-electric units by December. The other two are expected to be completed by March or April next year.

The completion of the concrete work at Panchet Hill was dependent on the release of machinery and equipment from Maithon and with the transfer of such equipment it was anticipated that the bulk of the work would be completed by April 1958. The hydel station would be ready a few months later.

About Durgapur, he said that nearly half the work on the main canals had been completed and progress in the construction of branch canals and navigation system were scheduled to be completed by the middle of 1957 and the drainage and protective works and a few minor distributaries by the end of 1958.

The transmission and distribution project was proceeding according to schedule and more than 511 route miles of transmission lines and 23 sub-stations and receiving stations had been completed out of a total of 843 miles of transmission lines and 35 sub-stations and receiving stations. The construction of the remaining lines and sub-stations was expected to be completed by November 1957.

Referring to finance, Mr. Rau said the total expenditure up to the end of 1956/57 was likely to amount to Rs. 105.45 crores, which included Rs. 13.49 crores on account of interest on capital. Total receipts for the sale of power up to the end of January 1956 amounted to nearly Rs. 3 crores. Irrigation water had so far not contributed any revenue.

Along with its construction programme, he continued, the D.V.C. was also planning for the future. To meet the growing demand for electricity in the valley, which though the richest mineral area in the country, had so far suffered from a lack of power and water, it was proposed to add a fourth unit at Bokaro either of 50,000 K.W. or 75,000 K.W. capacity, and an underground hydro-electric installation of 40,000 K.W. at Konar. These two together would cost Rs. 9 crores.

A proposal to construct a second thermal station at Durgapur was also under the active consideration of the Government and would cost about Rs. 17 crores. It had also been decided to double the circuit on the Bokaro-Dalmianagar line and provision had been made for the extension of the D.V.C.'s substations at a cost of Rs. 2 crores.

The Corporation also proposed to launch a bigger programme of building small dams for the irrigation of the uplands in Bihar, afforestation soil conservation farming, development of small-scale industries and the establishment of tourist centres in the valley. All these schemes would cost about Rs. 4.8 crores in the second Five Year Plan and it was expected that they would provide employment for a fairly large number of people.

Two other dams, which were originally scheduled to be taken up for execution in the Second phase, had not been included in the second Plan because the Governments of Bihar and West Bengal did not consider them necessary as reasonable flood protection had already been secured.



GRAM : DAVALLEC

PHONE : ALIPORE 1765

DAMODAR VALLEY CORPORATION.

ANDERSON HOUSE, ALIPORE
CALCUTTA-27

No. 35 FA(B) 54-55 - 1902

February 29, 1956.

To
The International Bank for
Reconstruction & Development,
1818 H Street, N.W.
Washington 25, D.C.
U.S.A.

Attention: Mr. Antonin Basch.

attachments to
Treasurers

March 6

Subject: Loan Number 72 IN
(Damodar Project).

Gentlemen:

I am directed to invite a reference to your letter of January 4, 1956 to our Chairman and to say that, at the instance of the Government of India, a revised list of goods covered by the International Bank loan (72-IN) for the Damodar Project is being drawn up on a firm basis. Statements showing anticipated withdrawals from the loan by calendar quarters in different foreign currencies are also being prepared simultaneously. These have not yet been finalised. As, however, you are keen on getting information regarding likely withdrawals in German Marks, a statement showing anticipated withdrawals against expenditure to be incurred on account of such goods of West Germany as are likely to be paid for in the currency of that country is enclosed. This statement may kindly be treated as tentative, subject to the decision of the Govt. of India on the question as to whether it is necessary to have the drawing period of this loan extended beyond June 30, 1956.

2. There are also other goods of German origin which fall under the following categories :

- (a) Those purchased from local suppliers ex-stock on rupee payments; and
- (b) those which the local agents import on receipt of Corporation's purchase orders. Payments to manufacturers in these cases are made by local suppliers in Pound Sterling, Corporation's payments being made in rupees.

Reimbursement in U.S. \$ against some of the payments falling under the above categories has already been effected by the International Bank. In view, however, of paragraphs 4 & 8 of the Bank's letter of September 6, 1955, the question of reimbursement against expenditure incurred against these goods has been referred to the Government of India for a directive. Government's decision in the matter is

expected shortly and such action as may be necessary
will be taken on receipt of Government's orders.

Yours faithfully,

Enclo: One Statement.

(Sent to T. S. Rao, Mem 6)

G. D. Kshetrapal

(G. D. KSHETRAPAL)
SECRETARY.

NOV 2 5 21 PM 1922

RECORDED AND INDEXED
INTERNATIONAL BANK FOR
RECEIVED

MAR 5 2 51 PM 1956

SECRETUM
(G. D. K. S. M. L. V. V. T.)

Ref. 1. 1. 1.

ΛΟΓΟΣ ΕΠΙΦΡΑΝΤΙΑΣ

NOT BE TAKEN ON RECEIPT OF GOVERNMENT, & OTHERS.
expected shortly and such action as may be necessary

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

OFFICE MEMORANDUM

TO: Files

DATE: February 29, 1956

FROM: W.D.S. Fraser *Wf*

SUBJECT: India - DVC (Loans 23 IN & 72 IN)

1. Notes of Working Party meeting held on Monday, February 27, 1956 at 3:00 p.m. in Room 510. Present: Messrs. Basch (Chairman), Clark, Fraser, Jago, Street and Wright.
2. The Working Party discussed a memorandum dated February 21, 1956 from Mr. Pendharkar, requesting blanket approval for the transfer of Bank-financed equipment from the DVC projects once such equipment became surplus. An extract of a letter from the Chairman of the DVC to the Minister of Irrigation and Power, supporting the request, was attached to the memorandum. *✓*
3. Reference was made to a previous letter of July 1, 1955 from the Government of India, in which the Bank was requested in general terms to consent to the transfer of Bank-financed equipment which might become surplus to the requirements of the DVC. The Bank's reply to that request had been that "the Bank always acted promptly on requests to agree to sales of equipment which became surplus and this practice will be maintained also in the future". On October 3, 1955, the Bank was requested to consent to the transfer of one tractor to the Kosi Project. Although no justification was given, the Bank assumed that it was an emergency, and approved the transfer as an exceptional case. *not sent file*
4. It was felt that the real reason why the Government of India and the DVC were making the request for blanket approval did not emerge in the latest letter. There was a move afoot to set up a government construction corporation which would have control of all construction equipment for public projects in India. This was a pet idea of the Minister of Planning, Mr. G. L. Nanda. Mr. Rau, the Chairman of the DVC, was a friend of the Minister, and this explained why DVC was prepared to support the proposal.
5. In the opinion of the Working Party, the reason given by the DVC that there was excessive paper work involved in getting permission from the Bank to release equipment was not a valid one. There seemed to be no reason why the Bank should depart from its normal procedure in this case. Provided adequate justification was given, the Bank could always approve any transfer within a few days. In this connection, it was suggested that the DVC might submit to the Bank a list of equipment that was surplus now, so that the Bank could give its approval. As regards equipment likely to become surplus, it was suggested that the DVC for its own purposes might have a forecast which might be submitted with progress reports to the Bank. In this way, the Bank would have an early indication of what equipment was becoming surplus, and be able to give its approval for release promptly.

6. The Working Party agreed that a reply to Mr. Pendharkar should be prepared sympathizing with the Government's request, but informing them that the Bank was not able to depart from its normal policy regarding the transfer of equipment. The letter should also suggest that a list of equipment now surplus, together with a forecast of equipment likely to become surplus, should be submitted to the Bank, thus providing early justification for any request for transferring equipment.

cc. Those present
Mr. Marshall



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 29 February, 1956	Document Type Memorandum			
Correspondents / Participants To: Mr. V.C. Pendharkar From: Dr. Antonin Basch				
Subject / Title Second DVC Loan - Transfer of Surplus Equipment				
Exception(s)				
Additional Comments Declassification review of this record may be initiated upon request.		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
Withdrawn by Tonya Ceesay	Date June 13, 2017			

File
Operational
DVC

DAMODAR VALLEY CORPORATION

BOKARO THERMAL PLANT

P. O. BOKARO
HAZARIBAGH, BIHAR

No. GS-3/3-1812

February 25, 1956.

Dear Gray,

On the eve of my departure from Bokaro, I would like to drop you a line. I have completed my extension of one year for DVC and will be leaving by air from Calcutta on March the 5th, 1956. Every thing has worked along satisfactorily, and contract was signed between myself and DVC.

A slight
imper

Things in general in Bokaro have progressed along satisfactorily. At present our load conditions are peak load : 67, average load: 50 MW. Sorry, we shall not be in Bokaro at your next visit. We expect to arrive home at New York April 7, and perhaps some time I may see you after my arrival.

Kindest regards from Mrs. Chapman and myself,

Yours sincerely,

Walter T. Chapman.

(Walter T. Chapman)

Mr. L. Gray Marshall,
International Bank for
Development & Reconstruction,
Washington, D.C.,
U.S.A.

WTC/anc.

P.S. My address in Philadelphia is:
5726, Vandyke Street,
Philadelphia.
Mr. Lahiri sends his kindest regards
and all at Bokaro wish to be remembered.



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 21 February, 1956	Document Type Memorandum			
Correspondents / Participants To: Dr. Antonin Basch From: Mr. V.C. Pendharkar				
Subject / Title Second DVC Loan - Transfer of Surplus Equipment				
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THE INDUSTRIAL CREDIT AND INVESTMENT CORPORATION OF
INDIA LIMITED

Fort House, 221, Dadabhoy Naoroji Road, Bombay 1

407/56
13th February, 1956

Mr. Antonin Basch
Department of Operations
Asia and Middle East
International Bank for Reconstruction and Development
Washington 25, D. C., USA

Dear Mr. Basch,

At the last Meeting of our Board of Directors there was a general discussion of the effects on this Corporation's shareholding of the recently promulgated Insurance Ordinance. I now enclose for the information of Mr. Black a copy of a letter which the Chairman had sent to the Finance Minister. I have sent copies also to Mr. Beevor and Mr. Russell Smith suggesting that they may wish to bring the letter to the attention of their respective Groups.

Yours sincerely,

/s/ P. S. Beale

enclosure

SIR RAMASWAMI MUDALIAR
Chairman

DL, Clive Buildings,
Calcutta

11th February, 1956

Sri C. D. Deshmukh
Finance Minister
Government of India
Secretariat
New Delhi

Dear Finance Minister,

At the meeting of the Directors of this Corporation held at Bombay on the 4th February - the first meeting since the promulgation of the Life Insurance (Emergency Provisions) Ordinance 1956, I was requested to write to you in order to bring to your notice certain matters of grave significance affecting this Corporation.

It appears to the Board that the effect of this Ordinance will be that the shares of this Corporation in the ownership of Companies doing Life Insurance Business have passed into the control of the Government of India in so far as they formed assets of a Life Insurance business. In the majority of instances where our shares are owned by Insurance Companies doing both life and general business, we are not informed as to the Department for which the Shares are held but it appears probable that shares representing in the aggregate approximately 18% of our total capital will be affected by this Ordinance and by the legislation which is envisaged.

I need hardly mention that this Corporation came into being as the result of prolonged international negotiations and that it was a fundamental consideration of all these discussions that the capital of the Corporation should be owned entirely by private Indian and non-Indian shareholders and that shareholdings should be as widely diffused as possible.

Another effect of the Ordinance is to reduce the total of our shares under the control of the U.K. Group; this holding formed part of a carefully negotiated pattern and was a feature of the Prospectus of our Public offering of Shares.

There is also the position of the International Bank for Reconstruction and Development to be considered. This Bank as you are aware has extended to this Corporation a line of credit equivalent to U.S. \$10 million. In all the discussions in which the Steering Committee (now incorporated in the Board of Directors) participated, that Bank made it clear that private ownership of the capital of the Corporation was fundamental to their granting assistance.

Over and above these facts which I have recited, the Board are also concerned by the effects of this Ordinance from the point of view of the Agreement between the President of India and this Corporation dated 29th

January, 1955. This Agreement lays upon the Board of Directors certain duties with respect to the registration of transfer of shares with the view to avoiding any undue concentration of control. It is to be noted that the same Agreement records explicitly that - "It is the mutual intention of the Government of India and the Corporation that the membership of the Corporation shall, so far as practicable, be broadly distributed and that there shall be no undue concentration of control."

The developments to which I have referred have taken place within one year of the establishment of this Corporation by International effort and with high hopes that it should become a strong and expanding privately-owned organisation. Its formation was publicised as an earnest of the desire of the Government of India to see private enterprise play a larger role in the 2nd Five Year Plan than it had done in the First.

The Board of Directors will be giving further consideration to these matters and will be consulting with the representatives of the Groups which participated in the Corporation's establishment. The purpose of my letter is to bring to your attention the view which the Board take of this turn of events.

Yours sincerely,

Sd/ - A. Ramaswami Mudaliar

Chairman

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

ROUTING SLIP

Date

30th Jan 56

NAME

ROOM NO.

~~Mr Graves~~

224

~~Mr Loone~~

Archives

209

Action

Note and File

Approval

Note and Return

☒ Comment

Prepare Reply

Full Report

Previous Papers

Information

Recommendation

Initial

Signature

Remarks

A fast one!
copy of my letter 18.11.55
attached

From

~~Harry J. ...~~

216



GRAM : DAVALLEC

PHONE : ALIPORE 1765

DAMODAR VALLEY CORPORATION

ANDERSON HOUSE, ALIPORE
CALCUTTA-27.

Information Office

January 20, 1956.

No.Inf/XI-12/110

The Information Officer,
International Bank for Reconstruction
& Development,
1818 H Street, N.W.,
Washington 25 D.C.,

Dear Sir,

Kindly refer to your letter dated 18.11.55., wherein you expressed your desire to come to a permanent agreement about photographs of our projects. The Damodar Valley Corporation is agreeable to supply you with 30 photographs (size 8" x 6") of Maithon and Panchet Hill dams and of Durgapur barrage and canals every three months. Colour transparencies can also be supplied to you regularly. But the Corporation feels that as this request for photographs are 'extra' (because photographs are regularly supplied with our Progress Reports), these should be paid for. Each black and white print (size 8" x 6") would cost you Rs.5/- and colour transparency (Ektachrome - size 2½" x 2½") Rs.10/-.

Tom!
The Photographic Section in the Information Department is in charge of an Assistant Information Officer who goes out at regular intervals to photograph the progress both in still and movie!

Action will be taken on your letter after we hear from you.

Yours faithfully,

G. D. Kshetrapal(G. D. Kshetrapal)
SecretaryRECEIVED
JAN 25 1956
INTERNATIONAL BANK FOR RECONSTRUCTION & DEVELOPMENT
WASHINGTON, D.C.

RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT (G. D. Kereftshvili)

28-11111
JAN 20 9 52 AM 1956
Loma International

Lon.

Action will be taken on your letter after we hear from
and write.

at regular intervals to ~~brochure~~ the progress report in writing
is in charge of an Assistant Information Officer who does not

The brochure is given in the information department
transmission (brochure - size 5 1/2" x 5 1/2") \$3.10 -
and white paper (size 8" x 10") which cost for \$2.20 - and color
on progress reports) these should be kept for each project
etc, etc, (because brochures are regularly submitted with
the corporation fees that as this need for brochures
transmissions can also be submitted to you regularly. But
publishing prices and costs every three months. Color
(size 8" x 10") of material and banner will come and of
corporation is necessary to supply you with 20 brochures
about brochures of our projects. The Damodar Valley
you expressed your desire to come to a permanent agreement

Kindly refer to your letter dated 18.11.55. wherein
best etc.

Washington 22 D.C.
1818 H Street, N.W.
& Development
International Bank for Reconstruction
The Information Officer

MO. INT. XI-15/110

January 20, 1956.

Information Office



CALCUTTA-22
ANDERSON HOUSE, VIPORE

DAMODAR VALLEY CORPORATION

СВУМ: ДВАУГЕС

PHONE: VIPORE 1382

OFFICE MEMORANDUM

TO: Mr. S. Aldewereld

DATE: January 16, 1956

FROM: E. Wayne Rembert

SUBJECT: DVC Earnings Position

With reference to your memorandum of January 9, in which you draw attention to the DVC operating results set out in a progress memorandum of January 4, 1956, the figures mentioned in your first paragraph are correct, but as you point out in your second paragraph it is possible that some expenses have been omitted.

The position regarding purchases of power from Sindri is as follows. The Government of Bihar had proposed to build a state-owned power plant, but when the central government decided to build the Sindri plant, the Bihar Government entered into an agreement to purchase bulk power. DVC took over that contract in order that it would be able to supply power to Bihar from that source in advance of the completion of the Bokaro plant and thus eliminate any possibility of Bihar competing in power production. The contract provided for payment to Sindri of a fixed charge representing the proportion of the fixed charges for Sindri which a capacity of 22,500 kw bore to total capacity of 48,000 kw. This charge was ascertained to be about Rs. 112,000 per month. The energy charge was to be arrived at by finding the actual operating costs per kwh generated by Sindri. In June of 1955 DVC and Sindri agreed to cancel the contract but to preserve the interchange connection so that each could on occasion take power from the other. In fact some power was supplied to Sindri in July 1955. No price for energy supplied was settled at that time and it was hoped that purchases of power would balance out. In making forecasts for the future the Sindri charges have therefore been omitted in arriving at the figures mentioned later in this memorandum.

