

資料-1 調査団員・氏名

1. 調査団員氏名、所属

氏名	担当業務	現職
小宮 雅嗣	業務主任/電力計画	八千代エンジニアリング(株)
近藤 智則	調達計画/積算 (現地)	八千代エンジニアリング(株)
宮本 隆幸	調達計画/積算 (国内)	八千代エンジニアリング(株)

資料-2 調査行程

2. 調査行程

月日(曜日)	一般事項	作業項目	備考
1月17日(木)	「ナ」国へ出発	- 事業化調査の現地協議に出発 - 移動[成田(12:00) - ロンドン(16:35) by JL-401] - 移動[ロンドン(22:15) - (04:30+1) by BA-083]	(機中泊)
1月18日(金)	表敬訪問等	- 9:00 施主 (NPC) 表敬 - 11:00 JICAナイジェリア事務所表敬 - 15:00 施主 (FMOE) 表敬、調査目的・日程等説明 - 資機材、工事費等見積もり依頼	(アブジャ泊)
1月19日(土)	移動	- 移動[アブジャ(10:25) - カハラ-(11:30)] (飛行機) - 移動[カハラ-(12:00) - ウゴ (15:00)] (車輜) - 16:00 アクワ・イボム州政府と調査目的、日程等の協議	(ウゴ泊)
1月20日(日)		- アクワ・イボム州政府とサイト調査	(ウゴ泊)
1月21日(月)	現地協議・調査	- アクワ・イボム州政府とサイト調査、先方負担事項等協議	(ウゴ泊)
1月22日(火)	現地協議・調査	- 現地調査協議 - 移動[ウゴ (14:00) - カハラ-(16:00)] (車輜)	(カハラ泊)
1月23日(水)	現地協議・調査 調査結果報告等	- 移動[カハラ-(8:50) - アブジャ(9:55)] (飛行機) - 14:00 施主 (FOME, NPC) へのサイト調査結果報告、協議、議事録調印	(アブジャ泊)
1月24日(木)	調査結果報告等	- 午前：在ナイジェリア日本国大使館 (EOJ) 報告 JICAナイジェリア事務所報告、安全対策クラークへの 聞取り - 午後：資機材、工事費等の見積り取得	(アブジャ泊)
1月25日(金)	日本へ出発	- 移動[アブジャ(8:30) - ロンドン(14:55) by BA-82] - 移動[ロンドン (19:00) - 成田(14:45+1) by JL-402]	(機中泊)
1月26日(土)	帰国	- 移動[成田着(14:45) by JL-402]	(日本着)

資料-3 関係者(面会者)リスト

3. 関係者（面談者）リスト

<u>所属及び氏名</u>	<u>職位</u>
エネルギー省 Federal Ministry of Energy	
Engr. F. N. A. Olapade	Deputy Director, Electrical Inspectorate Service
Engr. A. Adebisi	Assistant Director, Electrical Inspectorate Service
Engr. Abubakar Dapshima	Principal Inspection Engineer
国家計画庁 National Planning Commission (NPC)	
Mrs. L. D. Bagaiya	Coordinating Director
Mr. Nwozuzu Samuel	Chief Planning Officer
Miss. Blessing Ezeifeke	Planning Officer
アクワ・イボム州政府 Akuwa Ibom State Government	
Hon. (Pastor) Oyong EimAsuquo	Commissioner, Ministry of Rural Development
Engr. (Sir) A. W. Utin	Permanent Secretary, Ministry of Rural Development
Engr. Peter Udobang	Director, Ministry of Rural Development
Engr. Imoedem Akpen	Director, Ministry of Rural Development
Engr. Michael Effiong Udo	Director, Ministry of Works and Transport
Mr. A. D. Udo	Member of Akwa Ibom House of Assembly
ナイジェリア電力持株会社 Power Holding Company of Nigeria (PHCN)	
Engr. Oliver A. Ereugwu	Business Manager
Engr. Temple Ohiagba	System Operator
在ナイジェリア日本国大使館 Embassy of Japan in Nigeria	
押野 智行	一等書記官
JICAナイジェリア事務所 JICA Nigeria Office	
美馬 巨人	所長
諏訪 なおい	企画調査員
Mr. Ibrahim Bashir	Security Advisor
Mr. Omozuanubo Joseph Oruamen	Security Adviser

資料-4 討議議事録(M/D)

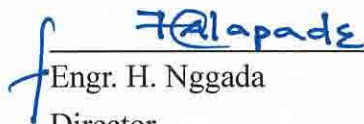
**MINUTES OF DISCUSSIONS
FOR THE PROJECT SURVEY
ON THE PROJECT FOR
RURAL ELECTRIFICATION IN CROSS RIVER AND AKWA IBOM STATES
(PHASE-III)
IN THE FEDERAL REPUBLIC OF NIGERIA**

Basic Design Study on the project for Rural Electrification in Cross River and Akwa Ibom States was conducted in year 2005. However, it has been over a year and half from the time of completion of the Basic Design Study. During this period, prices of raw materials such as copper, etc., and crude oil are rising. And also the security situation surrounding the site should be confirmed for the Project implementation.


