

APPENDICES

1. MEMBER LIST OF THE STUDY TEAM

1. Basic Design Study

Name	Work Assignment	Position
Mr. Koji MAKINO	Team Leader	Deputy Resident Representative, JICA Tanzania Office
Mr. Ken IMAI	Project Coordination	Senior Project Administration Officer, Transportation and Electric Power Team, Project Management Group I, Grant Aid Management Department, JICA.
Mr. Masatsugu KOMIYA	Chief Consultant/ Power Supply Planner/ Substation Planner	Yachiyo Engineering Co., Ltd.
Mr. Nobuyuki HONJO	Power Transmission & Distribution Planner /Environmental and Social Considerations Analyst	J-POWER
Mr. Minaichi TAKEOKA	Architectural Planner/ Natural Conditions Surveyer	J-POWER
Mr. Atsuhito URUNO	Procurement Planner / Cost Estimator	Yachiyo Engineering Co. Ltd.
Mr. Atsushi KATO	Power Transmission & Distribution Designer	J-POWER

2. Explanation of the Draft Basic Design Study Report

Name	Work Assignment	Position
Mr. Hiroyuki HAYASHI	Project Coordination	Senior Project Administration Officer, Transportation and Electric Power Team, Project Management Group I, Grant Aid Management Department, JICA.
Mr. Masatsugu KOMIYA	Chief Consultant/ Power Supply Planner/ Substation Planner	Yachiyo Engineering Co., Ltd.
Mr. Nobuyuki HONJO	Power Transmission & Distribution Planner /Environmental and Social Considerations Analyst	J-POWER

2. STUDY SCHEDULE

1. Basic Design Study

No.	Date		Survey Activities		Stay at
			Official Member	Consultant Team	
1	16 th Sep.	Sat.		Trip{Haneda :20:40 JL1319 → Kansai 21:55} Trip{Kansai 23:15 JL5099 → Dubai 05:00+1}	Air
2	17 th Sep.	Sun.	Trip{Johannesburg 9:50 SA188 → Dar es Salaam 14:20}	Trip{Dubai 14:30 EK725 → Dar es Salaam 14:30}	Dar es Salaam
3	18 th Sep.	Mon.		<ul style="list-style-type: none"> • Courtesy call to EOJ and JICA Tanzania Office • Courtesy call to Ministry of Energy and Minerals (MEM), TANESCO • Explanation of survey schedule and contents of survey, inception report and questionnaire 	Dar es Salaam
4	19 th Sep.	Tue.		<ul style="list-style-type: none"> • Discussion and Signing on Minutes of Discussion (M/D) • Technical meeting and data collection with TANESCO engineers • Confirmation on the status of EIA approval by Minister of Environment 	Dar es Salaam
5	20 th Sep.	Wed.		<ul style="list-style-type: none"> • Report to EOJ and JICA • Technical meeting and data collection with TANESCO engineers • Survey on 132kV transmission route 	Dar es Salaam
6	21 st Sep.	Thu.	Departure for Japan {Dar es Salaam :16:30 EK726→Dubai 23:00}	• Technical meeting and data collection with TANESCO Kinondoni office engineers	Dar es Salaam
7	22 nd Sep.	Fri.	Arrival at Haneda/Tokyo	• Survey on 132kV transmission route and Substation sites	Dar es Salaam
8	23 rd Sep.	Sat.		Survey on 132kV transmission route and Substation sites (Mr.Takeoka and Mr.Kato) Trip{Haneda :20:40 JL1319 → Kansai 21:55} Trip{Kansai 23:15 JL5099 → Dubai 05:00+1}	Dar es Salaam
9	24 th Sep.	Sun.		Internal meeting and sorting information (Mr.Takeoka and Mr.Kato) Trip{Dubai 14:30 EK7:25 → Dar es Salaam 14:30}	Dar es Salaam
10	25 th Sep.	Mon.		<ul style="list-style-type: none"> • Site survey on 132kV transmission route and Substation sites • Site survey on underground facilities • Discussion with World bank and SIDA 	Dar es Salaam
11	26 th Sep.	Tue.		<ul style="list-style-type: none"> • Survey on 132kV transmission route • Survey on underground facilities • Confirmation of local contractor • Discussion with TANESCO and MEM 	Dar es Salaam
12	27 th Sep.	Wed.		<ul style="list-style-type: none"> • Survey on 132kV transmission route • Survey on underground facilities • Discussion with local contractor about estimation 	Dar es Salaam
13	28 th Sep.	Thu.		<ul style="list-style-type: none"> • Discussion with TANESCO • Survey on 132kV transmission route • Discussion with Kinondoni ward office 	Dar es Salaam
14	29 th Sep.	Fri.		<ul style="list-style-type: none"> • Survey on 132kV transmission route • Survey on underground facilities • Discussion with Kinondoni ward office 	Dar es Salaam
15	30 th Sep.	Sat.		Internal meeting and sorting information	Dar es Salaam
16	1 st Oct.	Sun.		Internal meeting and sorting information	Dar es Salaam
17	2 nd Oct.	Mon.		<ul style="list-style-type: none"> • Contract negotiation of soil sounding investigation and topographic survey • Survey on 132kV transmission route • Survey on 33/11kV Distribution line • Confirmation of expansion plan along new Bagamoyo road 	Dar es Salaam
18	3 rd Oct.	Tue.		<ul style="list-style-type: none"> • Discussion with JICA Tanzania office • Discussion with TANESCO and TANROADS • Technical meeting with TANESCO engineers about 11/33kV Distribution line • Survey on underground facilities 	Dar es Salaam
19	4 th Oct.	Wed.		<ul style="list-style-type: none"> • Survey on 132kV transmission route • Survey on 33/11kV Distribution line • Survey on Substations • Confirmation of topographic survey at Substation 	Dar es Salaam
20	5 th Oct.	Thu.		<ul style="list-style-type: none"> • Survey on underground facilities • Market survey (Mr.Kato) Trip{Dar es Salaam :16:30 EK726→Dubai 23:00} 	Dar es Salaam

No.	Date		Survey Activities		Stay at
			Official Member	Consultant Team	
21	6 th Oct.	Fri.		<ul style="list-style-type: none"> • Drafting Field Report • Market survey • Survey on underground facilities (Mr.Kato) Trip{Dubai 02:50 JL5090 → Kansai 17:20} Trip{Kansai 18:45 JL1316 → Haneda 19:55}	Dar es Salaam
22	7 th Oct.	Sat.		<ul style="list-style-type: none"> • Drafting Field Report • Internal meeting and sorting information (Mr.Takeoka) Trip{Dar es Salaam :16:30 EK726→Dubai 23:00}	Dar es Salaam
23	8 th Oct.	Sun.		Internal meeting and sorting information (Mr.Takeoka) Trip{Dubai 02:50 JL5090 → Kansai 17:20} Trip{Kansai 18:45 JL1316 → Haneda 19:55}	Dar es Salaam
24	9 th Oct.	Mon.		<ul style="list-style-type: none"> • Drafting Field Report • Discussion with TANESCO and TANROADS 	Dar es Salaam
25	10 th Oct.	Tue.		<ul style="list-style-type: none"> • Discussion and Signing on Field Report • Discussion with TANROADS • Discussion with TANESCO and MEM 	Dar es Salaam
26	11 th Oct.	Wed.		<ul style="list-style-type: none"> • Discussion with TANROADS • Discussion with TANESCO and MEM • Discussion with EIA 	Dar es Salaam
27	12 th Oct.	Thu.		<ul style="list-style-type: none"> • Discussion with Kinondoni Ward Office • Discussion with TANESCO, MEM and TANROADS 	Dar es Salaam
28	13 th Oct.	Fri.		<ul style="list-style-type: none"> • Discussion with TANESCO and MEM • Report to EOJ and JICA 	Dar es Salaam
29	14 th Oct.	Sat.		Trip{Dar es Salaam :16:30 EK726→Dubai 23:00}	Air
30	15 th Oct.	Sun.		Trip{Dubai 02:50 JL5090 → Kansai 17:20} Trip{Kansai 18:45 JL1316 → Haneda 19:55}	

2. Explanation of the Draft Basic Design Study Report

No.	Date		Survey Activities		Stay at
			Official Member	Consultant Team (Mr. Komiya and Mr. Honjyo)	
1	24 th Feb.	Sat.		Trip{Narita :18:30 JL053 → Nagoya 19:50} Trip{Nagoya 23:00 JL5097 → Dubai 06:10+1}	Air
2	25 th Feb.	Sun.		Trip{Dubai 10:00 EK725 → Dar es Salaam 14:35}	Dar es Salaam
3	26 th Feb.	Mon.		<ul style="list-style-type: none"> • Discussion with JICA Tanzania Office • Discussion with TANESCO 	Dar es Salaam
4	27 th Feb.	Tue.	Trip{Johannesburg 13:50 SA7167 → Dar es Salaam 18:30}	<ul style="list-style-type: none"> • Confirmation on the status of EIA approval by Minister of Environment 	Dar es Salaam
5	28 th Feb.	Wed.		• Discussion with TANESCO	Dar es Salaam
6	1 st Feb.	Thu.		<ul style="list-style-type: none"> • Technical meeting and data collection with TANESCO engineers • Discussion and Signing on Minutes of Discussion (M/D) 	Dar es Salaam
7	2 nd Feb.	Fri.	Report to EOJ and JICA Trip {Dar es Salaam :16:30 EK726→Dubai 23:00}	• Discussion with TANESCO	Dar es Salaam
8	3 rd Feb.	Sat.	Arrival at Haneda/Tokyo	Internal meeting and sorting information	Dar es Salaam
9	4 th Feb.	Sun.		Internal meeting and sorting information	Dar es Salaam
10	5 th Feb.	Mon.		<ul style="list-style-type: none"> • Discussion with TANESCO • Field Survey 	Dar es Salaam
11	6 th Feb.	Tue.		• Discussion with TANESCO	Dar es Salaam
12	7 th Feb.	Wed.		• Discussion with TANESCO	Dar es Salaam
13	8 th Feb.	Thu.		<ul style="list-style-type: none"> • Report to JICA Tanzania office Trip {Dar es Salaam :16:30 EK726→Dubai 22:55}	Air
14	9 th Feb.	Fri.		{Dubai :02:50 JL5090→Kansai 16:40} {Kansai :18:30 JL1316→Hanada 19:40}	

3. LIST OF PARTIES CONCERNED IN THE RECIPIENT COUNTRY

List of Parties Concerned in the Recipient Country

Ministry of Energy and Minerals (MEM)

Mr. Bashir J. Mrindoko	Commissioner for Energy Petroleum Affairs
Mr. Prosper A. M. Victus	Assistance Commissioner for Energy
Mr. Theophillo Bwakea	Assistance Commissioner (Electricity)
Mr. Mathew M. Mbwambo	Senior Executive Engineer (Electrical)
Mr. Erick Rugabera	Energy Engineer

Tanzania Electric Supply Company Ltd (TANESCO)

Ambassador Fulgence M. Kazaura	Chairman of the Board
Dr Idris Rashid	Managing Director
Mr. Hans Lottering	Deputy Managing Director
Mr. Decklan Mhaiki	General Manager Transmission
Mr. Anton G. Booyzen	General Manager Distribution
Mr. Nantes Kruger	General Manager Support Service
Mr. Lothi T. J. Ole Mungaya	Director of Finance
Mr. Boniface S. Njombe	Ag Director of Project
Mr. Nsajigwa J. Mwaisaka	Manager Distribution Safety
Mr. Maneko JJ Katyega	Chief Research & Investigations Engineer
Mrs. Mercy S. Baregu.	Chief Project Engineer
Mr. Simon Kihyo	Chief Distribution Engineer
Mr. Abdullah Fereshi	Chief Transmission Engineer
Mr. N. L. Skauki Ntimba	Chief Construction Engineer
Mr. A. F. Nanyaro	Chief Electrical Plant & Maintenance Engineer
Mr. James Mtei	Senior Engineer Protection
Mr. Kato Kabata	Senior Engineer Geologist
Mr. Wangwe Mwita	Senior Procurement Engineer PMU
Mr. John F. Sakia	Senior Transmission Engineer
Mr. Josehat Gigadye	Senior Engineer Electrical Workshop
Mr. T. Pancras Rwelamila	Project Engineer
Mr. John Lazimah	Environmental Engineer
Mr. Stanley Shayo	Transmission Engineer
Mr. Gilbert S Mrosso	Land Surveyor
Mr. Hamisi Boby	Surveyor
<Kinondoni North Regional Office>	
Mrs. Sophia S. Mgonja	Regional Manager
Mr. Makoye Ng'erere	Senior Engineer