The loss for the 10 months September 1954 - July 1955 (omitting April 1955), if depreciation and interest were included, would have been nearly Rs. 16 million. In this and subsequent calculations, depreciation has been taken on the straight line basis which we normally use. We understand that DVC proposes to use an annuity basis for depreciation, which would result in a smaller charge to the operating account. We cannot tell from inspection of DVC's annual accounts whether they are yet making provisions for depreciation; no depreciation reserve or fund can be identified in the accounts.

All operating losses, depreciation, interest, etc. are being capitalized and revenues are being deducted from capital. This is in accordance with Section 39 of the DVC Act which provides that: "For a period, not exceeding fifteen years, from the establishment of the Corporation, if the Corporation runs in deficit, the interest charges and all other expenditure shall be added to the capital cost and all receipts shall be taken in reduction of such capital cost."

A review of present estimates of load and operating expenses suggests that if present tariff rates are maintained, it is likely that DVC will make net losses after charging interest up to 1962. It is not possible to make any reasonable forecast beyond that date. It may be noted that the Technical Report of January 1953 on the second DVC loan estimated that there would be net losses up to 1961/1962.

For the year 1955/1956 (ending March 31, 1956) revenues would exceed operating expenses exclusive of depreciation, but if depreciation is taken into account there would probably be a loss before interest of about Rs. 2 million. From 1956/1957 onwards it is probable that revenues would exceed operating expenses and depreciation, but after interest charges there would be a net loss of about Rs. 9 million. At a rough estimate it seems likely that the accumulated net loss up to and including 1961/1962 would be about Rs. 53 million.

The cost to DVC of power purchased from Sindri is not known because it is only in some months that DVC has included in its report the kwh purchased from Sindri. These purchases in general amounted to only a few hundred kwh so that the cost per kwh would be an absurd figure.

It is agreed by DVC that a revision of tariff rates will be necessary, but as pointed out by Mr. Marshall in his report on his inspection visit of August 1955, it would seem advisable to postpone rate adjustments until the operating costs of Bokaro have become more stabilized and until the capital costs of Maithon and Panchet Hill have been ascertained.

The demand forecasts which were used in the Technical Report on the second DVC loan are no longer valid. The general pattern of growth would be the same but put forward a few years. If the original completion dates of Maithon and Panchet Hill were still valid, DVC would have much excess capacity. In fact the slower rate of construction and later completion dates help to compensate for the slower load growth and there will not be too great an excess of firm capacity over peak load. The table below sets out our present estimates of what the system capacities will be and shows our present estimates of peak load and, for comparison, peak loads estimated in January 1953.

Capacities and Load in KW

	Capacities			Estimate of Peak Load	
	<u>Total</u>	<u>Firm</u>		<u>1956</u>	<u>1953</u>
1954/55	154,000	104,000	!	40,000	92,000
1955/56	154,000	104,000	!	80,000	119,000
1956/57	154,000	104,000	!	120,000	132,000
1957/58 1/	214,000	164,000	!	140,000	156,000
1958/59 2/	254,000	204,000	!	160,000	169,000

1/ Maithon April 1957.

2/ Panchet Hill July 1958.

Dr. Wayne Rembert

January 9, 1956

S. Aldewereld

D.V.C Earnings Position

I see from the attached Progress Memorandum that in the period September 1954 - July 1955 (leaving out of account the month of April 1955, for which most of the figures are not available) the D.V.C. operations seem to have been carried out at a loss of more than Rs. 500,000, without making any provision for depreciation or interest. During the same period, D.V.C. paid Sindri fixed charges amounting to about Rs. 1,125,000 and energy charges amounting to only about Rs. 53,000.

It appears possible that the actual loss on operations may have been greater, if fuel or other charges for the last months are not included in the figures.

Please let me have a memorandum concerning this situation. It would be useful to compare the results achieved with the forecasts on the basis of which the loan was made. The memorandum should also provide answers to the following questions:

- What would the loss for this period amount to if depreciation, interest and other fixed charges are taken into account?
- From what sources have the operating loss, depreciation, interest, etc., been covered?
- How soon does it seem likely that D.V.C. will be operating at a profit, if present rates are maintained?
- What is the accumulated loss (including depreciation, interest and any other fixed charges) likely to be by that time?
- What is the cost to D.V.C. per kwh of power purchased from Sindri?
- Should D.V.C. rates be increased? If not, is there any action the Bank should take?
- Finally, what bearing does this situation have on the demand forecasts on which the second D.V.C. loan was based, and the construction schedule for the power plants being financed with the aid of that loan?

Dr. E. Wayne Rembert

L. Gray Marshall

End-Use Inspection Report - DVC

October 11, 1955

(Amended Nov. 2, 1955)

If you are in agreement, the attached could be circulated to the
Area Department.

(Approved by Dr. Rembert October 26.)

LGM:fmc

Oct. 27, 1955

cc: Dr. Basch (3)

Mr. Jago 1

Original copy retained by Dr. Rembert

Oper. Files 1

Dr. E. Wayne Rembert

October 7, 1955

L. Gray Marshall

DVC End-Use Report (August 1955)

S U M M A R Y

1. While it is evident that practically all the projects are running behind schedule, they are not so far behind as to call for any drastic action. There are, however, many phases of the operations that can be improved which will speed up the work, decrease costs, and lead to a more efficient operation of the entire system.

2. Very few changes agreed to from time to time by the Bank and DVC have been made in the organization and management of DVC. The Bank has continually stressed the need to separate the operating as well as the commercial activities from the Chief Electrical Engineer's office which also handles the engineering and construction activities for the transmission system. The commercial activities were just recently separated, and the Commercial Engineer is now relieved of his many and sundry duties and is able to concentrate on existing and new business. This is a step in the right direction.

Another improvement is that the Chief Engineer, Mr. Komora, has been given complete control of the construction of both the civil and electrical works of the hydro-electric project at Maithon. While there are a few organizational problems, the majority of them can now be straightened out by the Chief Engineer very easily and rapidly.

3. The post of an Operating Executive has not been established. Several people are responsible for the various phases of operation such as power plant operation and maintenance, and substation and transmission line operation. Very little coordination exists. It is essential that this post be established and a department set up so that the large multi-purpose hydro-electric project and the large Bokaro plant can be operated at a minimum of cost and a maximum of efficiency. It is felt that DVC has the capable personnel for the executive position from which to make a selection but they all lack the proper training. The existing overlapping of responsibilities at Bokaro would then be eliminated. This Department will need an experienced load dispatcher, possibly a civil engineer specialized in hydraulics.

4. A recent development is the establishment of the position of "Additional Chief Engineer." Mr. A. L. Das, formerly Deputy Chief Engineer, has assumed the post and the position of Deputy has been abandoned. While no

definition of the post has been established, the present indications are that inasmuch as the Chief Engineer's contract has only been extended to December 1956, the DVC's anticipated date of completion of Maithon, he will devote practically all his time to the completion of the Maithon project while the Additional Chief Engineer will concern himself principally with Panchet Hill and the Irrigation Project.

5. The Bank has continually insisted that an experienced construction superintendent be appointed, particularly to look after the concreting phase of the project. It is particularly encouraging to know that in September of this year one was obtained on an eighteen-month contract and left for India.

6. The executive engineer in charge of the construction plant resigned during the spring and this, together with the fact that all foreign master mechanics have resigned, creates a very troublesome condition. This has been called to the attention of the Board who have agreed to take immediate action in attempting to fill the executive post and recruiting additional experienced master mechanics.

7. There has been a tendency for young engineers to leave DVC now that the engineering work is getting in the final stages and no additional civil works appears on the horizon. At Maithon the civil engineering force has decreased from 40 to 17. DVC is attempting to halt this trend by announcing the positions that will be continued after Maithon and Panchet Hill are completed. Recruitment of experienced engineers is difficult.

8. The Durgapur Barrage has been completed and inaugurated by the Vice President of the Republic on August 9, 1955. Bokaro steam plant is complete with the exception of a little temporary wiring. Konar Dam is complete except for a few finishing touches. The transmission system of the first loan has progressed to where there remains forty miles of line and the Burdwan and the Kharagpur substations to be completed. Tilaiya hydroelectric project has been tied into the system and all energy originally surplus is now fed into the main system.

9. The irrigation system construction is lagging, primarily because of shortage of common labor. While it would be an advantage to have it completed as soon as possible, the delay is not too serious, as it is taking longer to educate the people to the use of water than originally contemplated. The completion date looks now as if it will be the middle of 1958 instead of the end of 1956. Maithon is way behind schedules established at the time the last loan was signed. A realistic date now appears to be the first part of 1957 instead of the end of 1955. The principal reasons for not reaching the original schedule are 1) shortage of trained personnel to run and maintain heavy equipment, 2) delay in awarding a contract for construction of the underground power plant and 3) labor strikes during a very important part of construction. Panchet Hill will be delayed until at least after the middle of 1958. The delay in Maithon will prevent the transfer of equipment as planned and the delay in placing the orders for the major plant equipment

may possibly further delay the initial operation of the plant. Bad foundation conditions have been found at Panchet Hill but it is believed that if full treatment is applied under the supervision of the Harza engineers that no real delay will be encountered, although costs will be higher than anticipated. The completion of the transmission line to Calcutta and the Calcutta substation is planned for the first part of June, 1957, but a small supply is anticipated to be available in the first quarter of 1957. It appears that these dates can be met.

10. As a coal washery has been approved by Delhi but no definite plans for financing or for construction have been advanced, DVC is attempting to negotiate another short-term labor contract for the mining of coal at Bermo at a lower price than present. A slight amount of mechanization for the removal of overburden exists and is to be further expanded.

11. Both the DVC and the Central Government have made recent load forecasts. They were both compiled to justify the further expansion of the generating capacity of the system. In view of past experience in the buildup of power demand the forecasts appear too optimistic. It is felt that the definite planning of increasing the generating capacity of the system can wait until at least the end of 1956, when government plans for new industries and the completion dates of Maithon and Panchet Hill lines are better known. The load on the system is only 45 MW but there is good evidence that the load will be about 70 MW before the close of the DVC fiscal year, May 1.

12. While no definite plans are in progress for establishing a long-range rate policy for electric energy and water, the board has expressed the desire to establish rates according to sound business practices as soon as construction and operating costs are better known.

13. Cost estimates for the projects in the last loan have been increased about 15% over those supplied to the Bank at the time the last loan was signed. It is felt that these estimates are optimistic and that the delay in completion and the foundation problem at Panchet Hill will result in a still further increase.

14. The \$832,000 grant by the American Technical Mission for engineering services will not be sufficient to cover the entire costs of engineering and supervision of construction of the two large projects. It may be necessary to draw upon the loan to cover the additional costs. This use of the loan does not seem unreasonable for it is absolutely essential that foreign engineering services be retained until the completion of the two projects.

15. The Indian Government has recently requested the Bank to release surplus equipment from DVC projects for use on other projects in India. While there is a limited amount of heavy duty equipment that is worn out and some not adaptable to the Bank financed projects, in general all equipment should be retained until at least Maithon civil works is completed. It is

felt that all requests for the release of equipment financed by the Bank should be accompanied by a complete story as to the exact type of equipment, date of purchase, number of hours used and a general description of the condition of the equipment. Because of the present divided responsibilities in regard to the construction plant at the various projects, it is not at all improbable that equipment might be released from one which could be used to great advantage at Panchet Hill or the Irrigation System construction.

16. The Slocum investigation, sponsored by the Central Government, and approved by DVC, resulted in some excellent suggestions being made by Mr. Slocum. In general he found nothing radically wrong with the project or estimates of cost. The necessity of obtaining a larger amount of spare parts on time was one of the more important points and one which the Bank has continually discussed with DVC officials.

17. At the time of my visit the DVC had requested the Central Government to cancel an additional \$870,000 from the first loan. This was originally planned for mining equipment, the purchase of which has been indefinitely delayed because of the possible construction of a government coal washery which would make cheap middlings available to Bokaro. Since my return the Bank has formally approved on October 13th a reduction in the first loan of \$874,000.

18. A letter is to be written to DVC confirming the points covered by the memorandum and discussed during my visit.

LON:fmc

January 4, 1956

Mr. P. S. Rau, Chairman
Damodar Valley Corporation
Anderson House
Alipore, Calcutta
India

Dear Sir:

Loan Number 72 IN (Damodar Project)

The Bank is endeavoring to assess more exactly, and as far in advance as possible, the probable amounts and timing of any disbursements it will have to make in foreign currencies under various loans. Now that many orders have been placed, I would be grateful if you would send to us as soon as possible a schedule of estimated withdrawals broken down by calendar quarters and by the foreign currencies involved. We would prefer to have this expressed in the U.S. dollar equivalent and would appreciate your indicating the rate used for each currency in making the conversion.

We are keen to receive the information relating to German Marks as soon as possible; the information relating to other foreign currencies could be sent at your convenience.

Sincerely yours,

Antonin Basch
Department of Operations
Asia and Middle East

cc. Mr. Street

WDSF:cvb

OFFICE MEMORANDUM

TO: Files

FROM: L. Gray Marshall *LGM*

SUBJECT: Damodar Valley Corporation (Loans 23 & 72 IN)

DATE: December 15, 1955

In a telephone conversation today with Mr. Bruce Johnson of the Harza Engineering Company, I learned the following:

1) Mr. Waldorf has received a raise in pay to \$1400/ month and it is most likely but not sure he will stay until May or June. His present contract expires at the end of January 1955. The reason for the indecision is that he had asked for \$1500/ month.

2) Although Harza submitted a proposal they call "C" to DVC through Chinnappa, DVC has not accepted it or made any comments. This included terms for continuing the complete mechanical and electrical engineering in Chicago as there are not a sufficient number of experienced mechanical and electrical engineers in DVC. The proposal also included a provision for one engineer to control the technical aspects of the erection of equipment.

3) Orders have been placed with Nohab^{*} of Sweden for the wheels and A.E.G. for the generators to be installed at Panchet Hill.

4) Engineering on the power plant is continuing at Chicago even though no agreement is signed.

5) Harza has asked DVC for permission for one of their executives to visit the valley projects to review the progress and discuss the terms of the proposed contract.

* Not sure if this is the correct name.

LGM:fmc

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

November 23, 1955

Mr. Rucinski:

The question of whether or not to send a copy of this letter to the Finance Ministry or to Mr. Kamat was discussed with Gray Marshall. He was reluctant to do so, because he felt it unnecessary to give any ammunition to the Government to criticize the DVC or to exacerbate the rather difficult relationship between the Government and DVC. He felt that copies of follow-up letters, on technical matters, should only go to the Government when unsatisfactory conditions made it necessary to get action. In this case, no special action was called for. Mr. Marshall felt that, in view of the cordial relations he has with DVC, sending the letter to the Government might put him in an embarrassing position when the next end-use visit is made.

In view of Gray Marshall's opinion, I did not send a copy to the Ministry of Finance nor to Mr. Kamat. However, we have been in the habit of sending, as a matter of routine, copies of any letters concerning Bank loans to Mr. Kamat, and if you think it advisable, I will send a copy of the letter in question to him.

~~W.D.S.~~ W.D.S. Fraser

Mr. Fraser
Thank you. In view of the
argument and a lack of serious
shortcomings, I agree with his
position. W.D.S. 11/24/55

W

Air Mail

December 15, 1955

Mr. P. S. Rau, Chairman
Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27, India

Dear Mr. Rau:

Your letter of November 20, 1955, in regard to the staffing of the Bokaro Thermal Plant has been received.

While in Calcutta the last time I reviewed the problem with your Plant Superintendent, the Chief Electrical Engineer, and your Personnel Director. I was informed that all "Workcharged" employees numbering over 200 would be released before the end of the year. This I assumed would be about December, 1955. By all means these temporary employees should be eliminated as soon as possible now that the plant has been completed.

In regards to the personnel to be permanently employed in the operation and maintenance of the plant and maintenance of the barrage and grounds immediately surrounding the plant, we believe that the present number is far in excess of actual requirements. In the United States and Canada for plants of the size of Bokaro, with about the same number of units, the total number of employees varies somewhere between 115 and 190 depending upon the type of fuel used and the size and number of auxiliary facilities, such as dams, intake conditions, etc. The total figures of employment include those employed for operation and maintenance, as well as the administration of the complete plant.