Therefore JICA decided to dispatch the Consultant team for this survey.

In order to confirm present situation for the implementation of the Phase-III Project (Akwa Ibom State), all the parties confirmed and agreed upon necessary scope of works to be done on a timely manner by Nigerian side in the attached sheets.

Abuja, January 23, 2008


Engr. H. Nggada
Director
Electrical Inspectorate Service
Federal Ministry of Energy


Hon. (Pastor) Oyong Etim Asuquo
Commissioner
Ministry of Rural Development
Akwa Ibom State


Mr. Nwozuzu Ugochukwu Samuel
Chief Planning Officer
National Planning Commission


Mr. Masatsugu Komiya
Chief Consultant
Project Survey Team
Japan International Cooperation Agency

ATTACHMENT

1. Undertakings to be done by Nigerian Side

Nigerian side has agreed upon necessary undertakings to implement the Project under the Japan's Grant Aid scheme in accordance with Minutes of Discussions (M/D) signed on 11th October, 2007 and on 8th March, 2006, which is in the Basic Design Study Report, if the Japans Grant Aid is provided.

Nigerian side and the Consultant team confirmed that the contents of agreement concluded between both sides on the Basic Design Study as mentioned below.

1-1. Undertakings to be taken by Federal Ministry of Energy

The following undertakings shall be executed in accordance with the implementation schedule on Annex-1 "Tentative Implementation Schedule".

(1) LV distribution line equipment and materials

The Nigerian side should arrange the budget for LV distribution line equipment and materials.

1-2. Undertakings to be taken by Akwa Ibom State Government

The following undertakings shall be executed in accordance with the implementation schedule on Annex-1 "Tentative Implementation Schedule" and Annex-2 "Route map of 33kV Distribution line".

(1) Bush Clearing

Bush clearing work shall be executed by Akwa Ibom State Government. The Total length is approximately 20km alongside 33kV distribution line in the Project Site. Outline of bush clearing work is shown on Annex -2.

(2) Booster Station

The Nigerian side should arrange the budget allocation for securing land by the end of April, 2009.

(3) Completion of remaining parts of 7km of 33kV Distribution lines from the State Secretariat to Udo Udoma Avenue, and construction of 2.2km of 33kV Distribution lines from Ikot Obon to Adia.

The Nigerian side should be completed by the middle of September, 2009.

(4) Road and Bridge repair work (Additional request to Basic Design Study)

The Nigerian side should be completed by the middle of April, 2009.

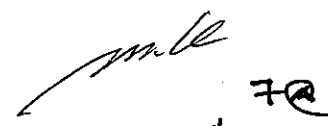
The Total length of the road to be repaired is approximately 1.3km and No. of bridge to be repaired is one, alongside 33kV distribution line in the Project Site. (Refer to Annex -2)

2. Necessary Safety Measures

The following safety measures for all Japanese concerned parties shall be ensured by Akwa Ibom State Government from April, 2009 to the completion of the Project. As for detailed arrangements as follows,

- (1) Escort for Japanese Supervisor (Contractor teams and Consultant):
2 policemen x 4 teams = 8 policemen, 10 hours per day
- (2) Security Guard for stock yards:
2 policemen x 2 places = 4 policemen Full day, 24hours
- (3) Security Guard for Site Office and Accommodation:
4 policemen, Full day, 24hours
- (4) Patrol for the Project Site:
2 policemen x 3 sites = 6 policemen, Full day, 24hours
- (5) Escort for Japanese Supervisor (Moving to Abuja, upon request):
2 policemen, upon request
- (6) Arrangement for vehicles necessary for Police officers

In addition, Akwa Ibom State Government shall have responsibility for all payment for Police Officers and vehicles.

Handwritten signature and initials, possibly 'm.l.' and '70'.

Tentative Implementation Schedule for Ibedu Ibiaikot Clan in Akwa Ibom State (Phase-III)