Mr. Benedict Bahati	Revenue Protection Engineer
Mr. Sosthenes Kateule	Planning Engineer
<DMT KAUDA>	
Mr. Patrick D. Songa	Representative
Mr. Jafari Mpina	Maintenance Engineer
Mr. Greson Manase	Maintenance Engineer
<Ilala Substation>	
Mr. Joseph Sundi Manene	Senior System Control Engineer
<Factory Zone III Substation>	
Mr. Mafuko J. Chinganga	System Supervisor
Mr. Rashldi Minawandu	Operator
<Tegeta Substation>	
Mr. Godwin Mtembei	System Operator
Mr. Yohani Sheso	System Operator

Tanzania National Road Agency (TANROADS)

Dr. FY Addo Abedi	Chief Executive Officer
Mr. Boniface H. P. Nyiti	Director of Development
Mr. Ndyamukama J.	Regional Manager
Mr. Jason M. Rwiza	Manager Project-Management Unit
Mr. Simon Mghani	

Dar es Salaam Water and Sewerage Authority (DAWASA)

Mr. Anthony A. M. T. M. Masaawe	Chief Operation Officer
Mr. S. J. Bunyese	Program Delivery Engineer

Dar es Salaam Water and Sewerage Corporation (DAWASCO)

Mr. Jackosn L. C. Midada	Chief Operation Officer
Mr. Mizunguli	Operation Officer
Mrs. Zubeba H. Hsemo	Area Manager (Kinondoni)
Mr. Zanda	Maintenance Staff (Kinonndoni)

Dar es Salaam City Council

Mr. Enoch J. Kitandu	Transportation Engineer
Mr. K. C. L. Mwambene	City Engineer
Mr. Hamidu M. Mgaya	Principal Surveyor Mayor's Assistant

Kinondoni Municipal Council

Mr. Benjamin M. Maziku
Mr. Harold W Sawaki

Municipal Engineer
Municipal Roads Engineer

National Environmental Management Council

Mr. Joseph R. Kombe

Acting Director

The World Bank Tanzania Office

Mr. Ralph Karhammar
Mr. Baruaay Elijah A. T. Luhanga

Sr. Energy Specialist
Power Engineer

Embassy of Sweden in Tanzania

Ms. Anne-Lie Engvall

Program Officer Infrastructure

Other Consultants

Mr. Craig Wood
Mr. Alan Mayers
Mr. Wessel Schulting
Mr. Tumsifu Meena
Mr. Harko Kloeze
Mr. Dawid Breed
Mr. Mussa Nyamsingwa

Managing Director Logistics Consulting Group Ltd.
Director Logistics Consulting Group Ltd.
Logistics Consulting Group Ltd.
Logistics Consulting Group Ltd.
Project Manager Interbeton
Resident Engineer Stewart Scott
Director Norplan Tanzania Ltd.

Embassy of Japan in Tanzania

Mr. Hiroshi Ito

First Secretary

JICA Tanzania Office

Mr. Toshihiro Obata
Mr. Kashiwaya Makoto
Mr. Koji Makino
Miss Asuka Tsuboike
Mr. Oikawa

Resident Representative (BD)
Resident Representative (DBD)
Deputy Resident Representative and Senior Economist
Assistant Resident Representative
Assistant Resident Representative

4. MINUTES OF DISCUSSIONS

**Minutes of Discussions
on the Basic Design Study
on the Project for Reinforcement of Transmission and Distribution Facilities
in Oyster Bay Substation
in the United Republic of Tanzania**

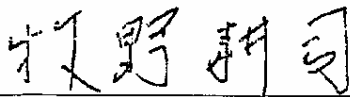
Referring to the results of the Preliminary Study which was conducted in March 2006, the Government of Japan decided to conduct a Basic Design Study on the Project for Reinforcement of Transmission and Distribution Facilities in Oyster Bay Substation (hereinafter referred to as "the Project"), and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to the United Republic of Tanzania (hereinafter referred to as "Tanzania") the Basic Design Study Team (hereinafter referred to as "the Team"), headed by Mr. Koji Makino, Deputy Resident Representative, JICA Tanzania Office, and is scheduled to stay in the country from September 17 to October 14, 2006.

The Team held discussions with the officials concerned from the Government of Tanzania and conducted a field survey in the study area.

In the course of the discussions and the field survey, both sides confirmed the main items described in the attached sheets.

Dar es Salaam, September 19, 2006

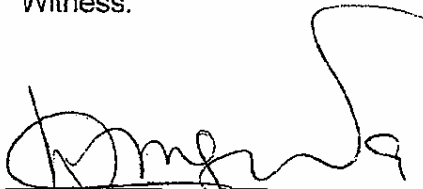


Koji Makino
Leader
Basic Design Study Team
JICA



Hans Lottering
General Manager Transmission
Tanzania Electric Supply Company
Tanzania

Witness:



Ngosha Said Magonya
Commissioner for External Finance
Ministry of Finance
Tanzania



Prosper A. M. Victus
Acting Commissioner for Energy and
Petroleum Affairs
Ministry of Energy and Minerals
Tanzania

ATTACHMENT

1. Title of the Project

The official title of the Project is "The Project for Reinforcement of Transmission and Distribution Facilities in Oyster Bay Substation."

2. Objective of the Project

The objective of the Project is to reinforce transmission and distribution facilities in Oyster Bay Substation.

3. Project Site

The Project site is in the north part of Dar es Salaam city, as shown in Annex-1.

4. Responsible and Implementing Organization

The responsible ministry is the Ministry of Energy and Minerals (hereinafter referred to as "MEM").

The implementation organization is Tanzania Electric Supply Company (hereinafter referred to as "TANESCO").

The organization charts of MEM and TANESCO are shown in Annex-2 and 3.

5. Items Requested by the Government of Tanzania

As the result of discussions, requested components were confirmed as below:

- Installation at New Oyster Bay Substation
 - 132/33kV 45MVA Transformer: 2 units
 - 33/11kV 15MVA Transformer: 2 units
 - Equipment related 132/33kV Transformer 1 lot
 - Equipment related 33/11kV Transformers 1 lot
 - 33kV Feeder Equipment: 5 feeders
 - 11kV Feeder Switchgear and Materials: 1 lot
- Construction of 132kV-240sqmm² Transmission Line between Ubungu Substation and New Oyster Bay Substation: approx. 7.0km
- Additional installation of 132kV outgoing feeder at Ubungu Substation: 1 bay
- Construction of 33kV-240sqmm² Distribution Line between New Oyster Bay Substation and existing Oyster Bay Substation: approx. 1.6km

The final components of the Project will be decided after further studies, and JICA will assess the appropriateness of the request and will report to the Government of Japan.

6. Japan's Grant Aid Scheme

The Tanzanian side understands the Japan's Grant Aid scheme explained by the Team, as described in Annex-4.

7. Environmental and Social Considerations

The Team explained the outline of JICA Environmental and Social Considerations Guideline (hereinafter referred to as "the JICA Guideline") to the Tanzanian side. The Tanzanian side took the JICA Guideline into consideration, and shall complete the necessary procedures.

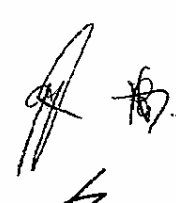


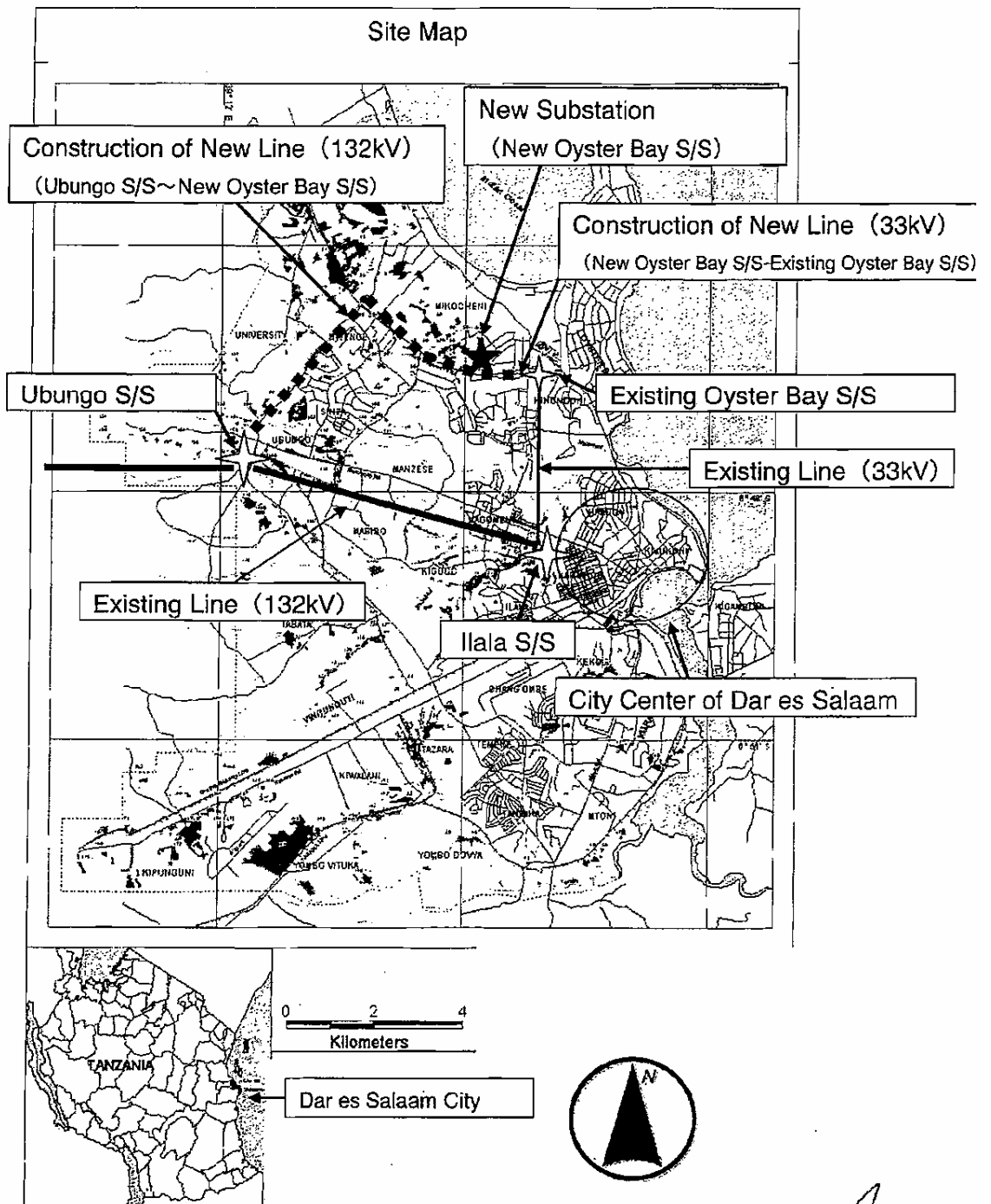
8. Schedule of the Study

- (1) The consultants will proceed to further studies in Tanzania by October 14, 2006.
- (2) JICA will prepare the draft report in English and dispatch a mission to Tanzania in order to explain its contents in February 2007.
- (3) When the contents of the report are accepted in principle by the Government of Tanzania, JICA will complete the final report and send it to the Government of Tanzania by April 2007.

9. Other Relevant Issues

- (1) The Tanzania side shall allocate the budget for its undertakings to be done in a timely manner, which are shown in Annex-5.
- (2) Concerning the construction of 33kV-240sqmm² Distribution Line between New Oyster Bay Substation and existing Oyster Bay Substation, TANESCO expressed that it could construct that distribution line by TANESCO on the conditions that the Japanese side procured the necessary materials for it.
- (3) The Team explained that the plan of the New Bagamoyo Road (section: Morocco-Tegeta; 17.4km) would affect the Project, and requested that the Tanzanian side should make necessary arrangements for the Team's smooth conduction of the filed survey in the study area. The Tanzanian side agreed on this requirement from the Team.
- (4) The Tanzanian side agreed that they were responsible for the land acquisition/lease for the Project, and that they would complete the necessary actions and allocate the necessary budget for that acquisition/lease before the next Japanese mission coming, which will be notified by the end of December 2006, by a letter.
- (5) The Tanzanian side explained to the Team about the following measures for the new transmission lines.
 - 1) For Sam Nujoma Road
 - ① The existing 33kV lines shall be relocated from the right side to the left side of the road heading to Mwenge junction, in order that new 132kV transmission line can be installed at the right side.
 - ② Tanzanian side promised to proceed with TANROADS to install the street light poles at the center part of the road.
 - 2) For New Bagamoyo Road
 - ① TANESCO shall provide the survey map indicating road boundary, by 26 September, 2006.
 - ② TANESCO will provide the Team the agreed plan for allowable space for new 132kV transmission line construction, among the related authority such as TANROADS, local governments, etc.