The Kuljian Corporation made detailed recommendations to DVC some time ago in regard to the number and types of employees that they felt would be essential during the first few years of operation or what is usually known as the shakedown period. I have reviewed their estimate of the staff suggested and appreciate their reasons for recommending such a large staff for the first few years of operation. This was done because of the large number of inexperienced employees recruited and it was their desire to select the most efficient personnel from this number for permanent employment. It is considered that the maintenance staff as recommended by Kuljian can be further reduced when the Maithon and Panchet Hill projects come into service and all major maintenance and repair is accomplished by one department which would be

located at Maithon which was contemplated by your Chief Electrical Engineer. The total recommended for this period by Kuljian was: Operation 161, Mechanical Maintenance 60, and Electrical and Instrument Maintenance 57, or a total of about 278 plus a small administrative group.

At the time of my visit the permanent operating staff of 143 seemed reasonable but their permanent maintenance group of about 225 was greatly overstaffed. The other divisions of permanent employees in the engineering, stores, administration and accounts departments of about 100 also is considered to be greatly in excess of requirements. The engineering department at Bokaro now appears to be superfluous to the needs of the plant and could very effectively be transferred to the Maithon Engineering Department or to the Chief Electrical Engineer's department at Calcutta.

It seems reasonable to us that a permanent operating staff of around 150 for two units and around 200 for three units would be sufficient to efficiently operate the plant and a permanent maintenance staff of about 100, which would be reduced to about 50 as the men become more efficient. The administration, etc. could be reduced to at least one quarter.

The staff required to administrate and maintain the colony area has not been considered as these operations were not reviewed.

A reduction of staff at Bokaro would also have a beneficial effect on the housing situation in the colony as it probably would not be necessary to expand the housing facilities as presently proposed.

From my favorable impression of the present power plant advisor, Mr. Chapman, I am sure that an engineer with his valuable experience can guide your executives in the selection of permanent employees.

Very truly yours,

LGM

L. Gray Marshall
Public Utilities Division
Department of Technical Operations

LGM:fmc

The Kuljian Corporation

ENGINEERS • CONSTRUCTORS



CABLE ADDRESS: KULCIA

1200 NORTH BROAD STREET, PHILADELPHIA 21, PA.

December 1, 1955

*Operational
Files*

*no answer
required
LSM*

Mr. Gray Marshall
World Bank
1818 H Street, N.W.
Washington, D. C.

Subject: Bokaro Thermal Power Station
Operation Personnel
Kuljian Job K-1310-C

Dear Mr. Marshall:

As per your request from Mr. H. A. Kuljian a few days ago, we are enclosing herewith two (2) copies of Operational Organization Chart in condensed form indicating the various departments and number of personnel involved in each section, accompanied with detail sheets enumerating each operation phase with number of personnel. We trust this gives you adequate information for your purpose.

As a side issue, I would like to make the following comment:

When I was in India, I prepared this schedule with great consideration and consultation with Damodar Valley Corporation. The operation personnel for the plant proper were based on the ability and skill of the operators that we could obtain at that time which needed a great amount of training. Therefore, at the present time, if they have these men trained satisfactorily, the possibility is the number of personnel can be reduced than what is scheduled.

As for the maintenance section, including all maintenance departments, the basic problem was the availability of men primarily for routine maintenance which is continuously in demand of these men and also stand-by men for emergencies in addition to the yearly inspection and overhaul of machinery. Inasmuch as the plant is in a location where the necessary skilled men are not immediately available this schedule was based on having adequate men all year round to overcome this problem. That is why there is quite a sum of men indicated in the maintenance group.

As for transport, stores, accounts, administration, colony and medical, this setup was based on D.V.C.'s request entirely. It has no direct bearing on plant operation. There is a lot of indirect bearing on plant operation to take care of the entire colony and personnel.

The KULJIAN CORPORATION

Engineers · Constructors

1200 NORTH BROAD STREET • PHILADELPHIA 21, PENNA.

Mr. Gray Marshall
World Bank

- 2 -

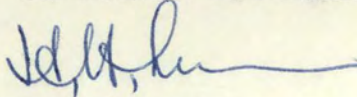
December 1, 1955

If there is any additional information required, or if we can be of any help to you, kindly call the undersigned.

With best regards, we remain

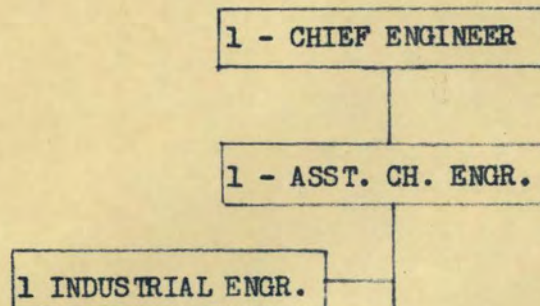
Very truly yours,

THE KULJIAN CORPORATION



H. H. Levonian
Vice President
Construction Division

HHL:rm
Encl.



Total 81 Total 24 Total 6 Total 58 Total 49 Total 8 Total 24 Total 14 Total 14 Total 98 Total 102 Total 14

BOKARO THERMAL POWER STATION
OPERATIONAL
ORGANIZATION CHART

1 Unit

THE KULJIAN CORPORATION
ENGINEERS AND CONSTRUCTORS
PHILADELPHIA 21, PA.

OPERATION

1 Engr. in Charge-Operation
* 4 Engr. in Charge-Shift Operation
* 4 Mech. Control Engr.
* 8 Jr. Control Engr.
* 8 Boiler Operators
* 4 Stage Heater Operators
* 4 Boiler Basement Operators
* 4 Ash System Operators
* 8 Assistants
4 Screen Sump Operators
4 Elect. Control Engr.
4 Jr. Control Engr.
* 4 Turbine Operators
* 4 Fan Floor Operators
* 4 Service Operators
4 Water Treatment
4 Assistants
1 Senior Chemist
2 Chemist
1 Asst. Chemist

81 TOTAL

OPERATION - COAL HANDLING

1
2 Shift Foremen
2 Control Operator
2 C.H. Operator
2 Transfer Tower
2 Bunker Tipper
2 Ropeway Operator
4 Tippers
2 Drag Scraper
5 Greaser

24 TOTAL

* - Denotes Number of Personnel Required for Operation of One Unit Only = 56

OPERATION

Total Number of Personnel Required for One Unit - $56 + 49 = 105$

Total Number of Personnel Required for Two Units - $56 \times 2 + 49 = 161$

Total Number of Personnel Required for Three Units - $56 \times 3 + 49 = 217$

MAINT. - COAL HANDLING

2 Fitter
4 Technician
 6 TOTAL

MAINT. - MECHANICAL

Turbine	1	Chief Maint. Engr.
	1	Asst. Maint. Engr.
	4	Technician
	4	Helper
	1	Greaser
Boilers	1	Chief Maint. Engr.
	1	Asst. Maint. Engr.
	4	Technicians
	4	Helper
	4	Shift Technician
	4	Helper
	1	Head Rigger
2	Rigger Helper	
Machine Shop	1	Master Mechanic
	3	Machinist
	3	Helper
	3	Bench Technician
	3	Helper
	1	Tool Room
	1	Carpenter
	1	Helper
	1	Mason
	1	Helper
	2	Cert. Welder
	3	Welder
	1	Power Hammer
1	Blacksmith	
1	Helper	
	58	TOTAL

MAINTENANCE - ELECTRICAL

1 Chief Maint. Engr.
 1 Power Asst. Engr.
 1 Foreman
 9 Technician
 9 Helper
 1 Lighting Asst. Engr.
 2 Foreman
 9 Technician
 9 Helper
 1 Inst. Asst. Engr.
 2 Tester
 2 Technician
 2 Helper
49 TOTAL

MAINTENANCE - INSTRUMENTS

1 Chief Maint. Engr.
 1 Asst. Maint. Engr.
 2 Inst. Technician
 2 Helper
 1 Elect. Technician
 1 Helper
8 TOTAL

MAINTENANCE

Total Number of Personnel Required - 121

TRANSPORT

1
1 Foreman
3 Technician
3 Helper
8 Driver
1 Electrician
1 Helper
2 Helper
2 Cleaner
1 Fork-Lift Driver
1 Crane Driver
24 TOTAL

STORES

1 Senior Store Keeper
2 Store Keeper
2 Store Attendants
1 Store Clerk
1 Serang
7 Riggers
14 TOTAL

TRANSPORT

Total Number of Personnel - 24

STORES

Total Number of Personnel - 14

ACCOUNTS

1 Accounts Officer
1 Asst. Accounts Officer
4 Accountants
3 Accounts Assistant
1 Paymaster
1 Head Time Keeper
3 Time Keeper
14 TOTAL

ADMINISTRATION

1 Statistician
2 Tech. Asst.
1 Gr. II Asst.
6 Steno-Typist
2 Typist
2 Dufftry
6 Peon
1 Senior Draftsman
1 Junior Draftsman
2 Tracers
1 Yard Foreman
6 Cleaners
3 Sweeper
1 Labour Mate
11 Mazdoor
1 Security Officer
1 Asst. Security Officer
12 Armed Guards
12 Watch & Ward
26 Chowkidars
98 TOTAL

ACCOUNTS

Total Number of Personnel - 14

ADMINISTRATION

Total Number of Personnel - 98

ROUTING SLIP		Date	
		Nov. 22, 1955	
NAME		ROOM NO.	
Mr. Rucinski		620	
Mr. Fraser		506	
Action		Note and File	
Approval		Note and Return	
Comment		Prepare Reply	
Full Report		Previous Papers	
Information		Recommendation	
Initial		Signature	
Remarks			
Mr. Marshall's letter to DVC following up his end-use mission, as requested by you. <i>Bill. Why don't we send copies of these letters to him. Ensure handling in Delhi and to Kuwait? Jf.</i>			
From			
W.D.S. Fraser			

		<u>COLONY</u>
		1 Town Engineer
		1 Asst. Engineer
		1 Jr. Draftsman
		1 Surveyor
		1 Estimator
		4 Khalasis
	G. House, Insp. Bunga- low, Garden	1 Care Taker
		1 Garden Supervisor
		4 Malees
		1 Khaksama
2 Cooks		
Elec.	3 Servants	
	1 Elect. Foreman	
	1 Elect. Supervisor	
Workshop	7 Elect. Technicians	
	7 Helpers	
	1 Overseer	
	2 Store Keeper	
	1 Blacksmith	
	1 Blacksmith Helper	
	1 Carpenter	
	1 Mason	
Water Supply	1 Fitter	
	1 Welder	
	1 Welder Helper	
	1 Overseer	
	2 Supervisor	
	1 Plumber	
	1 Valve Operator	
	2 Pipe Fitter	
Bldg. & Sanitation	3 Helper	
	4 Pump Driver	
	4 Pump Driver Helpers	
	1 Overseer	
	2 Supervisor	
Road	1 Sweeper Mason	
	4 Sludge Pump Drivers	
	4 Helpers	
	20 Sweeper	
	1 Overseer	
	2 Supervisor	
	1 Tar-boiler Operator	
	1 Helper	
	<u>102</u> TOTAL	

<u>MEDICAL</u>
1 Medical Officer
2 Asst. Medical Officer
2 Compounders
2 Dressers
3 Nurses
2 Wardboys
1 Bearer
<u>1</u> Ambulance Driver
<u>14</u> TOTAL

COLONY - TOTAL Number of Personnel - 102

MEDICAL - Total Number of Personnel - 14



GRAMS : DAVALLEC

P.S. Rau, ICS. (Retd),
Chairman

PHONE : ALIPORE 1765

DAMODAR VALLEY CORPORATION.ANDERSON HOUSE, ALIPORE
CALCUTTA-27Air Mail.

LG. 98/55-10485

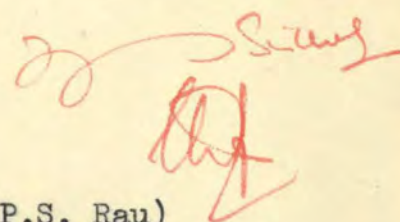
November 20, 1955

*Dear Mr Gray Marshall,*Subject:- Mr. Gray Marshall's visit to the DVC.

I have just received a letter from the Bank dealing with your observations made as a result of your recent visit to the DVC establishments.

2. You will recall that you promised to send us a note on the question whether our Bokaro Thermal Power Station has been over-staffed. There is no mention of this point in the letter just received. Presumably one is under preparation. If not, will you kindly send us one as soon as you can? We have held up consideration of this problem pending the receipt of your observations. *With kind regards*

Thanking you,


(P.S. Rau)

Mr. L. Gray Marshall,
International Bank of Reconstruction and Development,
1818 H, Street, N.W.
Washington 25, D.C.

ack Dec 15/55

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

DEPARTMENTAL ROUTING SLIP				Date	
DEPARTMENT OF TECHNICAL OPERATIONS					
Mr. Aldewereld			Mr. Marshall		
Mr. Allardice			Mr. Matter		
Mr. Andersen			Mr. Mehaffey		
Mr. Armstrong			Mr. Perkins		
Mr. Bass			Mr. Piccagli		
Mr. Bergan			Mr. Reid		
Mr. Bryce		✓	Mr. Rombert		305
Mr. Chadenet		✓	Mr. Ripman		308
Mr. Colquhoun			Mr. Rosen		
Mr. Craig-Martin			Mrs. Ryshpan		
Mr. de Leeuw			Mr. Saitzoff		
Mr. de Vries			Mr. Smythe		
Mr. Finne			Mr. Spiro		
Mr. Finsaas			Mr. Spottswood		
Mr. Flesher			Mr. Svoboda		
Mr. Geolot			Mr. Van Helden		
Mr. Groenveld			Mr. Walstedt		
Mr. Guinness			Mr. Wenzell		
Mr. Jago			Mr. Wheeler		
Mr. Kanthers			Miss White		
Mr. Kephart			Mr. Wubnig		
Mr. Lipkowitz			Mr. Young		
Mr. Main		✓	Oper. Files		208
DETACH THIS SLIP AFTER CIRCULATION AS SHOWN ABOVE.					

OFFICE MEMORANDUM

TO: Files

DATE: November 10, 1955

FROM: L. Gray Marshall *LM*SUBJECT: DVC (Loans 23 & 72 IN)

In a telephone conversation with Mr. Franklyn C. Rogers, I learned that Mr. Chinnappa, the Deputy Chief Electrical Engineer for DVC, has completed his tour of European factories in the company of a Harza engineer and that Harza and Chinnappa have come to an agreement as to recommendations to the DVC Board on the award of the hydro electric generators for Panchet Hill. It is understood that a letter of intent has been given on the turbines and that a letter of intent is about ready to be submitted on the generators. Sufficient information has been obtained from the manufacturers on the dimensions of the units so that DVC has been informed by Harza as to the exact size of the foundations for the power house. It was feared that the lack of this information might delay construction. The question as to the engineering services to be supplied by Harza was again discussed.

Last March or April, the Harza Engineering Co. were requested to study the possibility of all engineering work being done in India for the completion of the Panchet Hill project. Harza made a complete study and it was found that if the biggest part of the work was done in India that the complete engineering of both Maithon and Panchet Hill could be completed within the amount of money already allocated by ICA. Nothing was done along these lines, primarily because no decision had been taken in regard to the units. Now that time has lapsed, DVC have again requested Harza to study the problem and the latest submission, made recently, is that a certain amount of work will now be transferred to India, to the Chief Electrical Engineer's office, but certain work would still be retained in Chicago. It is believed under this arrangement that the entire engineering work could be completed by September or October of 1956, and that the additional cost would be in the neighborhood of \$100,000. This, however, would not include the supervision of construction after September or October or any other amounts for an additional two years during which the project will be under construction. It is believed that this additional cost would be in the neighborhood of \$50,000. Mr. Chinnappa has returned to India and will make his report to the Board along the above lines.

Harza submitted a request to DVC about two months ago for an increase in the salary of Mr. Waldorf, their Resident Engineer at Maithon, and suggested a continuation of his contract to cover the completion of the engineering work. Mr. Waldorf's contract with Harza expires January 15. No action has been taken on this proposal and as a result Mr. Waldorf plans on leaving India around the first of January and Harza has not selected a replacement. Harza has deferred a decision as to a replacement, pending

the acceptance of the Harza proposal to do a part of the work in India but also a large part of the engineering in Chicago which, as has been stated above, has just been submitted.

As this proposition is just being submitted to the Board, it is believed advisable to wait until approximately the first of December before taking any action with DVC.

LGM:fmc

AIR MAIL

November 9, 1955

Mr. P. S. Rau
Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27, India

Dear Mr. Rau:

Loans 23 IN and 72 IN

Mr. L. Gray Marshall has returned to the Bank and his report covering the end-use inspection of the DVC projects being financed by the Bank has been reviewed. His observations, which we hope you will find constructive, are set forth below. We believe that if action is taken by the DVC on the lines suggested, further improvement in the operations of DVC should result.

Organization

We believe that the establishment of the Commercial Engineer's position, independent of the Chief Electrical Engineer's office, is a constructive move and should result in more rapid expansion of the market for power than has been realized in the past.