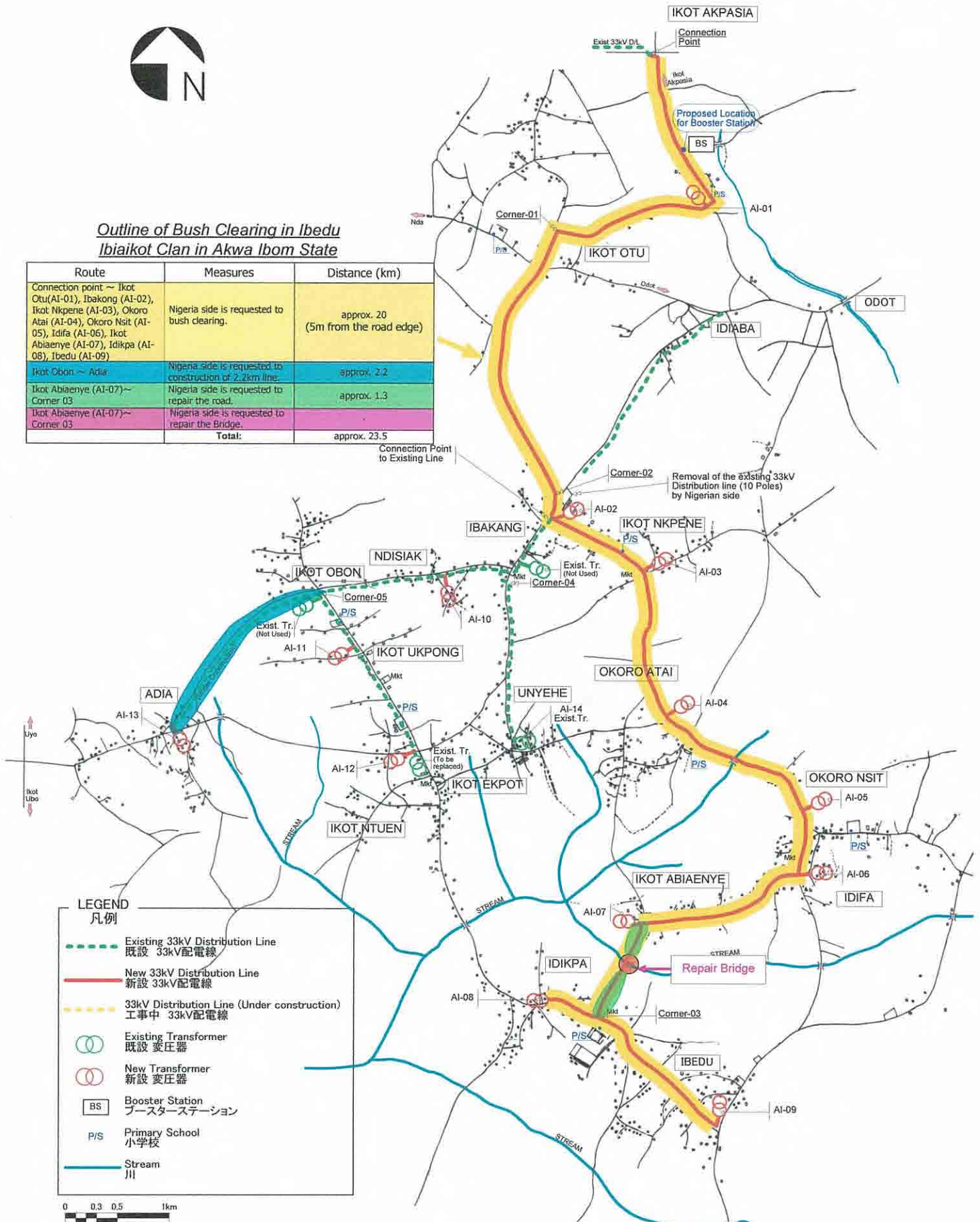
Items	fiscal year	20th																					Remarks	
	year	2008							2009							2010								
	month	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2		3
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1. Contract																								☐ : Rainy season ■ : Heavy rain
(1) Exchange of Notes by both Governments		▼																						
(2) Consulting services contract		▼																						
2. Construction Work by Japanese Contractor																								
(1) Construction Work																								☐ : Work at site
(2) Commissioning test by Japanese side																								
(3) Initial operation training																								
(4) On-the-Job Training (OJT)																								
(5) Handing over to Nigerian side from Japanese side																								
3. Equipment supply and Installation works by Nigerian side																								☐ : Nigerian Program (by FMOE) ■ : at Project site (by Akwa Ibom State)
(1)-1 Completion of remaining parts of 7km of 33kV Distribution lines from the State Secretariat to Udo Udoma Avenue in Uyo																								Date of Energizing ▼
(1)-2 Construction of 2.2km of 33kV Distribution lines from Ikot Obon to Adia																								Date of Energizing ▼
(2) Procurement and installation of LV distribution line equipment and materials																								Date of Completion ▼
(3) Bush clearing along the new 33kV distribution routes																								Date of Completion ▼
(4) Booster Station for Land, Leveling work and Temporary Fence and Gate																								Date of Completion ▼
(5) Road and Bridge repair work																								Date of Completion ▼

m.k.
 QA
 →
 SA
 #am



Outline of Bush Clearing in Ibedu Ibiaikot Clan in Akwa Ibom State

Route	Measures	Distance (km)
Connection point ~ Ikot Otu(AI-01), Ibakong (AI-02), Ikot Nkpene (AI-03), Okoro Atai (AI-04), Okoro Nsit (AI-05), Idifa (AI-06), Ikot Abiaenye (AI-07), Idikpa (AI-08), Ibedu (AI-09)	Nigeria side is requested to bush clearing.	approx. 20 (5m from the road edge)
Ikot Obon ~ Adia	Nigeria side is requested to construction of 2.2km line.	approx. 2.2
Ikot Abiaenye (AI-07)~ Corner 03	Nigeria side is requested to repair the road.	approx. 1.3
Ikot Abiaenye (AI-07)~ Corner 03	Nigeria side is requested to repair the Bridge.	
Total:		approx. 23.5



IC-D-01 Route Map of 33kV Distribution Lines of Ibedu Ibiaikot Clan in Akwa Ibom State

IC-D-01 33kV 配電線 上 図 示 各 区 域 毎 々 別 々 設 計 施 工 可 能 性 有 限 地 区