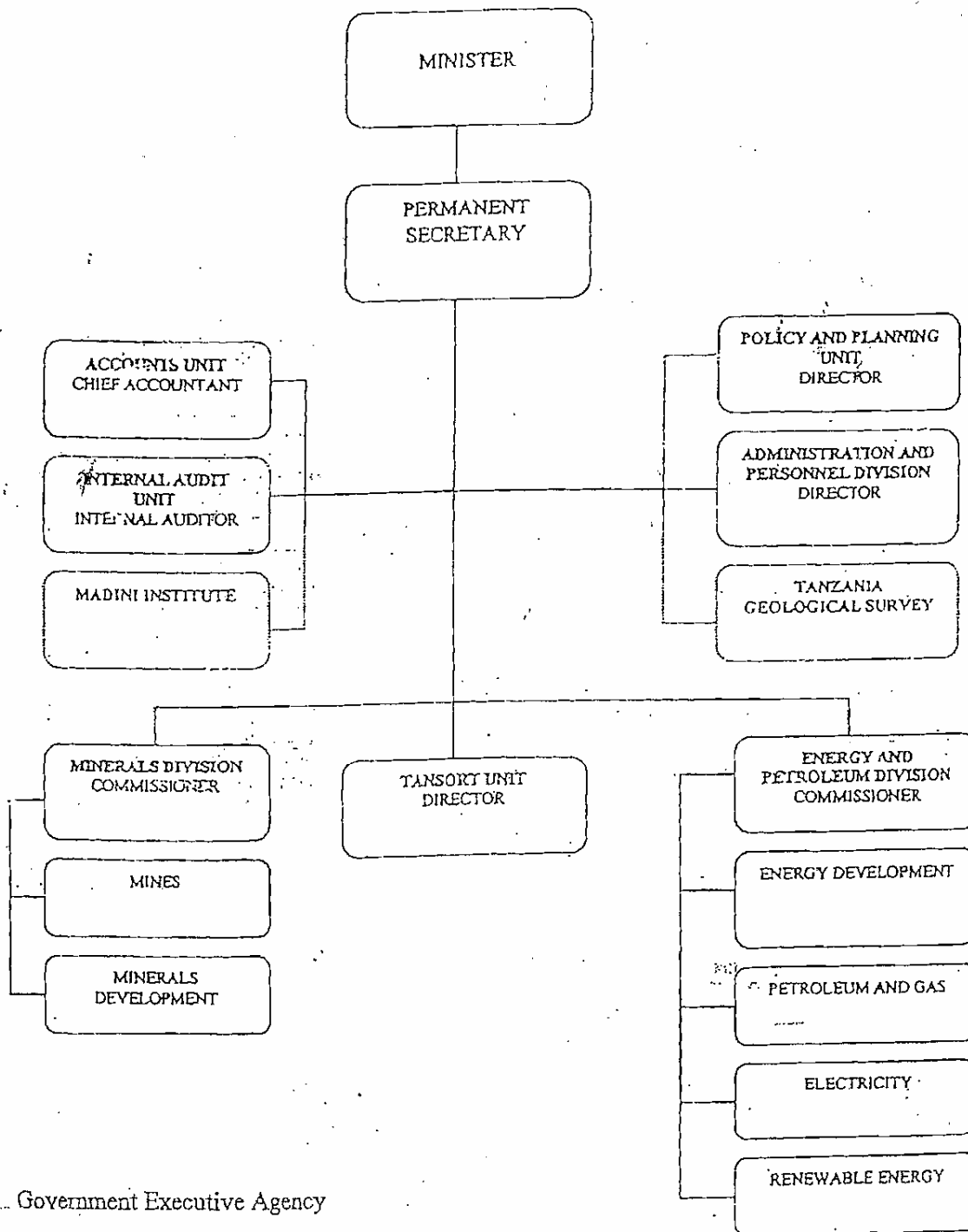




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Muundo wa Wizara ya Nishati na Madini

ORGANIZATION STRUCTURE OF
THE MINISTRY OF ENERGY AND MINERALS
AS APPROVED BY THE PRESIDENT - APRIL, 2001



Government Executive Agency

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TANZANIA ELECTRIC SUPPLY COMPANY LIMITED ORGANISATIONAL STRUCTURE



BOARD OF DIRECTORS
 Chairman: Ambassador: F.m. Kazaura
 8 - Directors
 Hon. Philip Magani; Mr. Arnold Kilewo; Mr. Adolar Mapunda;
 Mr.S. Saluja; Mr. Suleimani Juma; Mr. B.J. Mrindoko; Mrs.
 Agnes Bukuku; Mr. A. Mwakapugi.

MANAGING DIRECTOR
 Adrian Van Merwe

COMPANY SECRETARY
 G. Makia (Ag)

DIRECTOR INTERNAL AUDIT
 B. Mushi

GENERAL MANAGER GENERATION
 S.P. Mabada

GENERAL MANAGER TRANSMISSION
 Hans G. Lottering

GENERAL MANAGER DISTRIBUTION
 Athon G. Boozyzen

GENERAL MANAGER SUPPORT SERVICES.
 N. Kruger

DEPUTY GENERAL MANAGER TRANSMISSION

DEPUTY GENERAL MANAGER DISTRIBUTION
 W.G. Mhando

MANAGER PUBLIC RELATIONS
 D. Mshana

DEPUTY GENERAL MANAGER SUPPORT SERVICES.
 S.E. Wandiba (Ms.)

DIRECTOR THERMAL GENERATION
 G. Chgere

DIRECTOR HYRO GENERATION
 D. Mhaiki

DIRECTOR CORPORATE PLANNING & ESEARCH
 K.R. Abdulla

DIRECTOR SYSTEM CONTROL & TRANSM
 M.A. Saleh

DIRECTOR OF OPERATIONS
 C.L.M. Masawe

DIRECTOR OF DISTRIBUTION & CUSTOMER SVICES

DIRECTOR FINANCE
 L.O. Mungaya

DIRECTOR SUPPLIES & TRANSPORT
 N.O. Suke

DIRECTOR PRIVISATION UNIT
 W. Magambo

DIRECTOR HUMAN RESOURCES
 S. A. Simpilu

MANAGER THERMAL GENERATION
 G.C. Nyamuko

MANAGER KIDATU-HPP
 L. Tesha

MANAGER CORPORATE PLANNING
 F.N. Mayila

MANAGER ELECTRIFICATION
 M.Kingu

MANAGER DISTRIBUTION & SAFETY
 N. J. Mwaisaka

MANAGER GEN ACCOUNTS
 A. Chengula (Ms.)

MANAGER PROCUREMENT
 A. Chami (Ag)

DIRECTOR OF PROJECTS
 G. Njombe

MANAGER HUMAN RESOURCE
 A.s.Mtungue

MANAGER - MTERA HPP
 N. Kachwamba

MANAGER RESEARCH & DEVELOPMENT
 D.E.P Ngula

REGIONAL MANAGERS 24 REGIONS
 K'North - Ms S. Mgonja
 K'South - Mr G. Mnzava
 Ilala - R. E. Nsulau
 Temeke - MM Mwigaya
 Mara - Mr S. Makala
 Iringa - Mr Lukumi
 Rukwa - Mr Mbwaga(Ag)
 Kigoma - Mr P. Shigela
 Kagera - Mr N. Kaviche
 Shinyanga - Mr F. Mpanduji
 K'Njaro - Mr S.Mpfitbitsa

Dodoma - Mr Kamoleka
 Mwanza - Mr C. Masasi
 Arusha - Mr M.Kalokola
 Mbeya - Mr D. Ndagomba
 Ruvuma - r.J.Mwimbundu(Ag)
 Lindi - Mr M. Kassanga(Ag)
 Morogoro - J. Mawenge
 Tabora - Mr Zorwa(Ag)
 Mtwara - Mr Temu(Ag)
 Manyara - Ms S. Hiza
 Singida- Mr Kyeyeu
 Coast - Ms J. Ngahyoma

MANAGER FINANCE
 L. Kasanga (Ag)

MANAGER TRANSP & LOGISTICS
 A. Lutoganya

DIRECTOR OF SECURITY
 M. Kasyanju

DIRECTOR INF SYSTEM
 N.Chonya

MANAGER MANPOWER DEV. & TRAINING
 A. Mwingizi

MANAGER - PANGANI FALLS HALE
 J. Lugeiyamu

NB: Deputy General Managers were appointed as part of capacity building process and positions will be confirmed by the second half of 2006

VISION: To be an efficient and commercially focused utility Supporting the development of Tanzania
MISSION: To generate, Transmit, Distribute & Supply electricity in most effective, Competitive & Substanable manner
VALUES: Respect, Honesty, Loyalty, Ethical business conduct, Service excellence, Respect stakeholders' opinion & Enviromental friendly

17/07/2006

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6

JAPAN'S GRANT AID SCHEME

The Grant Aid scheme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

Japan's Grant Aid Scheme is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using Japanese consulting firms.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Scheme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes (E/N) signed by the Governments of Japan and the recipient country.

Finally, for the smooth implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"),

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conducted by JICA on a requested project (hereinafter referred to as "the Project"), is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

1. Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
2. Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view;
3. Confirmation of items agreed upon by both parties concerning the basic concept of the Project.
4. Preparation of a basic design of the Project.
5. Estimation of cost of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For smooth implementation of the Study, JICA uses registered consulting firms. JICA selects firms based on proposals submitted by interested firms. The firms selected carry out a Basic Design Study and write a report, based upon terms of reference set by JICA.

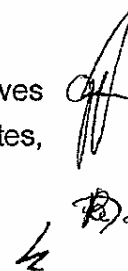
The consulting firms used for the Study are recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

3. Japan's Grant Aid Scheme

1) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

- 2) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes,



concluding contracts with consulting firms and contractors and final payment to them must be completed.

However, in case of delays in delivery, installation or construction, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

- 3) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However, the prime contractors, namely consulting, contracting and procurement firm(s), are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

- 4) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability of Japanese taxpayers.

- 5) Undertakings required to the Government of the recipient country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as the following:

1. To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the Project,
2. To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
3. To secure buildings prior to the procurement in case the installation of the equipment,
4. To ensure all the expense and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
5. To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the verified contracts,
6. To accord Japanese nationals, whose services may be required in connection with supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

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6) "Proper Use"

The recipient country is required to operate and maintain the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

7) "Re-export"

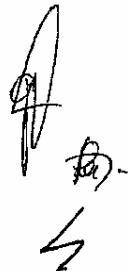
The products purchased under the Grant Aid should not be re-exported from the recipient country.

8) Banking Arrangement (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of recipient country or its designated authority.

9) Authorization to pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

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Major Undertaking to be taken by Each Government

NO	Items	To be covered by Grant Aid	To be covered by Recipient side
1	To secure land		•
2	To clear, level and reclaim the site when needed		•
3	To construct gates and fences in and around the site		•
4	To bear the following commissions to a bank of Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		•
	2) Payment commission		•
5	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country		
	1) Marine(Air) transportation of the products from Japan to the recipient country	•	
	2) Tax exemption and customs clearance of the products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site	•	
6	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		•
7	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract		•
8	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		•
9	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment		•

(B/A: Banking Arrangement, A/P: Authorization to Pay)

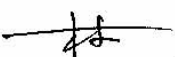
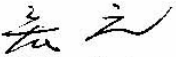
**Minutes of Discussions
on the Basic Design Study
on the Project for Reinforcement of Transmission and Distribution Facilities
in Oyster Bay Substation in the United Republic of Tanzania
(Explanation on the Draft Report)**

In September 2006, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team on the Project for Reinforcement of Transmission and Distribution Facilities in Oyster Bay Substation (hereinafter referred to as "the Project") to the United Republic of Tanzania (hereinafter referred to as "Tanzania") and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

In order to explain and consult the Government of Tanzania on the components of the draft report, JICA sent to Tanzania the Draft Report Explanation Team (hereinafter referred to as "the Team"), headed by Mr. Hiroyuki Hayashi, Senior Project Administration Officer, Transportation and Electric Power Team, Project Management Group I, Grant Aid Management Department, JICA and is scheduled to stay in the country from February 25 to March 8, 2007.