The extension of the Chief Engineer's contract, the appointment of an Additional Chief Engineer, and the employment of a Chief Construction Engineer should also make for a more efficient organization, particularly if the Chief Engineer is relieved of some of the details involved in the construction of the Panchet Hill and irrigation projects. During the past year, the DVC has lost a number of capable engineers because they felt their positions were insecure. It was noted that the DVC was attempting to counteract this situation by publicizing the facts. Continued efforts along this line are essential.

Confirming our past views, and based on the belief that DVC will continue to expand, we feel that there will be a continual need for engineering and construction personnel. It is therefore essential that the operation of the electrical and irrigation systems, with their many complex problems, should be separated from construction activities. There are capable engineers now on the DVC payroll who could handle this vital operations post, but they lack experience in the operation of a large system with hydro-electric installations with multi-purpose dams and irrigation. One alternative is that a DVC engineer should be trained immediately on a large Indian system, such as possibly Tata Hydro, or on a foreign system where experience has been gained in the best methods of operation. The other alternative is to acquire a foreign advisor for this intricate problem.

Maithon

We strongly support Mr. Slocum's recommendations on the Maithon project as a means of improving construction operations at that location. There is a possibility that completion of the underground power plant at Maithon will be the determining factor in the completion of this project. It is encouraging to know that the new construction engineer will have complete control of the project, which should ensure the proper coordination of the civil and the electrical works.

The record of operation of the primary crusher at Maithon has been very poor. We expect, however, with the new linings and availability of spare parts, that this record will be greatly improved.

Panchet Hill

At Panchet Hill, as test borings showed, poor rock conditions have been encountered which, although not serious enough to create alarm, will have to receive proper treatment; this should be carried out under the constant supervision of your consulting engineers.

Transmission System

The construction of transmission lines and substations under the first loan has been disappointing. We would like to see particular effort made to speed up the construction of the last two substations at Burdwan and Kharagpur.

Irrigation

The irrigation project is falling very much behind original schedules. The reason for this, as explained by your engineers, was the shortage of common labor. The original reason given for doing a large part of this work by manual means was that unemployment was prevalent in the area. In view of the present labor difficulties, a greater use of heavy construction equipment should be studied in order to speed up the program.

We would appreciate your sending us a brief outline of the steps being taken to educate the farmers to the benefits of year-round irrigation.

Bermo

At the Bermo mines, a limited amount of mechanization has been installed to remove overburden. This should be further increased to assure DVC that there will always be sufficient coal exposed, in order to meet the increasing needs of the Bokaro plant.

Construction Plant

We have taken note of your Secretary's letter on the mechanical repair personnel and spare parts conditions at the various projects. However, we would like to reiterate that the employment of experienced master mechanics is essential to the successful execution of the projects, and that it

might be possible to strengthen your staff by the employment of mechanics being released from the Central Tractor Organization. As was suggested by your personnel director, a Senior Executive Engineer should also be employed immediately to be in charge of the construction plant department. The Bank's concern over the spare parts problem seems to be justified--one supplier's books indicated that the principal orders for spare parts to be used during the 1955 monsoon season and major overhaul period were not received by the supplier until after the start of the monsoon. This was much too late, as the majority of spare parts, because of the volume required, had to be obtained from the factory. Mr. Slocum confirms the fallacy of a precarious position in regard to spare parts.

Engineering Services

The amount of the allocation by the American Technical Mission to cover the Harza contract does not appear to be sufficient to complete entirely the engineering services and the supervision of construction of the two large hydro-electric projects. Some decision should be taken immediately to assure the availability of additional funds. The Bank would be willing to consider a request for a change in the official List of Goods to cover the requirements for additional foreign currency.

Power Rates

While this may not be the moment for an upward change in the base of electricity rates, a continuing study should be carried on, so that when construction costs and operating costs are more definitely known, rates may be established in line with sound business practices. The same holds true with regard to rates for irrigation, and attempts should be made to put these rates in line, at least, with the rates contemplated at the time DVC received their loan from the Indian Governments.

Withdrawals Under the Loans

We would like to draw your attention to the fact that the Closing Date for withdrawals under the first loan is December 31, 1955, and that according to our books, there remains an amount of \$350,504 still to be disbursed. Under the second loan, we note that withdrawal applications have recently been coming forward more rapidly, but the fact is that out of the loan of \$10.5 million made in January 1953, there remains an amount of \$7,733,368 still to be withdrawn.

In conclusion, we wish to congratulate the management of DVC on the achievements during the past year, particularly the inauguration of the Durgapur Barrage and the Konar Dam, and to thank you for the cooperation given to Mr. Marshall during his visit.

Yours very truly,

(signed) E. Wayne Rembert (Nov. 14)

cc: Dr. Basch
Mr. E. Clark
Mr. Street
(Cleared with Working Party)

E. Wayne Rembert
Chief, Public Utilities Division
Department of Technical Operations

OFFICE MEMORANDUM

TO: Files

DATE: November 3, 1955

FROM: W.D.S. Fraser *wt*

SUBJECT: INDIA - DVC (23 & 72 IN) and Trombay (106 IN) Loans.

Notes of Working Party meeting on Monday, October 31, 1955 in Law Library.

Present: Messrs. Basch, Fraser, Clark, Marshall and Street.

1. The meeting was held to review Mr. Marshall's End-Use Mission reports on the two DVC loans and the Trombay loan.
2. Trombay. It was noted that the project was progressing satisfactorily and that there was no specific action arising out of the report that needed to be taken. Nor was it felt necessary to write a follow-up letter to the Borrowers other than the usual courtesy letters thanking them for cooperation. It was suggested that references in the report concerning stamp duty on the Trust Deed should be eliminated, as this matter had in the meanwhile been satisfactorily settled. Mr. Clark was not concerned about the difficulty of removing the iron workers off the land on which the Carnac receiving station was to be built. The Bombay Government had started the necessary legal process to have them evicted, and it was not necessary for the Bank to insist that full possession be established as one of the steps necessary to declare the loan's effectiveness.
3. DVC. As it was not very clear in the report exactly what was the chain of responsibility in the organization of the DVC, it was suggested that a simple chart showing the situation as it stood should be attached to the report. It was noted that a number of points in the report had not been covered in the draft follow-up letter to be sent to the DVC. As the report was not being sent to the DVC, it was agreed that the follow-up letter should be expanded to include all points in the report where improvements were suggested. In this way it would be easier for subsequent end-use missions to check what action had been taken by DVC to the Bank's suggestions. The Working Party noted that even though the projects had fallen behind schedule, the organization of the DVC had improved, especially as a result of separating the commercial activities from other operational activities. This should lead to a more rapid build-up of the load on the DVC system. The fact that Mr. Komora had been given the entire responsibility for Maithon construction was also a notable improvement.

cc. Those present; Mr. Jago.

I regret that I did not see you while in India, but you can rest assured that I did not select the monsoon season for my visit. It was more or less forced upon me because of the conditions of the projects in Ceylon and it seemed expedient to visit the DVC at the same time.

It is gratifying to know that you believe McGlenagan will work out, and I will look forward to receiving a few personal notes from you in the coming months.

Hilda wishes to be remembered to Lucille.

Sincerely yours,

L. Gray Marshall

LGM:mc

Air Mail

October 25, 1955

Mr. Andrew M. Komora
Maithon
India

Dear Andy:

It was a real pleasure to get your reassuring remarks on the progress of the DVC projects. If I had realized that my remarks to the Board would not have been given directly to you, I would have followed it up with a personal note. The points that you raise, particularly the position of supervisor of mechanical and electrical erection and the primary stone crusher, were the principal objects of my discussions while in Calcutta. However, in my report I have commented that I felt, as soon as you had returned to Maithon, the possible confusions of the posts of project manager and supervisor of mechanical and electrical erection would be straightened out. Of course, at the time I was in Calcutta I did not know that you had engaged Mr. E. C. McClenagan to act as Chief construction engineer. Another rather confusing situation occurred to me in the relationship of a chief engineer and an additional chief engineer. I still have not got this straightened out in my mind.

Naturally I was pleased to learn that your contract had been extended. The only thing is that I wish it had been for a longer period of time, but this undoubtedly will take care of itself.

In connection with the primary stone crusher, I recommended to the Board that serious consideration be given to obtaining one of the crushers that were on Bokra Dam which could be made available for you on Panchet Hill. There was no mention made at the time that you were completely overhauling the old crusher and obtaining new gears and motors. I did know that you were obtaining one pinion gear from the United States by air express.

I just learned from Harry Kuljian that Chinnappa is in Chicago in connection with the equipment for Panchet Hill. I certainly hope they get that matter straightened out in a hurry, so that it will not delay the completion of the project.

ROUTING SLIP		Date Oct. 24
NAME	ROOM NO.	
Dr. Lombard	305	
Mr. Marshall	303	

Action	Note and File
Approval	Note and Return
Comment	Prepare Reply
Full Report	Previous Papers
Information	Recommendation
Initial	Signature

Re ks

From NBR

2372

PHONE: ALIPORE 1765



DAMODAR VALLEY CORPORATION

ANDERSON HOUSE, ALIPORE

CALCUTTA-27

AIR MAIL

No.10FA(B)54-55-Part II- 9723

October 18, 1955.

*Noted
LHM
No answer required*

The International Bank for
Reconstruction & Development
1818 H Street, N.W.
Washington 25, D.C.
U.S.A.

Attention: Mr.L. Gray Marshall.

Gentlemen :

✓ Will you kindly refer to your letter
of June 23, 1955 asking for a brief report on the perso-
nel situation, availability of spare parts and the general
condition of construction equipment at each of the three
projects, Maithon, Panchet Hill and Durgapur Barrage ? A
report indicating the present position is appended hereto.

Yours faithfully,

Accompaniment: One Report.

G.D. Kshetrapal
(G.D. Kshetrapal)
SECRETARY.

UCL 3Y 11 11 1955

SECRETARY GENERAL
INTERNATIONAL BANK FOR
RECONSTRUCTION & DEVELOPMENT
WASHINGTON 25, D.C.

RECEIVED
INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

OCT 24 11 11 AM 1955

SECRETARY
(C.D. KAREKREBAT)

Accompaniment: One report.

HOME INTERNALLY

Report indicating the present position is appended hereto.
Projects, location, number and physical details; a
condition of construction equipment at each of the three
main stations, availability of spare parts and the general
of June 23, 1955 asking for a brief report on the basis-

Will you kindly refer to your letter

Gentlemen:

Attention: Mr. L. Gray Marshall.

P.S.V.
Washington 25, D.C.
1818 H Street, N.W.
Reconstruction & Development
The International Bank for

NO. 1054 (B) 24-22-1955 II- 553

October 18, 1955

VIB XVII

CAUSCULIA-22

VANDERSON HOUSE, VIPOKE

DAMODAR VALLEY CORPORATION

PHONE: VIPOKE 150



Report on the personnel situation, availability of spare parts and the general condition of equipment at each of the three projects, Maithon, Panchet and Durgapur Barrage.

1. Barrage & Irrigation.

a. Personnel : - There are at present satisfactory number of technical personnel for both maintenance and operation of the machineries.

b. Spares :- Almost all the spares, for which indents were placed, have been received.

c. General condition of machines :- All the machines are now in working condition. Considering the number of hours and the different terrain where the machines have worked, the condition of these is considered to be very satisfactory.

2. Maithon Project.

a. Personnel :- There is already a mechanical organisation set up for this purpose, and the present Executive Engineer was working as Master Mechanic. There has been no change in the set up after the withdrawal of the T.C.A. Master Mechanic. The position in respect of repairs and maintenance is satisfactory.

b. Availability of spare parts :- The project has now got enough spares to complete the rest of the job though occasions may arise when spares will have to be indented on an emergency basis.

c. General conditions of the machinery :- The condition of most of the equipment is good. The few machines which need repairs are being attended to.

3. Panchet Hill.

a. Personnel position is satisfactory. The Project has got a good team of technical staff in charge of a competent Executive Engineer and all types of breakdown, major and minor are attended to by these skilled personnel. On rare occasions, however, the help of Service Representative of the suppliers is requisitioned to tide over the difficulty. The absence of a foreign Master Mechanic is not therefore felt.

b. Availability of spare parts :- There has been considerable delay in their procurement, as most of the essential spare parts have to be obtained on forward delivery basis and consequently the equipment and machinery often suffer a set back. The position, however, is improving gradually.

c. General condition of machinery :- The general condition of all machinery is reasonably fair.

G.D. Kshetrapal
(G.D. Kshetrapal)
SECRETARY.

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Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 17 October, 1955	Document Type Letter			
Correspondents / Participants To: Mr. Gray Marshall From: Mr. Andrew M. Komora				
Subject / Title Second DVC Loan - Transfer of Surplus Equipment				
Exception(s) Information Provided by Member Countries or Third Parties in Confidence				
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
Withdrawn by Tonya Ceesay	Date June 13, 2017			

AIR MAIL

October 17, 1955

Mr. P. S. Rau, Chairman
Damodar Valley Corporation
Anderson House
Alipore, Calcutta
INDIA

Dear Mr. Rau:

When I was in Calcutta, we discussed the Bank's views on the release of construction equipment from Bank financed projects. It was my opinion that we both agreed that equipment would not be released or sold from Maithon, Panchet Hill and the Durgapur Barrage and Irrigation system until the equipment had served its useful life, become obsolete or it became surplus to the needs of the project, and that the last condition would only be fulfilled towards at least the nearing of completion of Maithon and the Panchet Hill projects.

Since my return we have had a request from the Government of India to approve the release of a HD-9 Tractor for which a sale had been negotiated with Kosi. We have replied stating our general policy but also stating that we assumed an emergency had arisen so that we would deviate from the general rule and would be prepared to approve the transfer as an exceptional case. We also stated that exceptions to the policy can only be made where adequate justification is given.

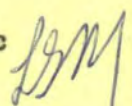
In our reply we also stated that we would prefer to see a release of a satisfactory unit from the surplus stock of the Central Tractor Organization rather than from the DVC.

In cases where a release or sale is contemplated, the exact type of equipment, date of purchase, number of hours used and a general description of the present condition of the equipment should be supplied to the Bank. In the case of a sale, the estimated sale price should be given.

Very truly yours,

L. Gray Marshall
Public Utilities Division
Department of Technical Operations

LGM:fmc



Approved by Dr. Basch

Mr. Gordon M. Street

October 17, 1955

L. Gray Marshall *LGM*

DVC - Machine Shop Tools (Loan 72-IN)

I have reviewed the Loan Disbursement Voucher for a Radial Drill that was purchased from Czechoslovakia. I feel pretty sure that I saw this machine in the general work shops at Maithon. Although the machine was being used to manufacture Harza Gates which will be used at Maithon, it is also used to manufacture items that are not a part of our project. It would be most difficult for me to prove the machine of poor quality and as far as repair parts are concerned, if they were not available from the country of origin, they could be made right at Maithon. In other words, I can see no justifiable basis for turning down the application.

LGM:fmc

Mr. Marshall's
Report, Oct 1/22

(Amended Nov. 2, 1955)

Dr. E. Wayne Rombert

October 11, 1955

L. Gray Marshall

End-Use Inspection Report - Damodar Valley Corporation (Loan 23 and 72 IN)

1. According to my terms of reference dated August 2, 1955 I visited DVC between August 6 and August 18 for the purpose of an end-use inspection. After visiting the offices of the Corporation in Calcutta, an inspection was made of the projects in the Valley. Before leaving Calcutta all the normal points covered by an end-use inspection and the special points covered by my terms of reference were discussed with the appropriate executives or the Board of Directors.

Organization and Management

2. Although there have been a few minor changes in the form of the organization, the general formation remains about the same as when the first loan was granted. At the time the last loan was signed the then existing chairman of the Board agreed to make certain changes that the Bank believed would be beneficial to the Corporation. These consisted primarily of separating the engineering and construction departments from the operation, financial and commercial departments. To date there have only been two real improvements:

1) The complete construction of the major hydroelectric projects, Maithon and Panchet Hill, is now definitely under the control of the Chief Engineer (Mr. A. Komora). This definitely is an improvement, as previously the mechanical and electrical construction responsibility has been divided between the Chief Electrical Engineer's office and the Chief Engineer's office.

2) The commercial activities are now separated from the Chief Electrical Engineer's office.

3. Both of these changes were made since the resignation of Mr. P.K. Bhattacharya early this year, formerly Chief Electrical Engineer who had been originally engaged as chief engineer for civil as well as mechanical and electrical engineering departments.

4. Mr. J. N. Goswami, formerly Deputy Chief Electrical Engineer, has been appointed to fill Mr. Bhattacharya's position. However, there is an understanding that this is only until June of next year when his contract expires and he becomes eligible for retirement.

5. Mr. K. Subramaniam, while still carrying the title of commercial manager, now reports directly to the Board rather than through the Chief Electrical Engineer's office.

6. No attempt has yet been made to separate the operation of the system from the Chief Electrical Engineer's office. While the Corporation acknowledges the advisability of such a move, there is the feeling that the proper personnel are not available within DVC. This is an important point that must be pursued as it is absolutely necessary when the large hydro plants start supplying power to the system. It is felt that the present Bokaro plant superintendent is capable of handling the position but should have additional training in dispatching which can be obtained on a system such as Tata's in Europe, the United States, or Canada. The immediate situation is not grave as only two thermal plants and one small hydro are involved in system operation: Bokaro, Sindri and Tilaiya.

7. It is interesting to note that all the engineers trained under the Kuljian Company are still in the employment of DVC.

Office of the Chief Engineer

8. At the time of my visit the Chief Engineer (Civil) was on home leave to the United States. In my talks with the Chairman of the Board, I was informed that the contract with the Chief Engineer had been extended from December 31, 1955 to December 31, 1956. There were no basic changes in his contract but there had been a great deal of opposition to his reappointment from the Ministry of Irrigation and Power. Apparently this stemmed back to the criticism leveled at the DVC and the Chief Engineer last spring because of what was considered delayed construction and high costs which resulted in a formal investigation in April, 1955 by Mr. M. H. Slocum, Chief Engineer for the Bahkra project. The results of this investigation, instigated by the Minister, will be covered in a later chapter.

9. About a year ago the project manager for the Durgapur Barrage, Mr. A. L. Das, was appointed Deputy Chief Engineer to relieve the Chief of a great deal of administrative duties and allow him to spend more time on the engineering and construction features of the principal project and because of the failure of DVC to locate a construction superintendent, it was arranged with the American Technical Mission in New Delhi to obtain the services of Mr. A. T. Douglass, a specialist in concrete work. Mr. Douglass spent a few days each month at Maithon which undoubtedly was of some value but failed to meet all the requirements of a construction superintendent.

10. Recently or just about the time that the Chief Engineer's contract was extended, a new post of "Additional Chief Engineer" was created and the former Deputy, Mr. A. Das, was appointed to fill the post. While the responsibilities of the Chief and the additional Chief are not defined in writing, I obtained through various sources the following:

11. While Mr. Komora was on home leave, Mr. Das assumed the position of Chief Engineer in every respect; however, upon Mr. Komora's return, Mr. Komora will devote practically all his time to Maithon and Mr. Das will have entire responsibility for Panchet Hill and have no responsibility in regard to Maithon. With the Durgapur Barrage completed, the irrigation system is under the Durgapur Barrage project manager, Mr. D. Mookerjee, a capable irrigation engineer on loan from the Bengal Government. Mr. Mookerjee will report directly to Mr. Das.

12. While Mr. Komora was in this country on home leave, he was authorized to obtain a construction superintendent. Mr. McClenagan has accepted the position and left for India about September 20.
13. In order to handle the installation and erection of machinery and equipment, particularly at Maithon, a post of Supervisory Mechanical and Electrical Engineer has been established reporting directly to the Chief Engineer. Mr. Mukerji, an engineer with experience on the erection of the small equipment at Tilaiya and a little experience on the installation of the equipment at Bokaro has been appointed to the position. The appointment of this engineer with limited experience to this important post has caused some friction among the other executive engineers of DVC that he will have to work with.
14. While theoretically the engineering for the hydro-electric projects came under the Chief Engineer in the past, in practice he only had what might be called a veto power on the Chief Electrical Engineer's actions. While all the civil engineering for the dams was done under the direction of an executive engineer from the Harza Engineering Company of Chicago at Maithon, all of the mechanical and electrical engineering was done at Chicago in consultation with the Chief Electrical Engineer of DVC in Calcutta. All correspondence also was directly with Calcutta with copies going to the Harza engineer and the Chief Engineer at Maithon. The Chicago office of Harza drew up the specifications for machinery and recommended awards directly to the Chief Electrical Engineer. The Chief Electrical Engineer of DVC also selected engineers for training in the suppliers' plants out of his own engineering department without regard for the ideas of the Chief Engineer. The engineering for Maithon was completed except for the normal field changes with no serious difficulties, but in the case of Panchet Hill there were difficulties which slowed up the work.
15. *Komora* Mr. Mukerji, in the absence of the chief engineer, but apparently with his approval, is setting up his erection plant and planning an organization of about 600 men which includes 100 skilled workmen to erect the plant. He tentatively has plans of obtaining new skilled employees. This certainly would not be to the best interests of DVC, not to use existing experienced men, and it has been brought to the attention of the Board. On the return of Mr. Komora, I am sure this matter will be clarified and experienced men transferred from the Chief Electrical Engineer's office to Maithon.
16. There does, however, remain a very important point that is not so simply rectified and that is the division of responsibility in the construction of the Maithon underground power house. Under the present arrangement, the project manager, Mr. B. P. Sarathy, has the entire responsibility for the civil works and does not feel that the supervising mechanical and electrical engineer should take over until his work has been completed or the work should be done simultaneously under his complete control. This point will become less important if Mr. Komora devotes his entire time and attention to Maithon and has time to act as project manager assuming complete physical control of the project. This particular point has been discussed with the Chairman of the Board because of the complicated construction of an underground power house where there is a limited area in which to work and assemble machinery, and the only means of access being through one adit or entrance.

Construction Plant

17. While the latest organization charts call for a Construction Plant Department, due to the resignation of the former department head, none exists today.
18. The original organization of this important department called for all major repair work on heavy duty equipment being done at Maithon where ample shop machinery and trained personnel would be available. Under these conditions the American Technical Mission provided about \$215,000 to finance the employment of four master mechanics. In order to simplify and speed up employment, a contract was signed with Harza to supply qualified personnel. Four capable personnel were supplied, one being assigned to each of the three major projects, Durgapur, Maithon and Panchet Hill, and the fourth to handle the major repairing at Maithon. Because of personal differences of one kind or another, two mechanics were relieved of their duties and two left of their own volition before their contracts had expired. The original planning broke down so that now each project does its own repairing, with the exception of major engine overhaul under mechanics with limited experience.
19. While it is true that "on job" training has been carried on, it is questionable as to the efficiency of the repair work. This combined with the difficulties in obtaining spare parts has led to a very poor state of repair of the heavy duty construction equipment. This has again been brought to the attention of the Board and we have suggested that the DVC personnel manager get in touch with the Central Tractor Organization at Bhopal and obtain some of their surplus experienced personnel. It was also noted to DVC that their scale of wages was way under that paid by the CTO and that the scale would have to be considerably advanced if they expected to attract experienced personnel. BHAPOL
20. The question of resignations of young engineers has caused concern. The chief reason for leaving is a desire to secure more permanent employment. DVC is attempting to explain their policies to the engineers and to inform them as to the types of engineers to be retained on a permanent basis in an effort to cut down resignations.

Progress of the Projects

Durgapur Barrage and Irrigation System

21. The Barrage has been completed together with the two head regulators and good progress has been made on the roadway over Barrage. The biggest part of this construction was executed by piece-work agreements through small contractors. Cement and steel were furnished to contractors by DVC and construction equipment was rented at reasonable terms. The Barrage was inaugurated on August 9 by the Vice President of the Republic.

28. The right and left main irrigation canals are being constructed by contractors. At the time of my visit about one-third of the total amount of earth had been excavated. While to a limited degree construction equipment is rented by DVC to contractors, the three principal contractors are using their own equipment. The balance of the contractors on this phase of the work, numbering about 38, are using primarily manual labor.

29. On the branch canals while a little of the work is being done mechanically by the DVC and two large contractors, the most of the work is being achieved by manual means by about 15 small contractors. In cases where contractors have failed to meet important completion dates, DVC has stepped in and used machinery. About 95% of the Branch canals have been completed. The excavation of the distributories is being done solely with manual means utilizing about 45 contractors. About one third of the total required excavation had been done. The excavation of the drainage canals, all manual labor, is in the hands of five contractors. About one-fifth of the work has been accomplished.

30. About 134 canal structures are completed and there are 173 under construction out of a total required of nearly 1500.

31. The project originally scheduled for completion in 1956 will not be completed until at least the middle of 1958. The principal reasons for delay are:

- 1) difficulty in obtaining land and way-leaves;
- 2) shortage of ordinary labor;
- 3) failure to use mechanized methods to a larger degree because of political conditions.

Maithon Hydro Electric Project

32. Maithon, originally scheduled for completion in the middle of 1955 is now scheduled for completion and commencing of operations in December 1956. This appears reasonable for the initial operation of the first unit but June 1957 appears more reasonable for the completion of the three units. The earth work part of the dam has progressed to a point where it can undoubtedly be completed before the concrete work. On the left-hand side the dam is to be raised about 25 feet above the present elevation and will take about the equivalent of 250,000 cubic yards of earth, a very small percentage of the total already placed. There is still about 200,000 cubic yards to be put in the transition part of the dam on the right hand side of the dam. An important part yet to be done is the hand placing of rip rap (or wave resistance) which for some reason was not placed as the dam was raised but now requires a large amount of rehandling and a great degree of manual labor. This should not cause alarm as it can easily be applied in time to meet completion dates and there is ample satisfactory rock available.

33. In the concrete part of the dam about 250,000 cubic yards of concrete has been placed out of a total of 320,000 cubic yards required. With a large plant in operation this pouring depends on the efficiency of the installation of shuttering and the continuous supply of aggregates. Completion of the

concrete part of the dam is scheduled for April. However, there are two points that must be considered.

28. First a quarry with proper quality of rock must be developed. While it is believed that a satisfactory arrangement had been found, it had not been developed to a point where it was definitely established. This particular point was covered in Mr. Slocum's report already referred to.

29. Secondly, the rock crushing plant had been broken down for about four weeks. The primary crusher is about thirty years old and looking at the records of operation, it is found that the plant has been down better than 4,100 hours because of mechanical failure out of a total of 11,000^{working} hours. This last breakdown was caused by a metal fatigue and failure of a pinion. A replacement was being flown out from the United States. At the time of the visit all concreting had been stopped on the dam for about three weeks. This was considered serious and called to the Board's attention, with the suggestion that the possible purchase of a new primary crusher be studied for Panchet Hill rather than to transfer this questionable equipment. Mr. Slocum in his report while not condemning the machine suggested that a great deal more secondary blasting be done to cut down on the size of the rocks to be crushed and relieve the load on the primary crusher. This used crusher was financed by the Bank but a certificate was received from an inspection firm that the equipment was in good condition before disbursement of loan funds.

30. At the time of the visit there had been some difficulty in the work of pouring the gate piers on the left hand side but this was only of a minor nature and of no real consequence. Work had already started on the tearing down of the crane trestle but was stopped when the technical difficulties on the piers were discovered. They were trying to pour too large batches at a time but grouting will correct the defective work.

31. The delay in construction of the Maithon dam this season was primarily caused, first by the continued failure of the crushing plant and secondly by the slowing down on the part of the labor and eventually a strike. While there were the usual grievances of low pay, the strike is believed to have been inspired by the failure of DVC to renew the contract of the Project Manager, N. L. Das. While no official statement was obtained from DVC, unofficial reports indicate that a laxity in Mr. Das's movements and execution of the project had caused DVC concern and thus the decision not to renew the contract. The project manager from Panchet Hill, Mr. B. P. Sarathy, has been put in complete charge of the civil works at Maithon including the underground power plant. (Code 148 limiting the activities of employees on the project was enforced and still controlled by the Police.) To break the strike the Army was utilized to operate the heavy construction machinery.

32. The diversion tunnel that was used during the initial stages of construction is being used as a power house tailrace tunnel after having been sealed off at the up-stream end. The flumes for three units and surge chambers are being excavated but great caution is being used because of the poor rock formation. While the quality of rock is good, slanting faults have resulted in quite a bit of over blasting. However, work in this regard appears fairly satisfactory.

33 The roof of the powerhouse has been practically completed and the ceiling lining covers about 90% of the roof. The intake has been started but no real work accomplished because of the necessity of waiting for low water conditions in order not to have to use expensive cofferdams.

34 The work is presently being done by a contractor -- Hindustan Construction Company. While using a large amount of manual labor instead of mechanized operations, the project is progressing but could be speeded up if mechanized operations are used on the excavation of the power house proper and the intake. The intake is more difficult than usual because each unit has a separate conduit and one of these is to go directly through the middle of the vertical power house adit that was used to carry all the roof excavation material to the surface.

35 While the scheduling for this part of the project calls for complete excavation and lining by February, this appears very optimistic and it seems that about June would be a more reasonable date. The meeting of the completion date of the first unit depends entirely on the coordination of the civil works with the installation of equipment. The installation of the underground cables and the outdoor switching station is the responsibility of the Chief Electrical Engineer's office. The Chief Engineer will, however, be responsible for the step-up substation as it is to be housed in a vault in the slightly inclined adit to the power house.

36 As has been noted previously, the Supervisory Mechanical and electrical engineer has set up a storage and assembly site and is presently cleaning up the machinery which has already arrived and making repairs to minor damages incurred during transit.

Panchet Hill

37 When B. P. Sarathy was transferred as project manager to do what he called "clean up a mess at Maithon," his former assistant, Mr. M. K. Ghosh, was made Acting Project Manager. Mr. M. K. Ghosh's experience is limited, but as long as the additional Chief Engineer limits his activities primarily to this project, constructions should be carried on satisfactorily.

38 Because of the delay in the Maithon project which will delay the transfer of construction equipment to Panchet, the work while steadily progressing is not up to the schedule originally set. While some new equipment such as La Toureanu scrapers have been purchased and machinery obtained from Durgapur, much work that had originally been planned to be handled by machinery is now being handled by labor contracts. The foundations for the crushing, batching and mixing plants have been completed for some time but the large equipment from Maithon will not be transferred until at least the next monsoon season (June, 1956). In the meantime small concrete mixers are being used to continue a small amount of work. It being the rainy season at the time of my visit, the activity on the project was limited. It is estimated that about 35% of the earth fill has been placed in the dam. About 7% of the rip rap has been placed, this being done manually by contract labor.

39. In the concrete part of the dam, the foundations have been about 40% excavated and about 8% of the concrete has been placed. While the original borings indicated poor conditions under blocks Nos. 3, 4 and 5, the conditions have proven more difficult than originally anticipated. It has been decided to grout around these blocks and excavate until solid rock is encountered. The engineers in charge state they will give it the full treatment. This will mean a great deal more excavation, concreting and grouting, than originally planned as well as requiring very close supervision. A large number of borings are being made at the power house site to determine the exact rock conditions before excavation is started. It is expected that this site will also require a large amount of grouting to stabilize the foundations.

40. The bids on the turbines and generators have been received and evaluated by the engineering consultants (Harza), but DVC is not in accord with their recommendations, and the award has been held up for a considerable period of time. A check with Harza shows that even on September 23 no agreement had been reached and they expected a DVC representative to visit Chicago and visit various manufacturing plants in Europe in order to settle the differences. It is doubtful, unless a decision is made immediately on the purchase, if the construction schedule recently revised by the additional chief engineer, can be fulfilled. The revised schedule calls for power house operation by July, 1958.

41. It was noted that a large amount of construction machinery was down waiting repair parts. The construction plant itself appeared in orderly shape and the stock room much improved over the conditions found on previous visits. Mr. Darwell, the foreign master mechanic, had just resigned and the recruitment of an Indian replacement was being attempted.

Konar

42. The concrete part of Konar Dam has been completed with the exception of a little cleaning up of the surface and the painting of the gates. It will also be necessary to clean up and possibly do a little grouting in the inspection galleries. The contractor, Hind and Patel, had very few people at work.

43. DVC has taken over the completion of the earth part of the dam which includes the laying of a small amount of rip rap and the construction of a road. This was all being done by labor contract and the work was very slow. However, it was planned to inaugurate the project on the 21st of September. The dam has been in actual operation for a good many months.

44. In addition to a dispute about the payment for work which has been done by Hind and Patel, the contractors, there is also a question about the salvage value of construction machinery, which had an original value of about Rs 6.8 million. The principal disagreement is in calculating depreciation of the shovels. While DVC purchased the equipment, the contractor was allowed to acquire the equipment by monthly deductions from their bills; however, DVC is obligated to re-purchase the equipment upon the completion of the job. The real difficulty is that the life of the shovels was definitely stated in the contract to be 30,000 hours, whereas the normal life of a shovel is about 15,000 hours. DVC has decided to take the problem to arbitration which results

in all of the equipment being held at Konar by the contractor and no use being made of it. It is admitted that some of the equipment is junk but a large part of it is in fair condition and could be used at Panchet Hill or at the coal mines. The contractor does not want the machinery, as a contractor is allowed to deduct a depreciation of 50% for income tax purposes for the first year the equipment is used.

BOKARO

45. The three units in this plant have now been in service for a considerable time and major repairs are now being experienced. In order to give reliable service, two units are being used continuously even though the load is less than the capacity of one unit. The maximum hourly rate to date has been 45 MW but it is expected that this will advance to about 70 MW before the first of the year. A rough calculation as to the increased cost of operating two units instead of one is about Rs 500 per day. However, because of the small load on the plant, it is taking about 1.4 lbs of coal per Kw hour. During the first phase of the operation there has only been one serious interruption to service. That was a boiler explosion of a minor nature and covered by insurance.