As a result of discussions, both sides have confirmed the main items described in the attached sheets.

Dar es Salaam, March 1, 2007

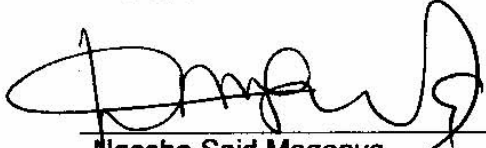
 

Hiroyuki Hayashi
Leader
Basic Design Study Team
JICA





Decklan Mhaiki
General Manager-Transmission
Tanzania Electric Supply Company
Tanzania

Witness:



Ngosha Said Magonya
Commissioner for External Finance
Ministry of Finance
Tanzania

Bashir J. Mrindoko
Commissioner for Energy and
Petroleum Affairs
Ministry of Energy and Minerals
Tanzania



ATTACHMENT

1. Components of the Draft Report

The Tanzanian side agreed and accepted in principle the components of the Draft Report explained by the Team.

2. Japan's Grant Aid Scheme

The Tanzanian side reconfirmed the Japan's Grant Aid scheme and the necessary measures to be taken by the Tanzanian side as explained by the Basic Design Study Team in September 2006 and described in the Annex 3 of the Minutes of Discussions signed by both sides on September 19, 2006.

3. Schedule of the Study

JICA will complete the Final Report in accordance with the confirmed items and send it to the Tanzanian side before the end of April 2007.

4. Other Relevant Issues

4-1. The Tanzanian side confirmed that the following major undertakings should be taken by the Tanzanian side at its own expenses.

- (1) To accelerate all the necessary procedures for the Project such as the custom clearance, tax exemption, etc.
- (2) To secure the temporary storage and construction yard, disposal site of soil and discharged water, etc. for the construction.
- (3) To relocate the existing structure in the proposed construction area such as warehouse, antenna tower store, etc. in the Ubungo Substation
- (4) To make necessary arrangements in the New Oyster Bay Substation land for the construction such as land reclamation, construction of access road and boundary fence
- (5) To relocate the existing 33kV distribution line on the 132kV transmission line corridor along the Sam Nujoma Road
- (6) To relocate the existing buried infrastructures along the Sam Nujoma Road, where the foundation of monopoles for 132kV transmission line will be installed.
- (7) To make the necessary public notice of scheduled power interruption during the construction and make an appropriate response to the residents living around the construction site.

4-2. Both sides confirmed that the EIA procedures are on the way of final approval (see attachment) and that the Tanzanian side should submit the copy of certificate to the JICA Tanzania Office after the completion of the EIA procedures as soon as possible.

4-3. Both sides confirmed that the procedures of the ownership transfer from private to TANESCO for the land of the New Oyster Bay substation is on the way of final stage that the Tanzanian side should submit the copy of land certificate to the JICA Tanzania Office after the completion of the said procedures as soon as possible.

4-4. Both sides reconfirmed that the position of street lighting is shifted to the center for the Sam Nujoma Road. TANESCO shall submit the design drawing of the street lighting pole prepared by TANROADS as soon as possible.

- 4-5. Both parties confirmed that the position of monopoles of 132kV transmission lines shall be in accordance with "Material of Discussion on 132kV transmission pole (monopole) location" which was agreed between TANROADS and the Japanese consultant on December 20, 2006 (refer to Attachment of Draft Report).
- 4-6. Both parties confirmed that the name of "New Oyster Bay Substation" or other feeder's is not permanent. TANESCO can change the name at appropriate timing.
- 4-7. The Team handed one copy of the draft detailed specifications of equipment and materials to be procured. Both sides agreed that the draft specifications were confidential and should not be duplicated or released to any outside parties.

FB

AA

3

ML



1/3 hand copies to others
Handwritten 2/2
NATIONAL ENVIRONMENT MANAGEMENT COUNCIL (NEMC)
BARAZA LA TAIFA LA HIFADHI NA USIMAMIZI WA MAZINGIRA

Tel. No. Direct line: 255 (022) 2134803
Tel: 255 (022) 2127817
Mobile: 0741 - 608930
Fax: 255 (022) 2111579
E-mail address: nema@nemctz.org

DEPR

Tencot House (3rd floor),
Sokoine Drive,
P.O. Box 63154,
DAR ES SALAAM,
TANZANIA

In reply please quote:

Ref: NEMC/04/20/Vol.II

Handwritten mark

Date: 31st January 2007

The Resident Representative
JICA
P.O. Box 9450
Dar es Salaam



Attn: Ms. Asuka *Geolke*
Initial: *AG*

Dear Madame,

RE: ENVIRONMENTAL IMPACT ASSESSMENT CERTIFICATE FOR THE PROPOSED TANESCO DISTRIBUTION AND TRANSMISSION REHABILITATION PROJECT - DAR ES SALAAM, MOSHI AND ARUSHA

Please refer to the above captioned subject

This is to inform you that M/S TANESCO Ltd submitted to the National Environment Management Council an Environmental Impact Assessment (EIA) Report for the above mentioned project. The objective of this submission was to obtain EIA Certificate as stipulated by the Environmental Management Act No. 20 of 2004 in Section 81 (1).

We would like to inform you and all concerned parties, that this EIA Report and Resettlement Action Plan (RAP) were reviewed by a cross-sectoral Technical Advisory Committee (TAC) from 10th - 11th August 2005 and 26/10/2005 respectively. As a matter of procedure four members of the TAC conducted a site verification visit in August 2005.

Taking into account the findings of the TAC, the Site Visit report and the corrections made in the final version of the EIA report, it was concluded that the EIA Report of the proposed activity, including its Environmental Management Plan and Monitoring Plan (EMP & MP) respectively, are of a high standard, but needed to be re-casted in order to conform with the format stipulated by the EIA and Audit Regulations of 2005.

=====
All correspondence should be addressed to the Director - General

Handwritten initials: EB, AH

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4

Handwritten initials: BL

TANESCO Ltd submitted the improved final version in January 15, 2007. The Council has just completed review of the same and is finalizing procedures to submit it the Minister responsible for Environment for formal approval and issuance of EIA Certificate. Certainly, the Council regrets for these procedural developments which caused delay and inconvenience to all concerned parties.

Consequently, by this letter the Council would like to inform JICA and other interested stakeholders that it has **no objection** to your esteemed organisation's intention to proceed with disbursement of funds for implementing this project, which is of national interest.

Thank you for your continued cooperation.

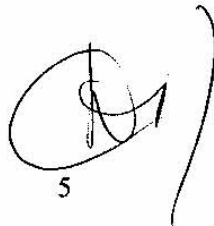
Yours sincerely,


A. Maembe
For Acting Director General

Cc: The Managing Director
TANESCO Ltd
P.O. Box 9024
Dar es Salaam







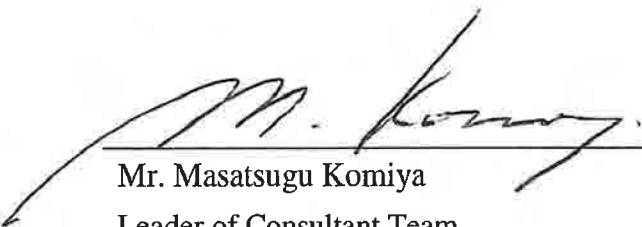


5. MATERIAL FOR DISCUSSION ON 132KV TRANSMISSION POLE LOCATION

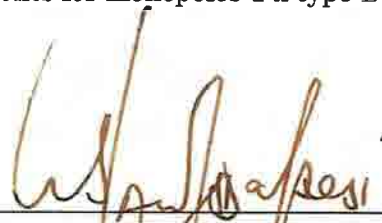
Material for Discussion
on 132kV transmission pole (monopole) location
for Basic Design Study on the Project
for Reinforcement of Transmission and Distribution
in Oyster Bay Substation

20th DECEMBER 2006

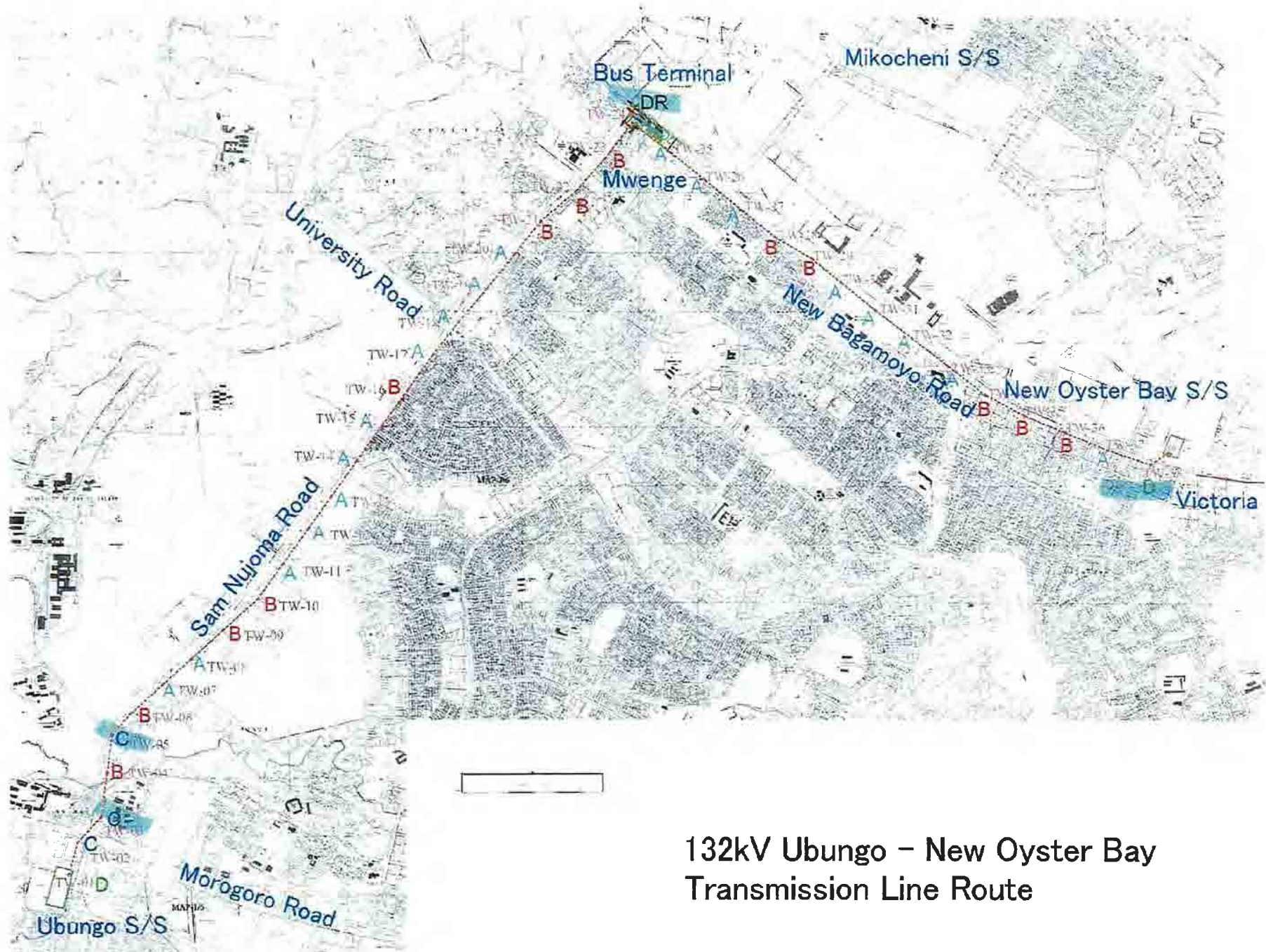
*In principle, TANROADS agreed at a meeting at JICA HQ Tokyo on 20th December 2006 at 10:30 hours that TANROADS will work with TANESCO and the project consultant to accommodate requirements for monopoles 1 x type DR, 1 x type D and 2 x type C (Total 4 numbers).