46. There are approximately 750 employees being utilized in the power plant operation. Of this number, there are approximately 225 that are temporary employees and they will be dropped before the first of the year. However, a total of 525 employees is considered high for a plant of this size. The services of Mr. Walter Chapman, power plant advisor, have been extended to February, 1956, but no formal contract has been signed. The Board Chairman states that the matter is being discussed in Delhi and that a contract should be available in a short period of time.

47. The most serious management problem is that the Chief Engineer of the plant does not have any control over maintenance and repair. The times selected for repair work are set arbitrarily by the Maintenance and Repair superintendent irrespective of load conditions. This has been called to the attention of the executives and closer coordination has been assured. The reduction in the number of Maintenance and Repair personnel will be done when a central maintenance and repair organization is set up to handle all projects and plants including Maithon - Tilaiya and Panchet Hill as well as Bokaro. The principal reason given for such a large maintenance and repair force was that they were still in a shake-down stage.

48. For a station such as Bokaro, in the average country an operating and a maintenance and repair force would be in the neighbourhood of, or possibly less than 150, but it is understandable that in India the force could go as high as 225 including maintenance personnel. At present in the power house alone they have about 215 operating and 275 maintenance and repair men. At Bokaro there is a housing problem because all permanent staff have to be housed which requires an additional large maintenance staff to service the colony. It has been estimated that it would be necessary to build at least 100 additional houses for the contemplated staff.

49. There is a tendency to manufacture repair parts in their own shops rather than buy factory parts. As the costs are never known, there is a great doubt that this is an economical procedure.

Transmission Lines

50. This part of the project is still lagging behind schedule partially because of delayed delivery of equipment but mainly because there has been no incentive to rush the work as the customers were not in a position to absorb the energy. The customers' failure to order and receive equipment and materials have been the principal reasons.

51. There still remains about 20 miles of line to be built at the end of both the north and the south lines. A large amount of work still has to be done on the substations at Burdwan and Kharagpur. Work was at a standstill because there are no roads along the right of way and the rice paddy fields were all flooded. The work can be completed by the end of the year and the line to Calcutta about the middle of 1957.

52. Some of the material purchased for the Bank-financed project had been used to tie the Tilaiya plant into the system so that about 2000 Kw of surplus capacity could be used to save coal at Bokaro. The use of the Bank financed material and effort used on this Tilaiya line could be criticized and it has been called to DVC's attention. However, in view of the improved economy of operation, it is not believed any real issue should be raised at this time.

Operation of the System

53. Mr. Lehaire, formerly plant superintendent at Bokaro, has been given the additional responsibility for the operation of Tilaiya and the dam at Konar. It is eventually planned to have a superintendent at each project and load dispatcher in overall charge so that the maximum benefit can be obtained from the water released for irrigation and flood control purposes. The seriousness of the situation in not obtaining an experienced load dispatcher or training one of their own men, has been expressed to the Board. It has been suggested that the least they could do would be to have one of their men trained on the Tata Hydro system or borrow one of Tata's dispatchers for initial operation. After talking with the DVC Board and with the management of Tata's, I find there are many possibilities and Tata is very anxious to cooperate. Tata's dispatchers have all been trained in the United States.

54. All engineering, construction and operation of the transmission system is still under the direction of the Chief Electrical Engineer. Both parties have decided to cancel out the Sindri contract and maintain only an emergency connection. No formal interchange agreement has been worked out but Sindri had to take advantage of the connection during the summer when they had a boiler failure. It is believed that such an interchange agreement is mutually beneficial until Maithon comes in or until the load at Sindri exceeds the capacity of the Sindri plant.

55. The small unit type steam power plant originally located at Maithon has been sold and the return from the sale was put into the DVC revenue account.

Coal Mining

56. Coal is still being mined manually under a labor contract. The price including the estimated cost of removing overburden and delivered to the coal yard at Bokaro is only Rs 13.12 as against Rs 14.25, the average price paid by the normal industry at the mine. The present contract expires February 6, 1956 and DVC is negotiating for a better price. Present indications are that a price of Rs 3-10 annas for coal delivered in the cablewayhopper can be obtained, with a cost of Rs 99 - 8 annas/1000 cu. ft. for removal of overburden. DVC will continue to remove the heavy overburden which it is believed can be done for Rs 94 - 12 annas if mechanical means are used. This is estimated as follows: Labor Rs 2.86; Direct Operation Rs 8.93; Interest Rs 4.47; Depreciation Rs 22.10; Maintenance and Repair Rs 44.21; Explosives Rs 7.87; plus a 5% overhead and general expense item.

57. The overall cost of coal delivered at the Bokaro yard would be Rs 12.8. At present there is about a three months' supply at the plant.

58. Only surplus construction equipment is being used at the mine and that is in poor condition. It is planned to expand this operation as more construction equipment is declared surplus. There is still no definite date of operation of the Central Government coal washery which will make middlings available to DVC. It is estimated that middlings from such a plant can be delivered to the Bokaro yard at a cost of Rs 10.

Load Forecasts

59. DVC has made a number of load forecasts. The ones of importance are the ones made in August, 1954 when DVC applied to the Central Government for permission to install a fourth unit in Bokaro, the one made by the Central Government in the spring of 1955, and the revised estimates made by DVC in the summer of 1955 when the loads at Calcutta, the electrification of the railways, the steel mill load, the Sindri Fertilizer load, etc. became more crystallized.

A - DVC - August, 1954	55/56	56/57	57/58	58/59	59/60	60/61	61/62
System Demand MW	80	100	136	192	222	249	274
B - CWPC - Spring 1955							
Firm capacity MW	141.5	141.5	178.5	270.0	270	270	307
System Demand MW	66	91	162	216	262	299	321
C - DVC - July 1955							
Firm Commitment MW	70	112	165	204	255	288	296
Additional		12	19	44	75	107	113
Total	70	124	184	248	330	395	409

60. While the next two years of the latest DVC estimate looks reasonable, the following years look unrealistic in view of DVC's past performance. The Bank's forecast at the time the last loan was made follows:

MW	119	132	156	169	189	210	231
----	-----	-----	-----	-----	-----	-----	-----

The Bank estimate did not include the presently expected Calcutta load which will be initially supplied in middle 1957.

61. It is true that there have been a number of changes in the industrial development of the Valley but the real reason for the DVC falling short of the Bank's estimates has been the failure of DVC to coordinate their customers' development with their own. This has continually been called to the attention of DVC. There appears to be better realization of the importance of development planning as the last move, made recently by DVC, was to set up the commercial activities separately and limit the commercial manager's activities to looking solely after maintaining old business and obtaining new business, rather than spending the biggest part of his time supervising the operation of the Bokaro plant, forecasting Plant operating costs, estimating costs of new extensions, and supervising coal mining operations, etc.

62. Considering the demands as now forecast, there would not appear to be any immediate need for planning additional generating capacity. The capacities as now installed and under construction are:

Tilaiya	4000
Bokaro as now installed	150,000
Bokaro - possible	180,000 (Higher Hydrogen Pressure)
Maithon 1957	60,000
Panchet Hill 1958	40,000
	284,000
Normal Firm Capacity	224,000

This would indicate that a possible shortage might occur in the DVC fiscal year 1959/60 but as has been expressed such a rapid load growth as forecast by DVC seems very improbable. It is my opinion that this shortage would not occur until about 1960/61 at the soonest. Of course the installation of generating equipment by other governmental organizations or the connection of the DVC system with Hiracud (this is not entirely unlikely either through the Calcutta system or directly) would considerably change the picture.

63. The most important consideration along these lines now is being given to the construction of a coking plant at Durgapur by the State of West Bengal. The State plans on using the reservoir behind the Durgapur Barrage for condensing water and the canal system for transportation of the coke. The installation as now envisioned would be two 30 MW units. However, an additional study is being made of one - 75 MW - which could be more adaptable to the contemplated expansion of DVC. The plant would be financed by the State directly and DVC is committed to let the State put in the plant, ~~and to buy the surplus power.~~ The State anticipate using some energy themselves for distribution in the State outside the operational area of DVC.

64. It is, however, essential if the loads are to be supplied that Maithon must come in no later than the middle of 1957 and Panchet Hill not later than the middle or fall of 1958.

65. Other plants being given consideration by DVC are:

Hydro (additional)	40 MW	Panchet Hill before March	1958
Thermal (additional)	75 MW	Bokaro	" " 1959
Hydro (new)	40 MW	Konar	" " 1959
Thermal (new)	150 MW	at Ondal or Bargarh	1960

66. Preliminary investigations have also been conducted on hydro projects such as Aiyar, Balphari, Bermo, etc., but these would only be economical if the projects are found necessary for other than power purposes which would carry a substantial share of the investment.

Rate policy

a) Power

67. Although no rate policy had been defined prior to my visit, the Board established a policy which in general meets the Bank's ideas, namely:

- 1) Revenue should cover all charges and produce a small surplus for contingencies; (*including depreciation reserve*).
- 2) Power should not be sold to any customer or class of customers at a loss;
- 3) A uniform tariff to the same class of consumer;
- 4) DVC does not recognize any preferential class of customers.

68. Rates originally established including a fuel clause are still in effect and give a return of .8 Annas per Kwh. It is recognized that the cost of operations at the present time exceed revenue but it is not planned to increase rates until the load increases so that the normal cost of operation of the Bokaro plant is known and the capital investments in Maithon and Panchet Hill are more firmly established. This attitude appears sound as increased costs of power now could possibly result in a lower volume of sales of energy which in turn would also have an adverse effect on costs and rates of return.

b) Water for Irrigation

69. The detailed policy obtained at the time of my visit in general meets the Bank's ideas, namely:

It is generally agreed between the DVC and the West Bengal Government that the water will be sold to West Bengal at a bulk rate calculated on a volumetric basis, as advised by the Government of India. This rate is to be eventually fixed so that it will enable the DVC to meet interest charges on capital, operation and maintenance charges, depreciation of assets, overhead of headquarters and a small percentage for profit.

70. The tentative rate agreed to recently specifies a wholesale rate of Rs 7-12 annas per acre but this is only for one season and for a section of the canal system that is completed and set low so as to encourage new customers. It is planned to step up the rate progressively as the irrigation system expands and the people become better educated to the benefits of year-round irrigation. Whether this is a sound policy is questionable, but until the construction of the system is further advanced and more firm estimates of costs of construction and operation are available a real study cannot be made.

71. At the time the DVC Rupee loan was obtained from the Government of India, rates for water of Rs 10 per acre for Kharif crops and Rs 15 for Rabi crops were established. It is anticipated that these rates will be met but it must be remembered that these rates were established as a consumer cost and now that it is fairly certain the system will be owned by DVC but water will be sold in bulk quantities to the State, the actual rate of return to DVC may be somewhat lower.

Estimates

72. Revised estimates for the Bank financed projects have been prepared. The following is a comparison of these with those established at the time the loan was prepared:

<u>2nd Loan</u>	<u>Original (1952)</u>	<u>Revised (Middle 1955)</u>
Maithon Project	Rs 139.0 Millions	Rs 162.9
Panchet Hill Project	Rs 148.0 "	Rs 174.0
Durgapur Project	Rs 200.0 "	Rs 227.8
Construction Equipment & Engineering	Rs 3.5 "	*
	Rs 490.5 Millions	564.7 (115%)
<u>1st Loan</u>	<u>Est. 1952</u>	<u>Revised</u>
Transmission Lines and Substation	Rs 82.0 "	Rs 86.0 Million

* Construction Equipment and engineering in each item.

73. As can be seen, the increase in the estimated costs of the second loan projects reflects about a 15% increase in labor costs and inflation caused by the Korean War. It also represents an increase in the cost of land.

74. In my opinion, the estimates are still open for questioning and until the Maithon project is further advanced they should be considered as rough estimates.

Engineering and Supervision of Construction

75. As has been covered by previous memoranda, the money allocated by the American Technical Mission to India, representing a total of \$832,000 is considered as insufficient to cover the complete work for Maithon and Panchet Hill. (Total capital cost of projects \$70 Million) Up to the present all mechanical and electrical engineering work was done in Chicago and the civil, done by Indian engineers under the guidance of a Harza Engineer, at Maithon. The mission money only covered American salaries and services and represented only 1.2 % of the cost of the project which is low. It was considered last summer that the money would last through February of 1956 if all mechanical and electrical work was transferred to India and done at the site under the supervision of another Harza engineer. The transfer of the work has never been done. However, no decision on the purchase of the turbines and generators has been made and the work at Chicago has come to practically a standstill. The total amount spent to the end of August was about \$700,000. The estimated amount required to complete the two projects or through the end of 1957 is \$285,000 or about \$155,000 more than that covered by the mission grant. This, however, does not include the services of a foreign experienced machinery installation man which it is felt is necessary and very essential. DVC has been informed that the Bank would be willing to consider a change in the list of goods which would be necessary to cover these items. The original amount for the cost of engineering in the list of goods was \$200,000, but this was later reduced at DVC's request to \$83,000, \$48,785 of which has already been used for the Chief Engineer's salary, something that was not foreseen at the time the agreement was signed.

76. Harza is submitting a new proposal on the basis of the work being all done in Chicago but does not include the services of the mechanical and electrical supervisor. DVC has not been able to secure mechanical and electrical engineers to do the work at Maithon.

77. It might be mentioned here that a Harza engineer and a DVC engineer are in London prior to visiting the continental factories of the various bidders before making a decision on the purchase of the principal equipment for Panchet Hill. The time lost in making a decision will seriously delay the completion of the project.

Financial

78. In accordance with the DVC Act, they are still not paying interest on the money borrowed from the Government or taken depreciation on the Bokaro project.

79. During the fiscal year 1954/55 the budget allowed an expenditure of Rs 160 million for all construction and operation but only about Rs 130 million was spent. This was partially due to the long strike at Maithon.

80. Section 39 of the DVC Act provides for interest charges and losses to be added to capital costs if the DVC operates at a deficit. However, a proforma operation and maintenance account is being kept separately. The revenue receipts together with other miscellaneous receipts have been treated as capital receipts and taken in reduction of expenditures.

Release of Construction Equipment from Projects

81. Prior to my trip the Bank had received a request from the Indian Government that release be given by the Bank so that surplus equipment could be released to other projects in India. In a discussion with the DVC Board, they were informed that it was the general policy of the Bank to concur in the release of equipment from Bank financed projects when equipment became worn out, obsolete, or surplus to the needs of the project. However, the Bank wished to be advised prior to the removal and given an opportunity to comment on the release. The Board assured me that they did not intend to release the equipment before it had served its useful purpose but we have since received a request to release a tractor that will be sold and transferred to Kosi.

82. It, however, came to my attention later that the Central Government was considering setting up a construction company to do contract work throughout India and that they intended to pool all construction equipment in India.

83. In order to eliminate any pressure by the Central Government upon the DVC to release equipment prior to the end of its useful life on the project, it would be well to reiterate the Bank policy to the Central Government and send a copy to DVC. Informally I was informed that both Kanwar Sain, head of the Department of Water and Power, and Mr. P. S. Rau are active supporters of the construction company plan. My own opinion is that with active government support the present Indian contractors in a joint venture with reliable foreign contractors can handle the majority of the new and proposed projects and eventually build up their organization to a point where private contractors can do the work for the entire country. The mere fact that the Central Government wants to set up such a company indicates that departmental operation is not proving satisfactory.

Slocum Report on Maithon

84. A copy of the report was obtained. The summation of the prime needs to enable completion within the dates outlined were:

- 1) Prepare immediately a new quarry;
- 2) Relieve crusher loads by pre-fragmentation;
- 3) Eliminate penuriousness regarding spare parts; and
- 4) Re-study concrete pouring schedule.

He found nothing radically wrong and was sure that if the above four points were followed, lower costs and an improved completion date would be realized.

DVC Construction Equipment Repair Parts

85. While there has been a general relaxation by the Financial Adviser in the purchase of spare parts after the receipt of the Slocum report, there is still a lot of room for improvement.

86. Mr. Slocum suggested that there might be as much as 150% of the value of new equipment required for spare parts. Our opinion is that if it requires more than 100%, serious consideration should be given to retiring the old equipment. Mr. Slocum suggested that possibly 25% of the value would be invested in spare parts at the completion of the project, which appears reasonable.

87. DVC has complained that equipment suppliers have not been cooperative in maintaining repair parts so a visit was made to one of the large suppliers, Blackwood Hodge. In a review of orders it was established that during the first part of this year very small orders were placed but at the first part of the monsoon season large orders appeared requiring immediate delivery. At the time of my visit in August only about 60% of this order had been delivered. This demonstrated that the real trouble was right in the DVC as it is impossible for a supplier to anticipate requirements if not informed as to needs of a customer. The idea of notifying the suppliers of anticipated requirements in the beginning of a year and placing orders in the spring for parts that will be required for major overhaul during the monsoon season is important. This serious condition has² again been called to the attention of the Board.

88. The supplier showed me a list of parts that he said had been submitted to him by DVC at the end of 1954 as surplus to the needs of DVC and requested their cooperation in disposing of them. The notations in the column showed that as many as three and four new orders had been received from DVC for the identical parts since the list was received. This indicates poor organization and the lack of experienced master mechanics.

89. The personnel director of DVC assured me that they would recruit a new head for the Construction Plant Department under which this falls and also that they would exert every effort to recruit experienced master mechanics.

Disposal of Construction Camps

90. The State of West Bengal have about consummated arrangements for taking over the construction camp at Durgapur Barrage. DVC will erect a new permanent camp for the operating personnel of the Barrage. The State is purchasing the facilities in anticipation of the construction of the coking and generating plant. The money received by DVC will be classified as "other revenue."

91. Negotiations are also reaching the final stage in regard to the sale of the Maithon Construction Camp to the Central Government for the Department of Communications. DVC plan to build a permanent camp for Maithon operators across the river in the vicinity of the power house. DVC classify this as an industrial development as the shops will be used for the manufacture of communications equipment.

92. The construction camp at Tilaiya has been sold to the State of Bihar as a housing development and DVC plans to build about forty new permanent homes for Tilaiya operators. The diesel generating plant was also sold to the State who have transferred it to other places in the State where there is a shortage of electric energy.

93. In the case of the first loan, the amount of \$870,000 that the DVC has requested the Central Government to cancel was originally intended for machinery to be used in the coal mining operation. As no definite decision has been made on the Government coal washery which would make the mining equipment surplus, it appears logical that the Bank concur in the request for cancellation of the balance of the loan.

CONCLUSIONS

The projects are behind the original schedules but this is primarily due to too much optimism when the schedules were originally set up. The timing did not take into consideration the shortage of trained personnel, the possibility of war in Korea, or possible strikes such as has been encountered at Durgapur and Maithon.

The latest and most reliable scheduled completion dates appear to be:

Maithon	First part of 1957
Panchet Hill	" " " 1958
Irrigation System	Middle 1958
Line to Calcutta	" 1957

There still remains a lot of changes to be made if the network is to be operated in the most efficient manner. Primarily this centres around the establishment of an Operating Superintendent that would have complete charge of the power plant and transmission system and regulate the operations to get the maximum economy.

There should be a reorganisation at the Bokaro plant eliminating the engineering department, decreasing the overall staff to about 225 men for both operation and maintenance and making the Chief Engineer responsible for all maintenance and repair.

The Construction Plant Department should be adequately and efficiently staffed. Possible selection from the Central Tractor Organization should be attempted. An intelligent inventory should be made of all spare parts and the dealers in heavy construction equipment informed of possible repair requirements. Machinery should be carefully checked and old worn-out equipment junked. Equipment surplus to the needs of DVC should be listed and submitted to the Bank in ample time for the DVC to receive Bank comments before the equipment is disposed of.

A continued drive should be maintained to secure additional loads and to coordinate the purchase and construction of customers' equipment with that of DVC.

It is not felt advisable to adjust the electric tariffs until more definite information is obtained on the cost of operation of Bokaro and the capital costs of Maithon and Panchet Hill. In regards to the irrigation rates, these should be adjusted upwards next year.

LIST OF MATERIAL BROUGHT FROM INDIA (see India Docs
BY MR. MARSHALL - September, 1955 VI-67)
AFTER END-USE INSPECTION.

- I. Damodar Valley Corporation (Budget Estimates for 1955-6) (sent to Jago, Jan 13/56)
- II. Future Power Requirements for the Damodar Valley Corporation (for 2 countries)
- III. DVC Organisation Chart (August 1955)
- IV. Maithon Project (Construction equipment) - June, 1955
Panchet Hill Project " "
Barrage and Irrigation Project (Construction Equipment)
- V. Staff of B.I.R.S. - Regular, Sanctioned and Workcharged
- Va. Personnel Strength July 1955 (Average) - DVC - Bokaro Thermal Power Station
- VI. Panchet Hill Project - Summary
- VII. Two unit operation under the present load condition (29.7.55) (Sindri)
(signed by Operation Superintendent)
- VIII. Bokaro Thermal Power Station - Bokaro, June 28, 1955
(Ref: Power failure at Bokaro on 27.6.55)
- IX. a) Bokaro Thermal Power Station - 11.8/55 - Daily report
" b) Weekly statement of generation, fuel consumption, etc. (July operation)
" c) " " " " " " (June ")
- X. Record note on the discussions between the DVC and S.F.C.L. at Ranchi on 4 June, 1955
- XI. DVC - Bokaro Thermal Power Station - Generation
Load Forecast for 1955-56
Cost Sheet for March 1955 - Final
" " " June "
- XII. Annual Report of the DVC - 1953-54 (sent to Amjago, Jan 13/56)
- XIII. Rate Policy - in the Barrage and Irrigation Project
- XIV. DVC - Construction Schedule and Progress - Barrage and Panchet Hill - Aug. 1955
- XV. a) Maithon Project - Revised Estimate 1955 (provisional)
b) Panchet Hill Project - Revised Estimates 1955 "
c) DVC - Recast estimates for Barrage & Irrigation Project
- XVI. Generated Load of Bokaro on 28.6.55
- XVII. First (Bokaro-Konar Project) Loan No. 23-IN & second (Damodar Project Loan No. 72-IN
(DVC Statement on loans)

- XVIII. Damodar Valley Corporation - Transmission & Distribution System
Revised Estimate - 1954
- XIX. Konar Figures by Patel - A short Note on the Report of Investigation
Committee regarding Konar Dam.
- XX. Damodar Valley Corporation - Letter of Sept. 15 1955 from Mr. Kshetrapal to
IBRD (enclosed construction schedules) (filed Sept 15)
- XXI. " " " - Letter dated 19 Aug. 1955 from Mr. Mookerjee to
Mr. Marshall in Ceylon (brief review of progress
on the B. & I. Project)
- XXII. Schedule No. 2 (Group A and Group B)
- XXIII. DVC letter of Aug. 20 1955 to Mr. Marshall from Mr. Subramaniam enclosing
figures on sales
- XXIV. Loan Agreement (Damodar Project) dated Jan. 23, 1953
- XXV. Report on Projects submitted by the Indian Government for a second loan in
connection with DVC dated Jan. 16 1953 (Tech. Oper.)
- XXVI. Report on DVC Electrical System - by W.D. Lawrence of the U.S. Technical Co-op.
Mission.



Record Removal Notice



File Title Damodar Multi-purpose Project - India - Loan 0072 - P009589 - Administration - Volume 3		Barcode No. 1847781		
Document Date 06 October, 1955	Document Type Memorandum			
Correspondents / Participants To: Mr. V.G. Pendharkar From: Dr. Antonin Basch				
Subject / Title India (Loan 72 IN) - Transfer of Surplus Machinery from the D.V.C. to other Projects				
Exception(s) Information Provided by Member Countries or Third Parties in Confidence				
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group. <table border="1"><tr><td>Withdrawn by Tonya Ceesay</td><td>Date June 13, 2017</td></tr></table>	Withdrawn by Tonya Ceesay	Date June 13, 2017
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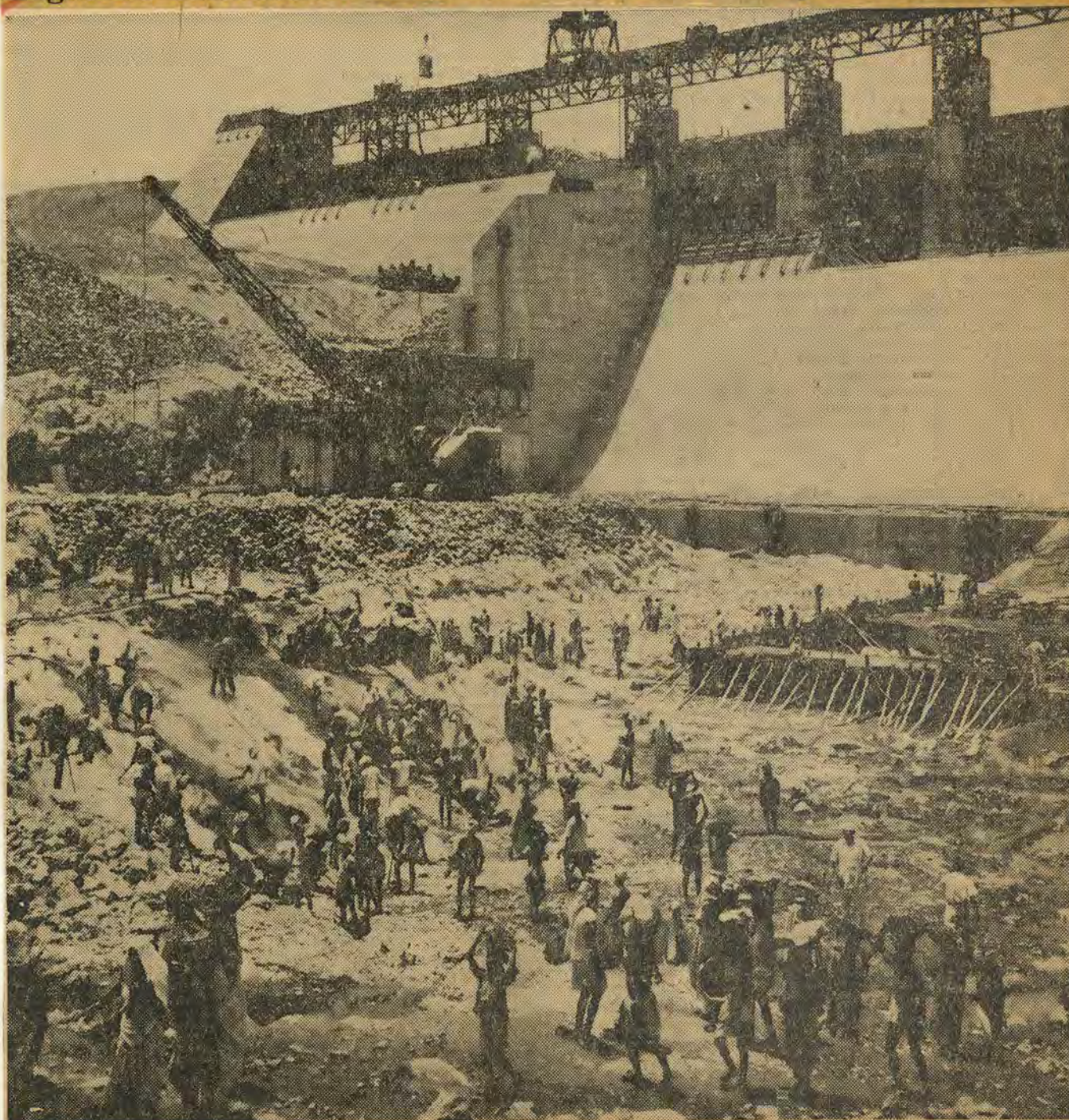
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PRESS CLIPPING SHEET

SV C file

ROUTING LIST	ROOM	FROM	COUNTRY	FILE
1.		A. Basch	INDIA	
2.		One of the following MUST BE CHECKED before returning the attached clipping to Research Files: RETAIN 6 MONTHS ☐ RETAIN 1 YEAR ☐ RETAIN (SPECIFY) _____ YEARS DISCARD ☐	SOURCE	
3.			NEW YORK TIMES	
4.			DATE	
5.			September 26, 1955	
6. RESEARCH FILES	1215			

Engineers Turn India's Dread Damodar River Into Symbol of Progress



Government of India

The Konar Dam, now complete, is one of four storage dams, each with power station, on the Damodar River. Once a synonym for flood, the river, which courses through northeastern India, is becoming the key to an industrial basin.

RIVER OF SORROW TO SPUR INDUSTRY

Subcontinent's Economy Will
Be Improved by Four Dams
Built to Harness Floods

Special to The New York Times.

DAMODAR VALLEY, India. Sept. 13—The Damodar River, once India's River of Sorrows, has turned this valley into one of the most important industrial basins in Asia.

For centuries, the waters of the Damodar meant only the terror of flood for the people of Northeastern India. At one moment in history, in 1943, the Damodar became an unhappily familiar name to Allied commanders. For six months the river floods washed out communications and delayed staging operations for the march back to Burma.

In India today the Damodar has become a word of progress instead of devastation. Its waters, tamed by years of work that already have cost the lives of about 100 laborers, now are providing power for industry, water for irrigation, channels for navigation.

The Damodar also has come to mean a lot of things that do not show up on engineers' charts or economists' statistics. It has brought new technical skills to Indian engineers and a large measure of pride to the entire country. And in an India bent on socialism, it has provided an example of private industry and government working together.

Every inch, every turn of the Damodar is known as intimately

to the engineers as the rickshaw pullers know the streets of Calcutta. The Damodar rises in the western part of the State of Bihar and flows southeast for 180 miles before entering the neighboring state of West Bengal. It turns south then and thirty miles below Calcutta enters the Houghly River.

The valley through which it runs covers about 9,200 square miles, green and fertile in the south, rocky and desolate in the north. About 5,000,000 persons live in the valley, poor as any in India and with the extra weight of malaria on them.

Poor People, Rich Valley

The people are poor but the valley is rich, the richest in the country. In the Damodar Valley are 80 per cent of India's coal, 98 per cent of her iron ore, almost all her copper. There is some of the best mica in the world and there is bauxite, chromium, manganese, silica, sand and gravel. And there is careful talk about uranium.

From the Damodar River now comes the power that, combined with the wealth in the ground, has made the valley a foundation of the Indian economy. Power from the Damodar, built up and stored by flood control dams, is feeding iron and steel plants, locomotive works, chemical and fertilizer factories and cement plants. The project is government-owned and government-developed but the power it produces ties into a complex of plants mostly owned by private industry.

The valley project is patterned after one in the United States—the Tennessee Valley Authority. It was a TVA engineer, W. L. Voorduin, who, in 1945, drew up the plan outline.

Mr. Voorduin suggested that instead of merely concentrating on flood control, the Government use the Damodar for a multi-

purpose project: flood control dams to be used as generators of hydro-electric power, the cheap coal of the region to be used in a thermal power station to provide a backstop in time of water scarcity, a diversion dam to provide irrigation water and a system of drainage and navigation canals.

Loan from World Bank

The idea was accepted and the Government drew up plans for a \$200,000,000 development project. Three years later, the work started, under a semi-autonomous Damodar Valley Corporation. The International Bank provided loans of about \$70,000,000 and the United States contributed about \$800,000 to meet the cost of American supervising and design engineers.

The job is scheduled to be finished ten years after it started, in 1958. In some places it is running behind schedule. There have been accidents caused by inexperience, organizational problems and maintenance shortages. But foreign engineers believe that these were the almost inevitable by-products of lack of experience. Taken as a whole, they say, the project is an outstanding achievement.

By now, the project has changed the face of the Valley. Irrigation and navigation canals run through the land, feeding 185,000 acres. The goal is 1,000,000 irrigated acres and an increased rice production of about 300,000 tons a year. Having a dependable supply of waters from the canals feeding out of the dams means that fish cultivation has become possible.

Two Dams Finished

Four huge storage dams, each with a power station, are the essentials of the plan. The dams at Tilaya and Konar are complete and their stations are generating power. The coal power plant and dam at Bokaro is almost finished and the dams and hydroelectric plants at Maithon and Panchet Hill will be finished within two years. The power stations will contribute 240,000 kilowatts of power to the valley's industry and will be distributed to the factories by a transmission grid of more than 800 miles.

Every part of the project is designed to do more than one job. The navigation channels, for instance, will bring coal more cheaply to Calcutta, the metropolitan heart of North-eastern India. The canals also will bring food to the city and to the industrial area of the valley. To the farmers, the canals will bring cheaper fertilizer from the government plant at Sindri.

The people of the valley are still poorly fed, poorly clothed and miserably housed. The project has not suddenly lifted them out of thousands of years of want. But already the gifts of the now-benevolent River of Sorrows are affecting the daily lives of the valley people. Unemployment is down, crops plumper and more stable and the fear of flood is gone.

2472
September 26, 1955

Mr. James B. Davis
India Desk Officer
International Cooperation Administration
Washington 25, D.C.

Dear Mr. Davis:

We appreciate very much your letting us review
Mr. Marstrander's report.

Very truly yours,

L. Gray Marshall
Public Utilities Division
Department of Technical Operations

Enclosure

AIR MAIL

September 21, 1955

Mr. G. D. Kshetrapal
Secretary
Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27, India

Dear Mr. Kshetrapal:

Ref. 98/55-7773 ✓

I wish to acknowledge receipt of and thank you for sending me the copy of the Revised Estimates regarding the Transmission and Distribution System which I had requested when in Calcutta.