Mr. Masatsugu Komiya
Leader of Consultant Team
Basic Design Study Team JICA



Dr. FY Addo Abedi
Chief Executive officer
TANROADS



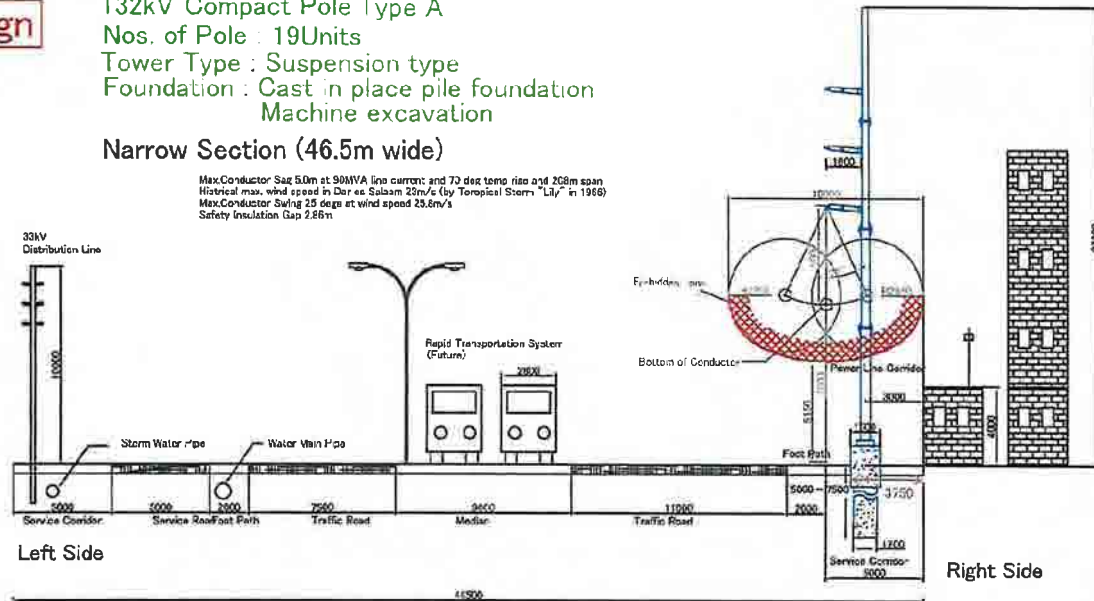
132kV Ubungo - New Oyster Bay
Transmission Line Route

Original Design

132kV Compact Pole Type A
 Nos. of Pole : 19Units
 Tower Type : Suspension type
 Foundation : Cast in place pile foundation
 Machine excavation

Narrow Section (46.5m wide)

Max.Conductor Sag 5.0m at 90MVA line current and 70 deg temp rise and 208m span
 Historical max. wind speed in Dar es Salaam 23m/s (by Tropical Storm "Lily" in 1968)
 Max.Conductor Swing 25 degs at wind speed 25.8m/s
 Safety Insulation Gap 2.88m



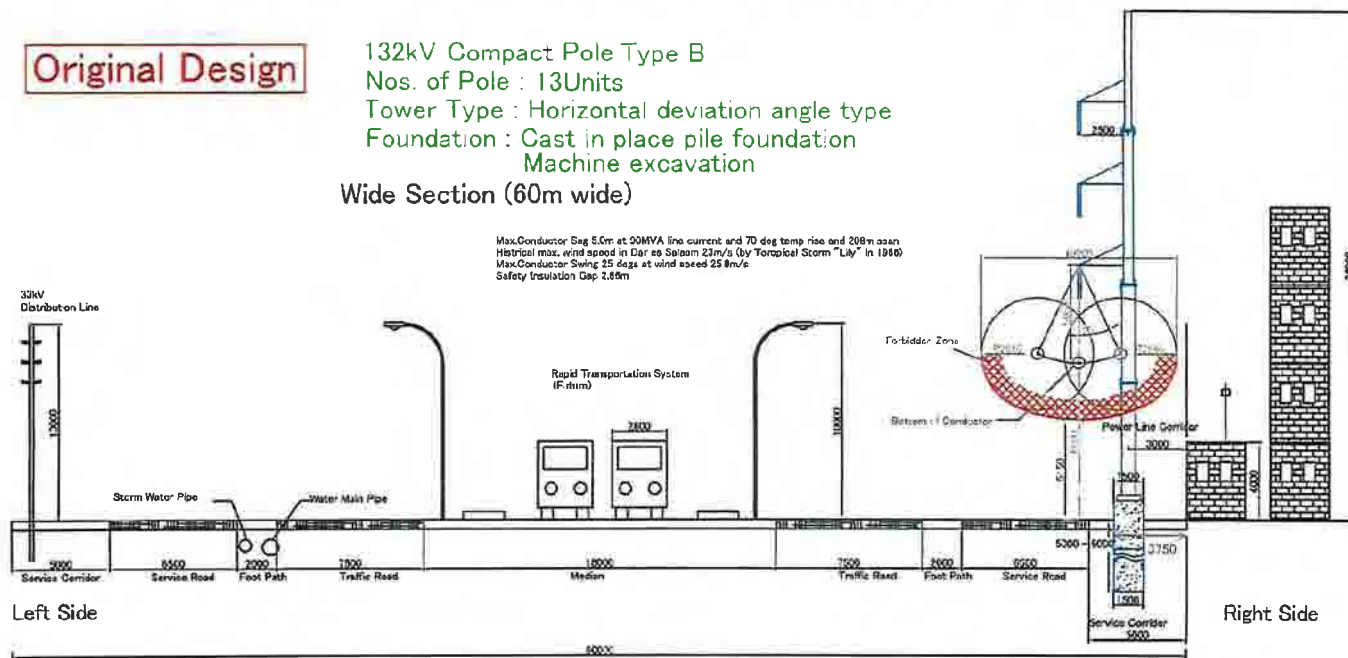
A-5-3

Original Design

132kV Compact Pole Type B
 Nos. of Pole : 13Units
 Tower Type : Horizontal deviation angle type
 Foundation : Cast in place pile foundation
 Machine excavation

Wide Section (60m wide)

Max.Conductor Sag 5.0m at 90MVA line current and 70 deg temp rise and 208m span
 Historical max. wind speed in Dar es Salaam 23m/s (by Tropical Storm "Lily" in 1968)
 Max.Conductor Swing 25 degs at wind speed 25.8m/s
 Safety Insulation Gap 2.88m

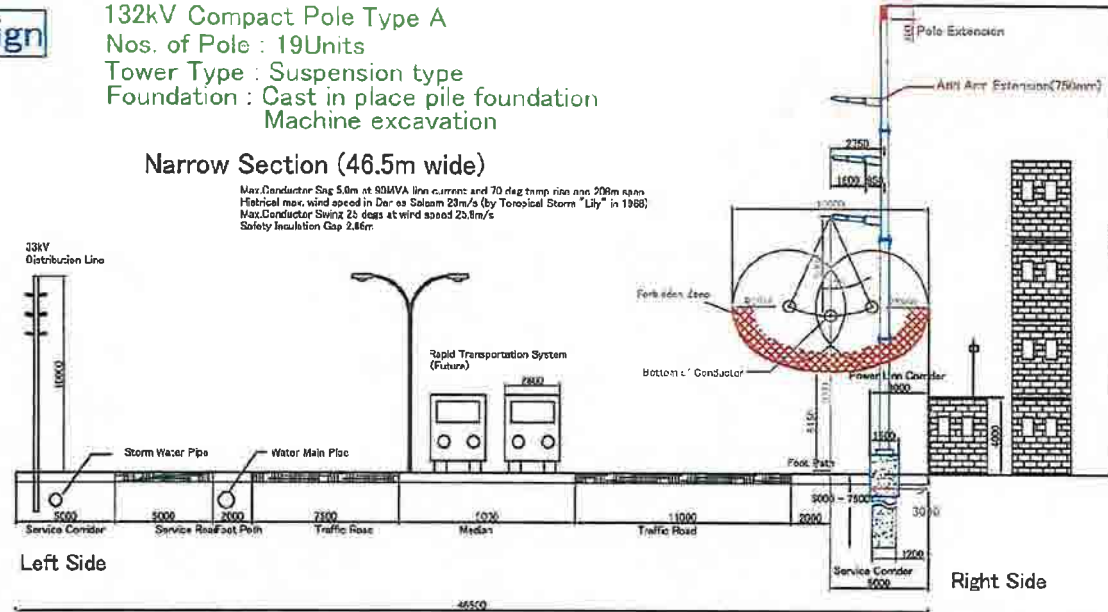


Revised Design

132kV Compact Pole Type A
 Nos. of Pole : 19Units
 Tower Type : Suspension type
 Foundation : Cast in place pile foundation
 Machine excavation

Narrow Section (46.5m wide)

Max. Conductor Sag 5.0m at 90MVA line current and 70 deg temp rise and 208m span
 Historical max. wind speed in Dar es Salaam 23m/s (by Tropical Storm "Lily" in 1988)
 Max. Conductor Swing 25 degs at wind speed 25.8m/s
 Safety Insulation Gap 2.86m



Left Side

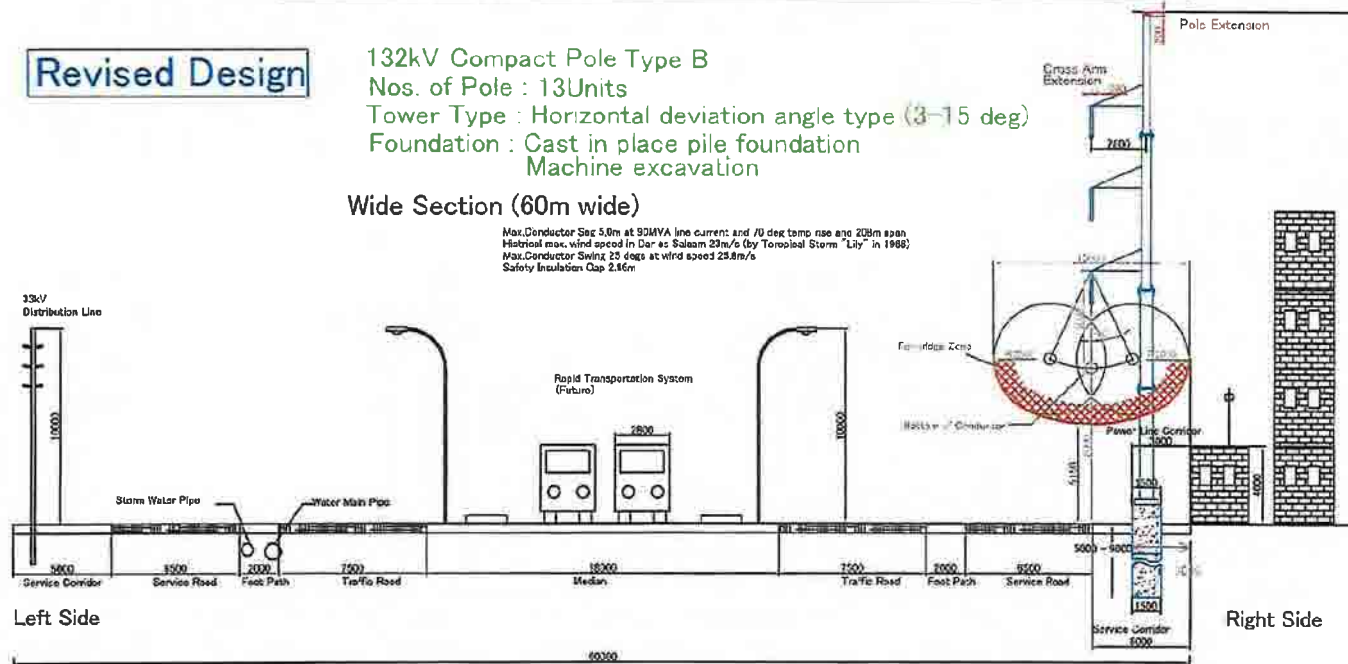
Right Side

Revised Design

132kV Compact Pole Type B
 Nos. of Pole : 13Units
 Tower Type : Horizontal deviation angle type (3-15 deg)
 Foundation : Cast in place pile foundation
 Machine excavation

Wide Section (60m wide)

Max. Conductor Sag 5.0m at 90MVA line current and 70 deg temp rise and 208m span
 Historical max. wind speed in Dar es Salaam 23m/s (by Tropical Storm "Lily" in 1988)
 Max. Conductor Swing 25 degs at wind speed 25.8m/s
 Safety Insulation Gap 2.86m