Yours sincerely,

L. Gray Marshall
Public Utilities Division
Department of Technical Operations

LGM:fmc

LSM

September 21, 1955

Damodar Valley Corporation
Anderson House, Alipore
Calcutta 27, India

Gentlemen:

Loans Nos. 23-IN and 72-IN

We acknowledge with thanks receipt of your letter No. WG-99/54-8382 of September 15, 1955, and the information attached thereto. We are studying this data with interest and, if necessary, will communicate with you further.

Yours very truly,

W. Lionel Jago
Public Utilities Division
Department of Technical Operations

MEC



GRAM : DAVALLED

PHONE : ALIPORE 1765

DAMODAR VALLEY CORPORATION.ANDERSON HOUSE, ALIPORE
CALCUTTA-27

No.WG-99/54- 8382

September 15, 1955.

From: Shri G.D. Kshetrapal, IAS.,
Secretary.To : The International Bank for
Reconstruction & Development,
1818 H Street, N.W.,
WASHINGTON 25 D.C.

Dear Sir,

I am directed to refer to Mr. Spottswood's letter of the 25th February 1955 and to furnish below the Corporation's comments on the various points raised therein :

Ch. S. Agan
Left for India
Sept 25

1. Appointment of a Chief Construction Engineer:

A suitable candidate for the post of Chief Construction Engineer has since been located in the States. He is expected to report himself for duty soon.

Mr. A.T. Douglass has been helpful in making certain suggestions for expediting the concrete work. The construction personnel of the Project have also become trained in concreting operations. The post of Additional Chief Engineer has since been created to relieve the Chief Engineer of a great deal of administrative work. It will now be possible for the Chief Engineer to devote more time to Project matters.

Approximately 76% of the total volume of concrete has already been placed on the Maithon dam. At the instance of the Government of India, Mr. Slocum

Contd.

ack 9/21/55 - mee

examined the causes of delay and retardation of schedules and rise in costs of the Project. A copy of his report is enclosed.

2. Separation of the commercial activities from the office of the Chief Electrical Engineer:

Although the Corporation is of opinion that the objections to the position of the Commercial Engineer are purely theoretical and have not revealed themselves in practice, still in deference to the opinion of the Bank, it has now been decided to effect a formal separation.

3. Extension of the term of Mr. Chapman:

The TCM authorities have already been moved in the matter and it is hoped that Mr. Chapman's term will be extended for another year.

4. Acceleration of the canal construction programme and intensification of educational programme for full utilisation of canal water by the farmers:

The Durgapur Barrage has been completed and formally opened by the Vice President of India on 9th August 1955. Greater stress is being laid on the completion of the canal system by the scheduled date. The services of the Mechanised Earthmoving Division of the DVC as also those of contractors are freely utilised. At present, 75% of total earthwork have been let out on contract and 45% completed. 20% of the structures connected with the canal system have also been let out on contract and 7% have been completed. The work which has been let out but not yet completed is also proceeding satisfactorily. All preliminary arrangements are completed regarding water supply for irrigation to about 1,00,000 acres from this season.

The educational programme is being intensified in collaboration with the Government of West Bengal. The Corporation has decided to establish a Central Experimental Station in the lower valley to

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carry out experiments, demonstration and propaganda with a view to educating the cultivators on the use of irrigation, crop rotation, better crops, increased output, vegetable cultivation, fruit culture etc.

5. Moving of the construction equipment from Maithon to Panchet:

Taking into account the fact that it is not necessary to store water in the Maithon Dam during the monsoon of 1955, the construction schedule has been extended to enable the concrete dam to be completed by end of April 1956, well ahead of the monsoon of the year. The installation of the undersluice and crest gates will also be completed ahead of the major monsoon flood to enable effective utilisation for flood control. It is planned to start transferring one concreting crane and part of the steel trestle to the Panchet Project in the beginning of 1956 the rest to follow after the completion of the Maithon Dam.

Some of the equipment which is to be transferred from Maithon to Panchet Hill will require a great deal of repair. This has been taken into account in scheduling the transfer of the equipment and the work at Panchet Hill.

6. Latest schedules for Maithon and Panchet Hill Power Station:

To supply power for electrification of the Railways and other consumers in the eastern region, the construction schedule of the Maithon Power House is being pushed on and even so we do not anticipate that the first generating unit will be ready before December 1956. Tenders were invited for Panchet Hill Turbo-Generator and Transformer and have since been received. It is proposed to place an order for the main equipment in the near future. Tenders for other equipment will issue in due course. The latest construction schedules prepared by Chief Engineer for Maithon and Panchet Power Stations are enclosed. These schedules are now under consideration by the Corporation.

7. In compliance with the wishes of the Bank, the Corporation will continue to send monthly progress reports also incorporating therein information

Contd.

regarding the amount of power sold, cost of generation and transmission, revenue from power sales etc. As a matter of fact, this information has already been shown in the monthly progress report for February. The only difficulty, in this connection, is that our figures for cost of generation would be pro-forma and cannot be reconciled directly with the monthly financial accounts.

8. Settlement of Mr. R.L.E. Cook's claim:

Mr. Cook has been told after taking legal opinion that the Corporation do not recognise him and have nothing to do with his alleged outstanding claims for work performed by him under the structural steel and boiler contracts for erection of the Bokaro Thermal Power Plant. It is for him to settle the same with the Kuljian Corporation with whom he had entered into a contract. Mr. Cook has since filed a suit in U.S.A. The Corporation has been advised to decide to ignore the proceedings as the Courts in U.S.A. have no jurisdiction to entertain a suit against it.

Yours faithfully,

G.D. Kshetrapal

(G.D. Kshetrapal)
SECRETARY

Accompaniment:

/skm:
14.9.55.

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/skm:

Accompanyment:

SECRETARY
(C.D. Karyakbaev)

[Handwritten signature]

Don't forget!

against it.
U.S.A. have no jurisdiction to interfere in and
decide to ignore the proceedings as the courts in
and in U.S.A. The corporation has been advised to
entered into a contract. Mr. Cook has since filed a
same with the Russian corporation with whom he had
previously power plant. It is for him to settle the
steel and boiler contracts for election of the Bokalo
claims for work performed by him under the agreement
and have nothing to do with his alleged outstanding
obligation that the corporation do not recognize him
Mr. Cook has been told after taking legal

8. Settlement of Mr. B.T.E. Cook's claim:

financial accounts.
and cannot be reconciled directly with the monthly
figures for cost of generation would be broken down
the only difficulty in this connection is that only
shown in the monthly progress report for February.
matter of fact, this information has already been
and transmission, revenue from power sales etc. As a
regarding the amount of power sold, cost of generation

ESTIMATE
PLANT DESIGN
MANAGEMENT.

M. H. SLOCUM
CONSTRUCTION CONSULTANT
2005 FLETCHER AVE.
SOUTH PASADENA, CALIF.

TELEPHONE
PK. 1-1085
LOS ANGELES, CALIF.

April 30, 1955

Shri P.S. Rau, Chairman
Damodar Valley Corporation
Calcutta

Sir,

At your request I have gone over the Maithon Dam Project on 28th, 29th and 30th April with the end in view of being of assistance to help solve some of the problems permitting an early completion date of this important unit of the D.V.C.

1. Upon arrival at site I found all work shut off due to a week old labor strike and was informed that this condition was preceded by a slow-down of labour extending over a period of some 6 or more weeks.

2. An analysis of the remaining work to be done shows -

A- Concrete in dam and spillway walls some 120,000 cyd. which in my opinion will take 7 to 8 months to complete after full return to work of crews now on a strike and assuming that they can and will turn out the norm of work preceding the "slow down" and strike.

B- 800,000 cyds. of embankment of all classifications which I believe can be done by the time concrete and taintor gates of spillway section are complete.

C- Work on the power plant excavation and appurtenant works appears to be progressing in an orderly manner and is at least two years to 3-unit power, probably 15 to 18th months for 1st unit.

3. I find the project is adequately equipped and staffed and make no comments on "might have been".

4. One point of weakness is lack of a proper quarry. There has been chosen a site, some exploratory drilling done to prove its adequacy, and preparations made to strip the area of the overburden. I recommend the following :-

A- Drill and shoot the overburden to permit ready and economical loading. Use two or more 2½ yd. shovels for this task (or as many as required to keep up with the drilling and shooting program). THIS IS URGENT and the production key.

4. B- Layout the quarry after the overburden is removed and area is proven to attack in 20 ft. lifts if drilled by wagon drills (which are job equipment) or in a 40 ft. lift if rotary drill is employed - 400 ft. minimum of face required.

C- As rock is exceptionally hard and of close texture better results will be obtained by close spacing of drill holes to enable rock breakage into the smallest economical fragmentation. This Rock is inclined to break in large fragments making difficult to load, handle and crush.

D- I urgently recommend extensive secondary shooting of the large fragments in the quarry followed by further breaking with a "headache ball" of 3000 to 4000 lbs. weight operated by either truck crane and or a crawler crane of proper capacity (some difficulty will be experienced in teaching men to use the "skull cracker" but its proper use will pay dividends so I urge all-out attention to this detail).

E- There is some 7 to 8000 cyds. of quarried rock adjacent to the primary crusher that I urgently recommend the same treatment as in 'C'.

5. Primary breaker is a 42" Mc. Cully Superior crusher that needs some repair work done to put it in proper shape and that would have been done sans the strike slow-down. The crusher, is definitely adequate for the work required, and its production will increase if the program outlined in C to E inclusive and para 5 is rigidly followed.

A- Due to the conditions outlined above the stockpiles are out of balance and should be put in balance by using surplus as earthdam wave protection and filter sand.

B- As the concrete work progresses the need or permissible use of the 6" minus and 3" minus rock will lessen and the smaller sizes will increase. This will entail added work on the secondary breaker and makes imperative that paragraphs C to E be heeded.

C- I desired, due to the exceptionally abrasive quality of the rock, the call to your attention the need of spare parts for both the primary and secondary breakers, particularly in view of the fact that this equipment is to be used at Panchet Dam at a later date. This I cannot stress too strongly.

D- I found some belts in need of repair, due to rock or steel fragment punctures. As these belts are adequate for the Panchet work I recommend that this be done immediately.

6. Batch-mixer plant is of standard design, kept in excellent mechanical condition and has a capacity ~~for~~ ^{far} above the quantity required.

7. Concrete cars, buckets, locomotives are numerically sufficient and in excellent mechanical condition.

8. Revolving cranes are of ample capacity and using the 6 cu.yd. concrete load have a safe capacity of 100 cu. yd. concrete per hour each, provided experienced operators are employed.

9. Trestle needs no comment. Suggest a strong effort be made to complete the left end of the dam and spillway walls and removal of the last three trestle bents so that the earth+rockfill of the dam can be made.

10. I find the class of form work and form alignment to be good and no unnecessary fills employed.

9/ 11. Concrete itself is of excellent quality and appearance and ^{urge} consideration of the use of less cement from Dam elevation 434 to completion of structure. Ample strength will be obtained with 200 pounds of cement per cu. yd.

11A. Concrete costs -

A. The estimate of 1952 apparently did not consider the difficulty of no pool of trained efficient personnel. This training of personnel to do work in a manner opposite to their experience has caused considerable, if not all of the added cost above the 1952 estimate which had no yard stick to judge by.

B. The reduction of the concrete quantity of the 1952 estimate by some 25%, while a tremendous saving in overall cost to the project will unquestionably raise the unit costs by approximately Rs.5 as this raised the area of forms per cu.yd. of concrete placed.

C. In my opinion it is not proper or fair to amortize the total cost of the concrete plant off on Maithon and Panchet Hill projects as the quantities in both projects are insufficient by more than 50% to realize on the plant life. I feel that the project should receive proper credit on this account.

12. It is axiomatic in constructing a concrete dam that the forms (shuttering) controls the speed by which the structure proceeds. Therefore due to the fact that the spillway crest, piers, bridge etc. are slow forming every effort should be made to arrive at spillway lip at as early a date as possible (ie force this section to utmost) letting monoliths 1 to 6 lag except when necessary to maintain yardage. I believe a study of a schedule based on this program will result in a higher daily or monthly average placing, thereby shortening time and cost.

13. I do not recommend the removal of one revolving crane until the last yard of concrete is placed at there is a large amount of work to be done erecting taintor gates, spillway bridge and other "bull cooking" chores.

14. Bed rock very excellent and a good job of preparation is apparent. I believe this bedrock will not take grout.

15. It has been my experience to date in India that during the economical life of shovels, tractors and trucks used on rock or mixed rock-earth excavation handling; that the spare parts are roughly 150% of original cost, nor having parts in stock so that it is necessary to use old is definite false economy. It is my opinion that the residual value of spare parts in warehouse will probably amount to 25% of total purchase. This is inevitable due to logistics.

As the project was not operating it was naturally a bit difficult for me to judge efficiencies but I believe that the concrete work can be completed during the calendar year of 1955 provided it can get underway by 15th May 1955 and that the dam proper including setting of gates, spillway bridge, taintor gates and operating mechanism can be completed on or about 1st May 1956.

I hereby make brief summation of the prime needs to enable completion within the dates outlined.

- A. Strip and prepare the new quarry site NOW.
- B. Relieve cursher loads by ample pre-^Pfragmentation of rock before reaching crushers.
- C. Do not be penurious regarding crusher or other spare parts - and if not on hand expedite *getting here.*
- D. Study schedule that will give best average daily placing of concrete.

Generally, I find nothing radically wrong and am sure that if the above recommendations - suggestions are followed that costs will improve and time of completion shortened. In conclusion I wish to express my appreciation to Mr. A.M. Komora in making available his time, records and accompanying me over the project.

I trust I have been of some assistance and help to you and Mr. Komora.

Very truly,
Sd: M.H. Slocum.

cc : Shri C.L. Nanda, Minister,
Irrigation & Power,
Government of India,
New Delhi - through Shri P.S. Rau.

cc : A. M. Komora, Chief Engineer, DVC.

:MRC
16.8.55.

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INTERNATIONAL COOPERATION ADMINISTRATION

Washington 25, D. C.

Operational files
Report held by
SB Marshall - Sept 22nd

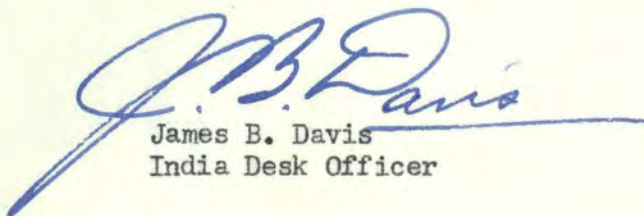
September 7, 1955

Mr. Gray Marshall
International Bank for Reconstruction
and Development
1818 H Street, N.W.
Washington, D. C.

Dear Mr. Marshall:

Enclosed is a report on the Damodar Valley Corporation Electrical System by Walter D. Lawrence, Electrical Engineer on our staff in New Delhi, which we believe will be of interest to you. If you find it useful, you may keep this copy for your files.

Sincerely yours,


James B. Davis
India Desk Officer

Encl: a/s

C (Letter from Mr. Marshall to Mr. Spottswood)

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AIR MAIL

TAJ MAHAL HOTEL
BOMBAY
Sunday, Sept. 4th, 1955

Dear Spotty,

It sure has been nice of you to send me the two letters I have received with all the news.

As usual I have put off writing as nothing particularly urgent has come up.

In regards to DVC I think my cable covered the important points and right now the most important thing is to let Komora know that the Bank does not support his views in regard to foreign technicians and engineers.

There is nothing urgent in Ceylon that cannot wait until I get back. Things are progressing fairly well. Trombay is moving on schedule - and no problems. This, however, does not go for Koyna but as this is not in my terms of reference I have particularly avoided any reference to it. I find they have asked for tenders on the low pressure tunnel and intake on October 17 and on the dam for November 17. The contractors here say it is very hard for them to bid and one American contractor said the specifications were so bad he could not bid without taking exceptions to the principal conditions. I have seen the specifications and even I consider them bad as they do not have any real drawings to work on and the electricity Board say they ^{have} good ones but they have been forbidden to give them to bidders.

Although an Electricity Board and a sub Koyna Board have been established, in effect it is still on paper - no physical authority exists. Tata invited me to a luncheon with the newly appointed chairman, Hasham Premji (a rice merchant) and he informed me emphatically that the Bank had promised a loan for Koyna - (I took no notice). He did not know the name of the engineering firm or what they were engaged to do other than they had 12-14 of the old Grid's engineers in Switzerland with the engineers, training. Even the chief civil engineer is there which prevents the bidders from getting information first hand. He is expected back after the before-mentioned bids are received.

I go on tomorrow to Karachi and will look at Sui and the Utilities. I will notify the Supply Company that I am there and arrange to see them. As I have no names I will get the top first and let him pass me down if necessary.

Expect to be back about the 18th to 20th.

Sincerely,
(signed) Gray

Mr. A.D.Spottswood
IBRD
Washington, D.C.

(L. Gray Marshall)