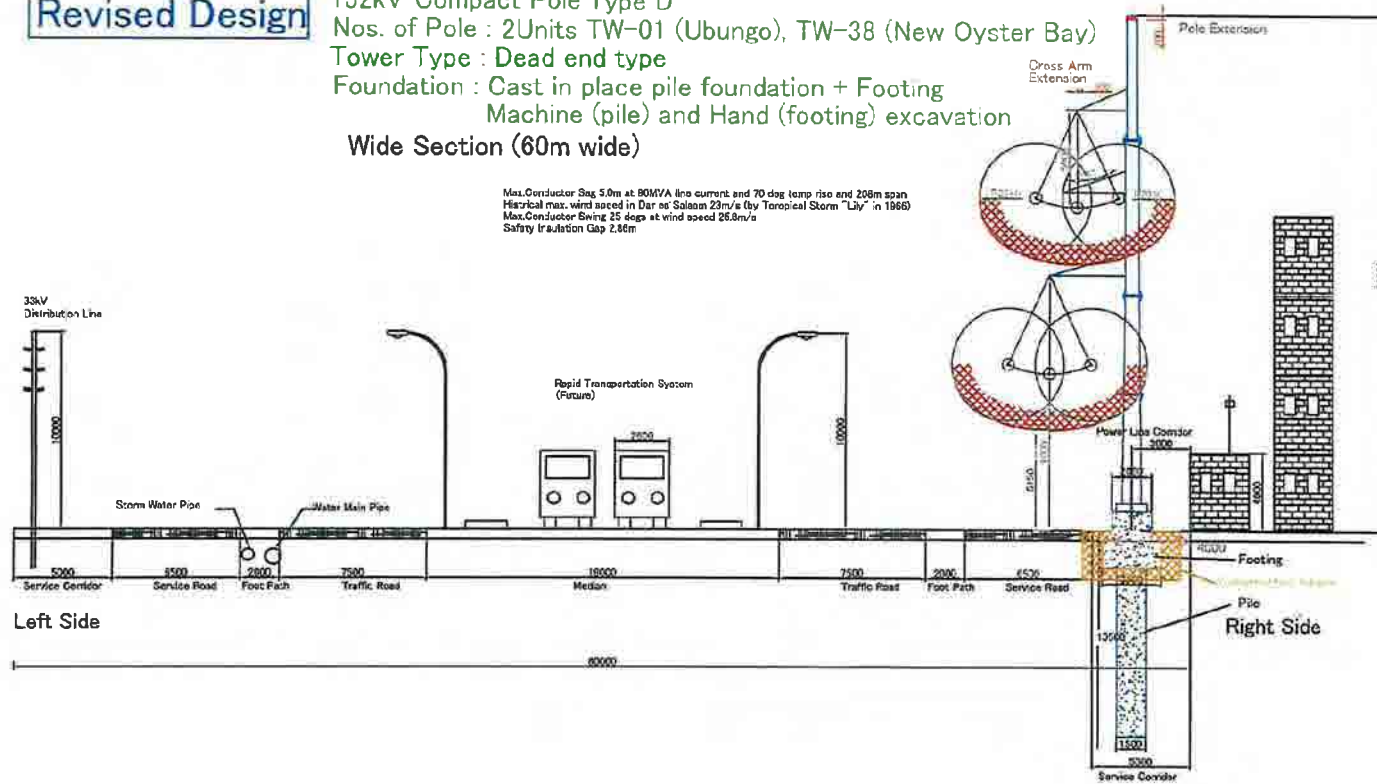
Left Side

Right Side

Revised Design

132kV Compact Pole Type D
 Nos. of Pole : 2Units TW-01 (Ubungo), TW-38 (New Oyster Bay)
 Tower Type : Dead end type
 Foundation : Cast in place pile foundation + Footing
 Machine (pile) and Hand (footing) excavation
 Wide Section (60m wide)

Max. Conductor Sag 5.0m at 80MVA line current and 70 deg temp rise end 208m span
 Horizontal max. wind speed in Dar es Salaam 23m/s (by Tropical Storm "Lily" in 1966)
 Max. Conductor Swing 25 degs at wind speed 26.9m/s
 Safety Insulation Gap 2.86m



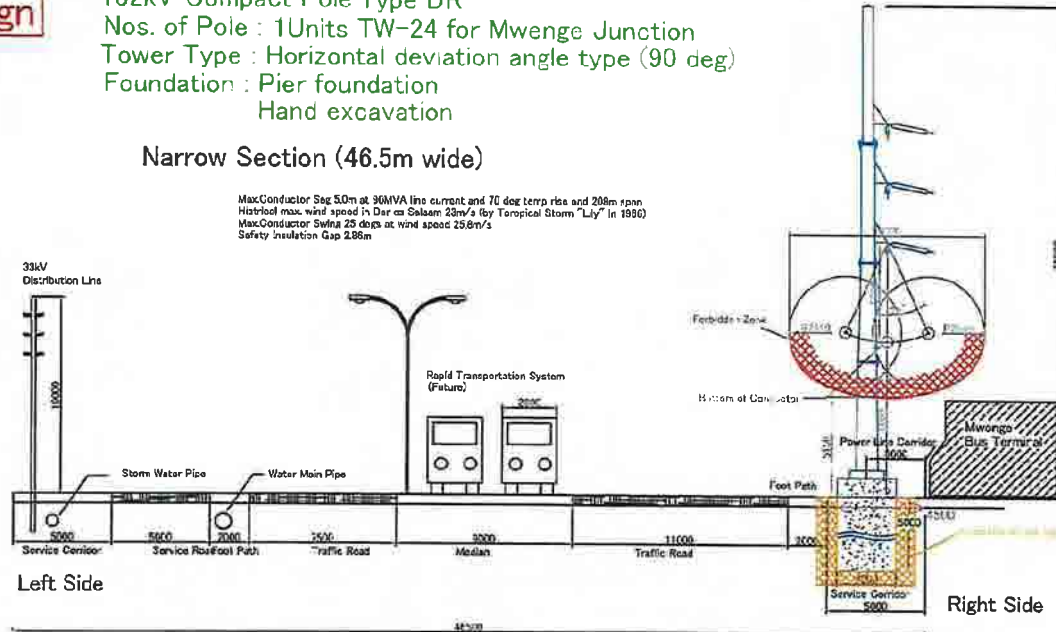
A-S-5

Original Design

132kV Compact Pole Type DR
 Nos. of Pole : 1Units TW-24 for Mwenge Junction
 Tower Type : Horizontal deviation angle type (90 deg)
 Foundation : Pier foundation
 Hand excavation

Narrow Section (46.5m wide)

Max Conductor Sag 5.0m at 90MVA line current and 70 deg temp rise and 208m span
 Historical max. wind speed in Dar es Salaam 23m/s by Tropical Storm "Lily" in 1986
 Max Conductor Swing 25 degs at wind speed 25.6m/s
 Safety Insulation Gap 2.86m



Left Side

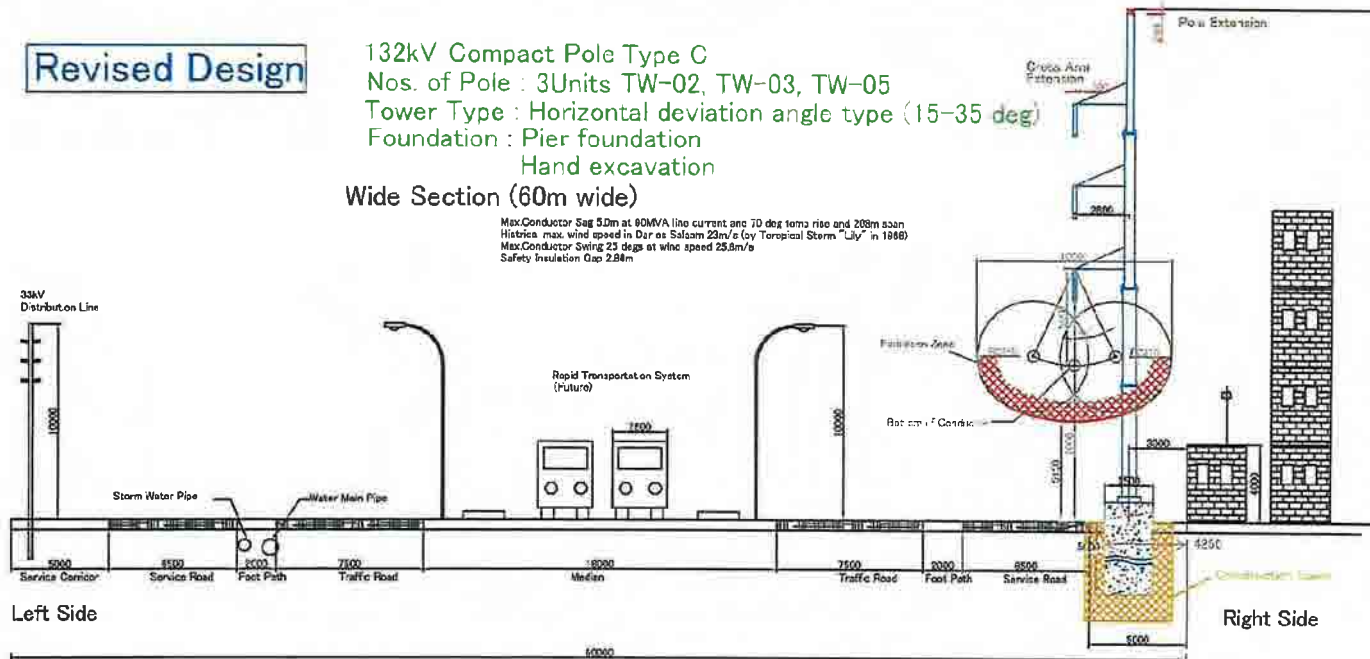
Right Side

Revised Design

132kV Compact Pole Type C
 Nos. of Pole : 3Units TW-02, TW-03, TW-05
 Tower Type : Horizontal deviation angle type (15-35 deg)
 Foundation : Pier foundation
 Hand excavation

Wide Section (60m wide)

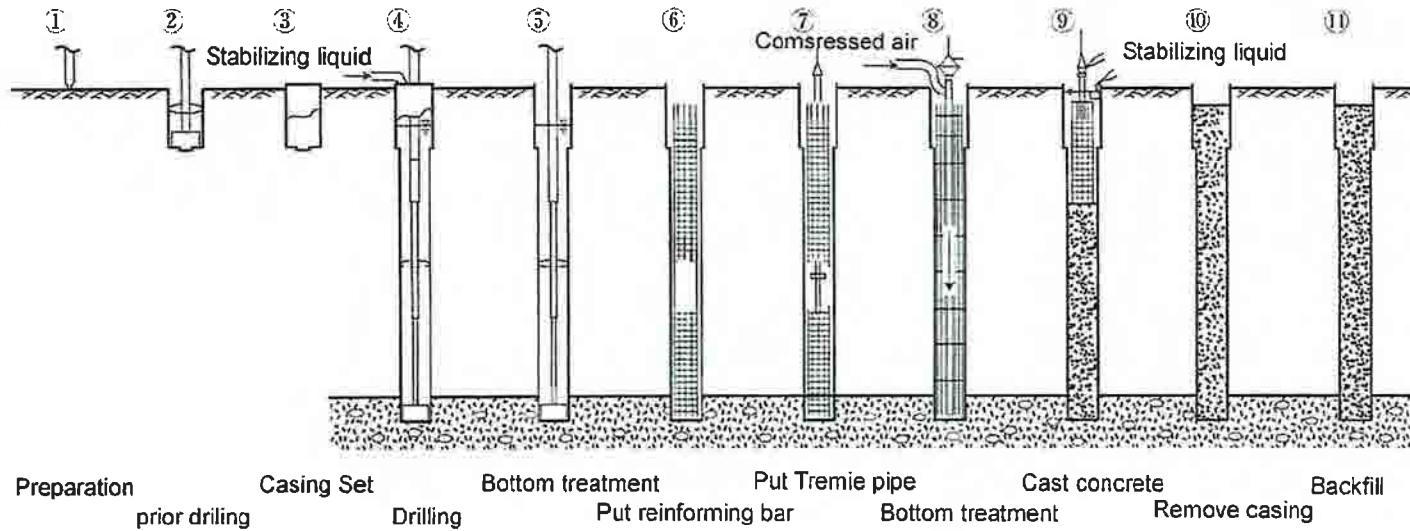
Max Conductor Sag 5.0m at 90MVA line current and 70 deg temp rise and 208m span
 Historical max. wind speed in Dar es Salaam 23m/s by Tropical Storm "Lily" in 1986
 Max Conductor Swing 25 degs at wind speed 25.6m/s
 Safety Insulation Gap 2.86m



Left Side

Right Side

Construction of Cast in place pile foundation



A-5-7

Construction of Pier foundation



1. Hand Excavation



2. Placing liner plate

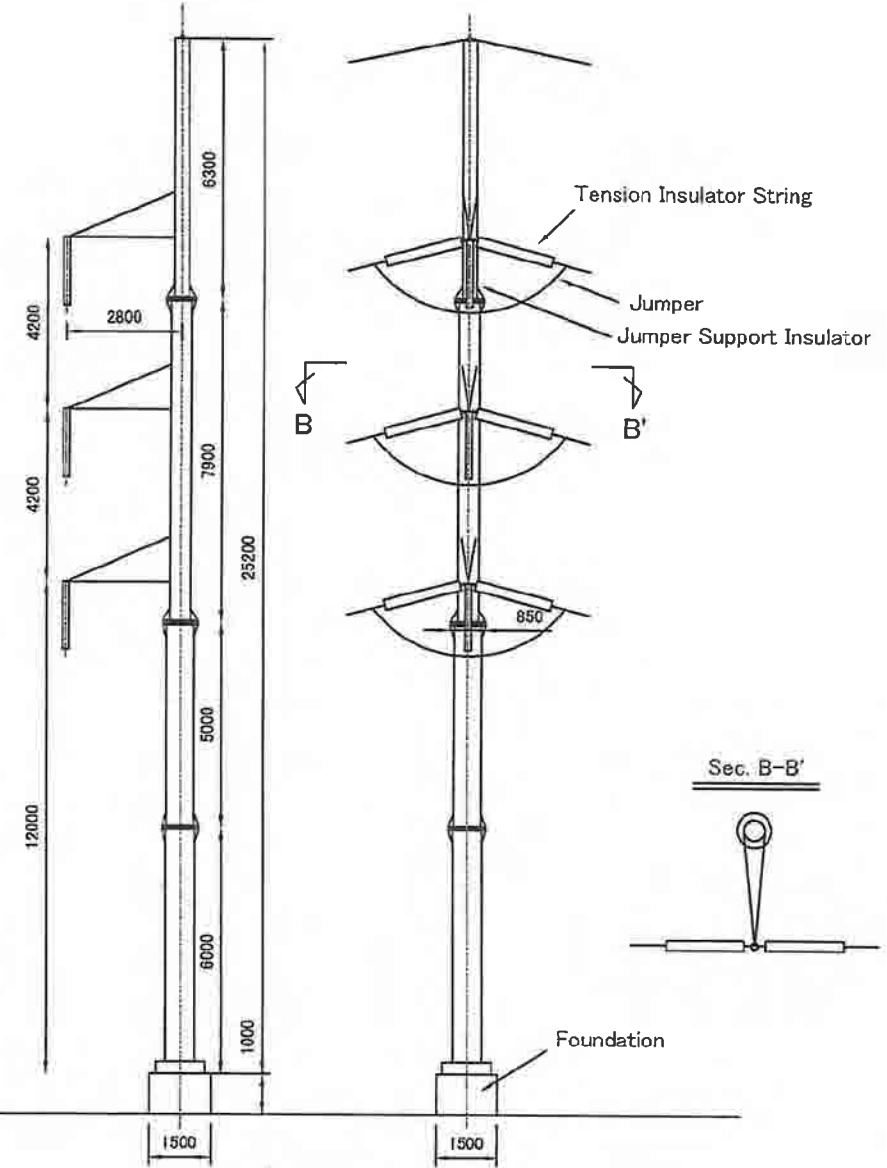
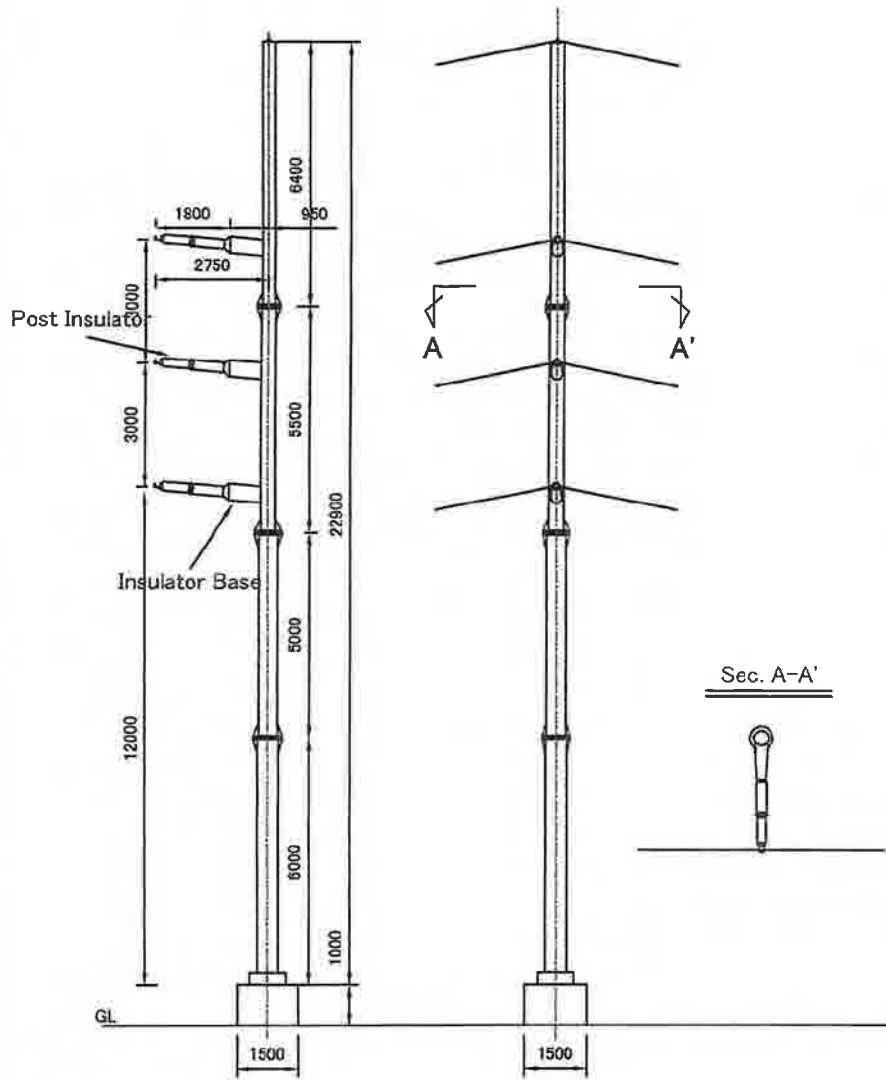


3. Casting concrete

Material Monopole: Carbon steel, Cross arm: Rolled steel
 Surface finishing Hot dip galvanized

Type A (Suspension 0 - 3 deg)

Type B (Tension H. D. A. 3 - 15 deg)



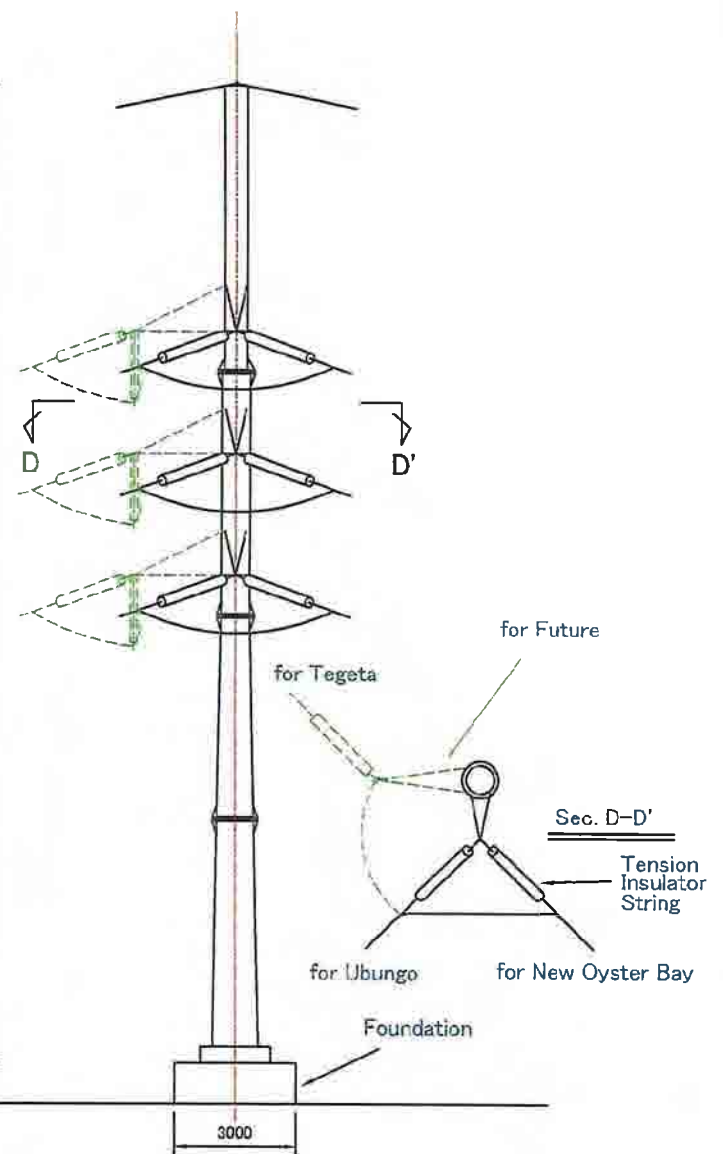
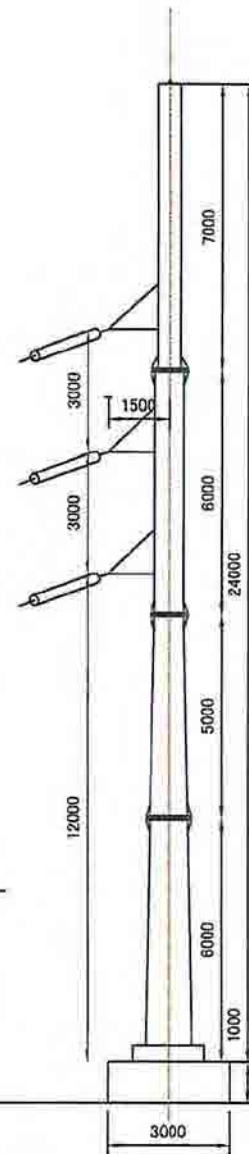
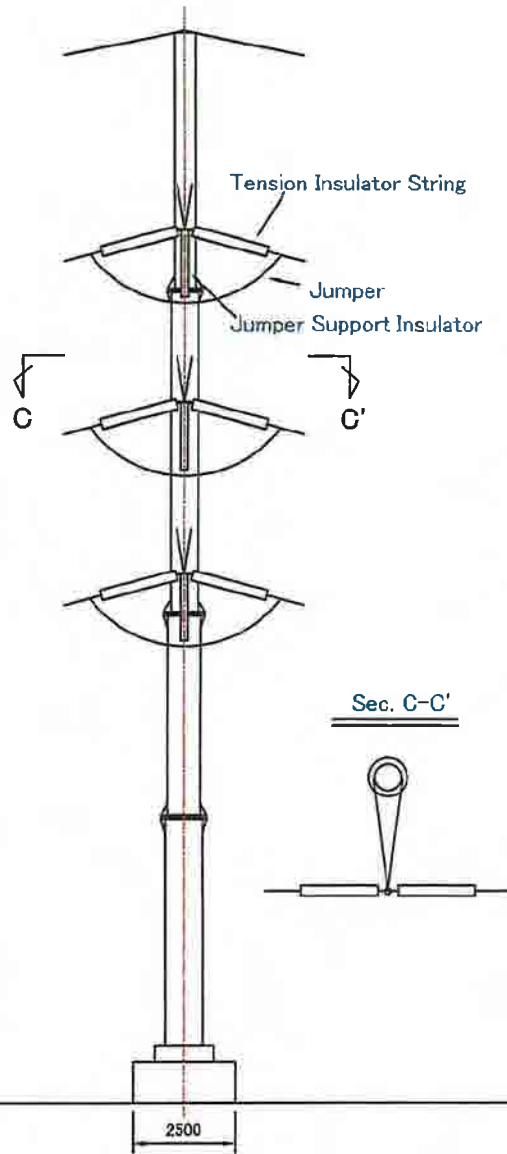
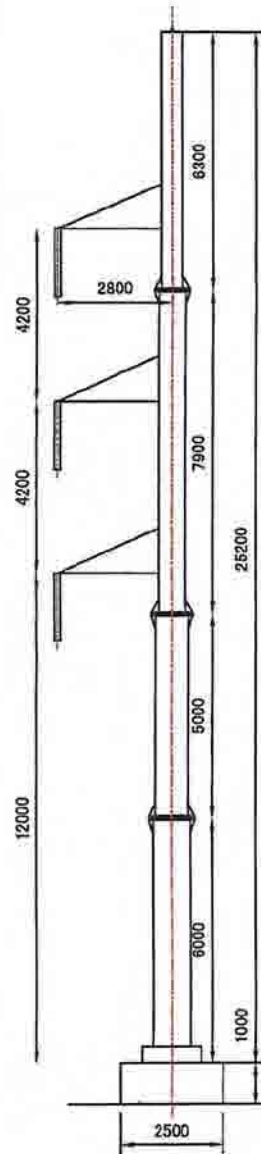
TL-G09A: 132kV Compact monopole (Type A Type B)

A-5-8

Material Monopole: Carbon steel, Cross arm: Rolled steel
Surface finishing Hot dip galvanized

Type C (Tension H.D.A. 15 - 35 Deg)

Type DR (Tension H.D.A. 90 Deg)

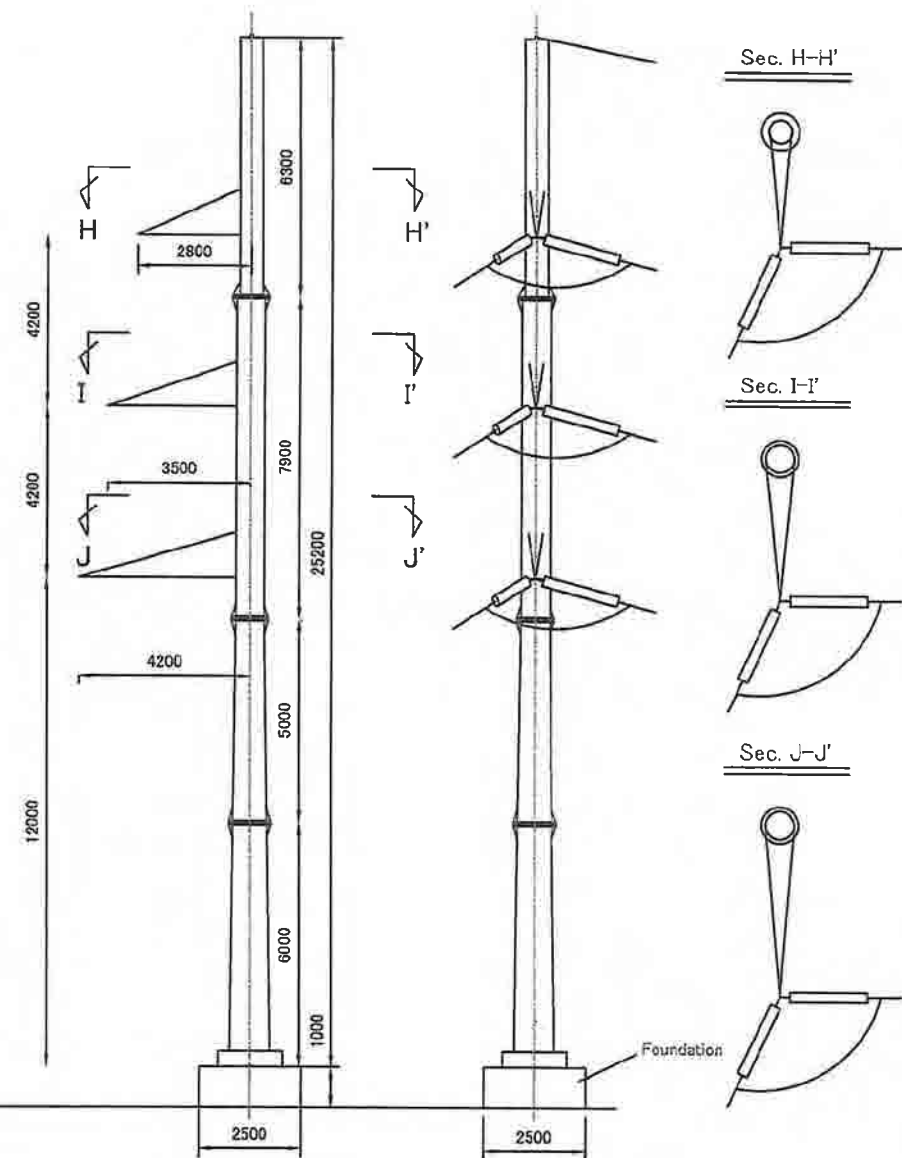
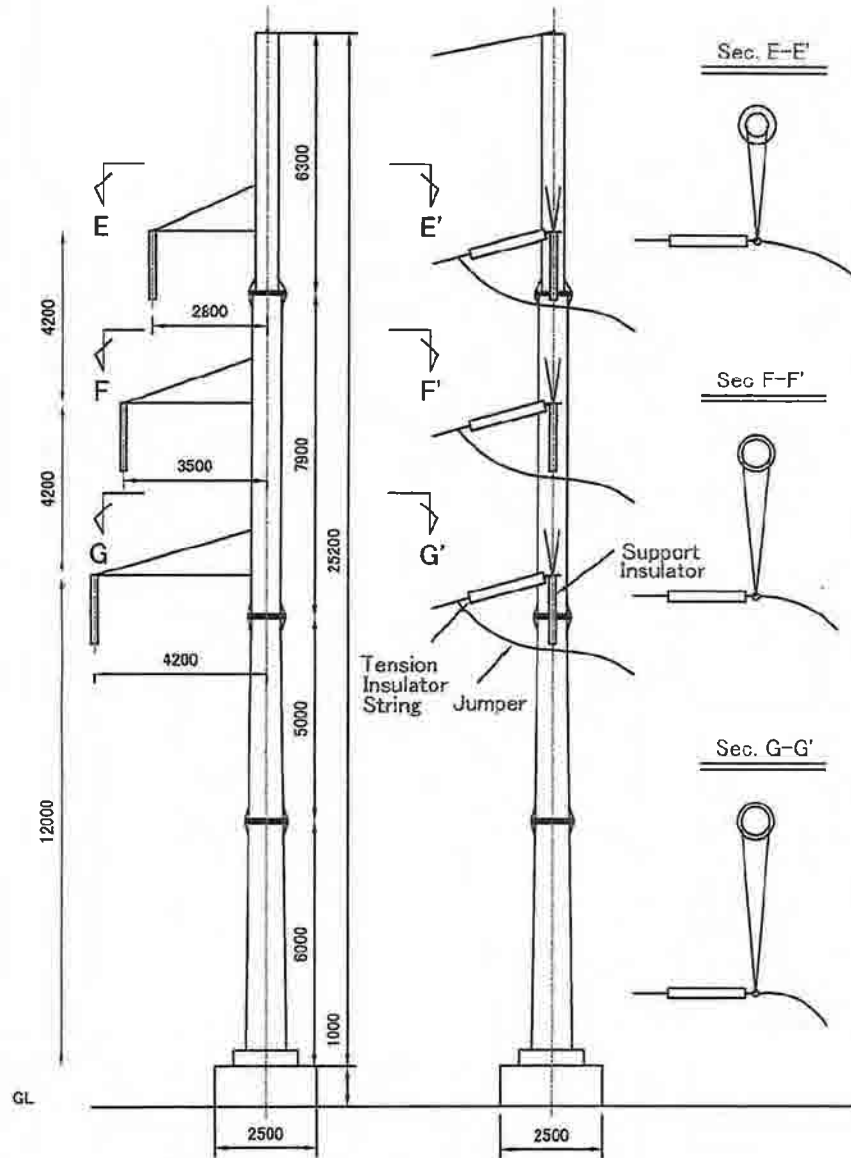


TL-G09B: 132kV Compact monopole (Type C Type DR)

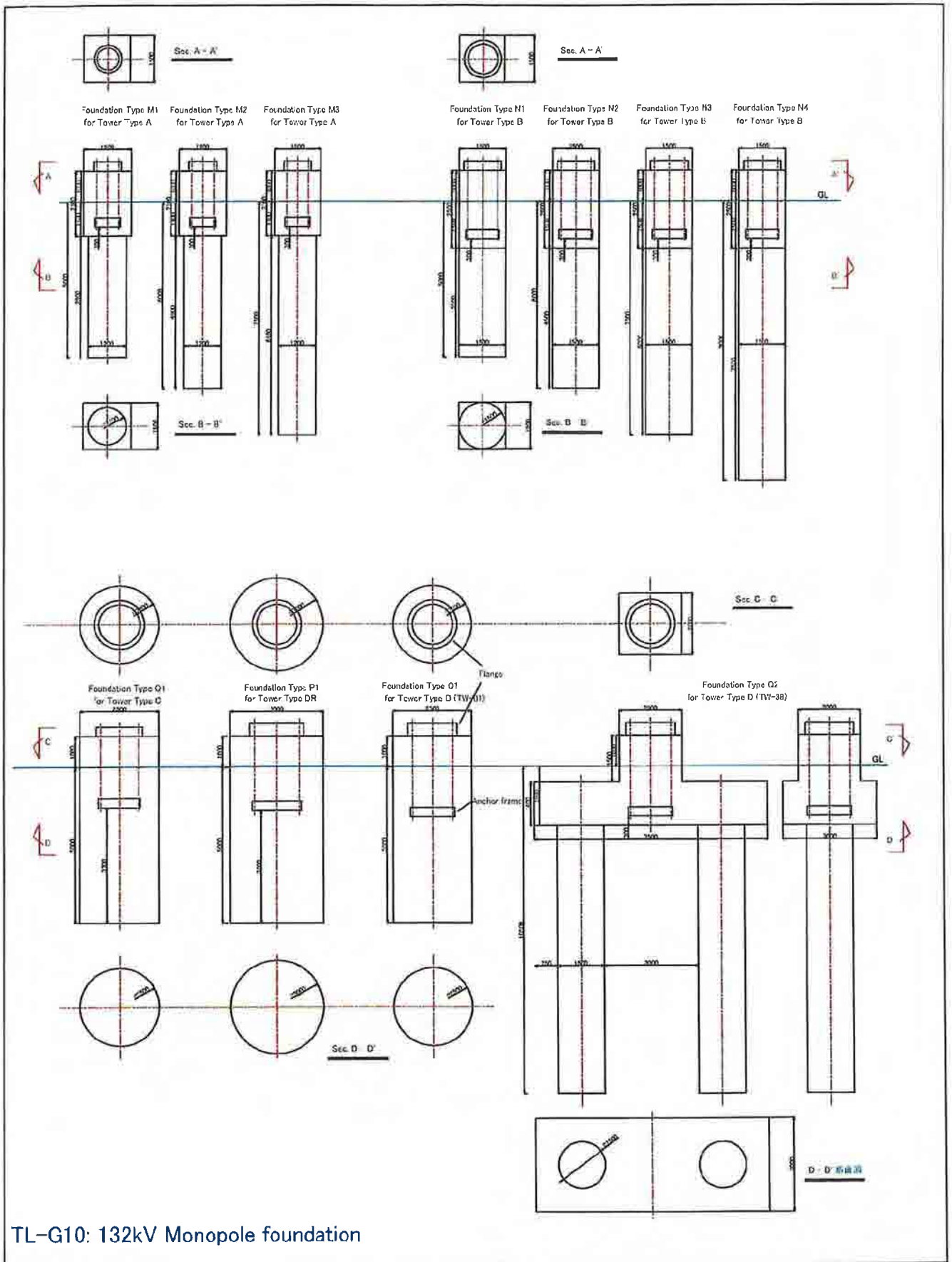
Material Monopole: Carbon steel, Cross arm: Rolled steel
Surface finishing Hot dip galvanized

Type D (Dead end type for TW-01)

Type D (Dead end type for TW-38)



TL-G09C: 132kV Compact monopole (Type D)



TL-G10: 132kV Monopole foundation