3. COMMENTS FROM PANEL REVIEW



### FEDERAL MINISTRY OF ENVIRONMENT

### **Environment House**

Independence Way South, Central Business District, Abuja - FCT. Tel: 09-2911 337 www.environment.gov.ng, ea-environment.org

### **ENVIRONMENTAL ASSESSMENT DEPARTMENT**

Ref: FMEnv/EA/EIA/4272/1/220 Date: 28<sup>th</sup> November, 2018.

The Managing Director/CEO, Transmission Company of Nigeria (TCN) Corporate Headquarters, Plot 14 Zambezi Crescent, Maitama, Abuja, FCT

# ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED LAGOS AND OGUN STATES TRANSMISSION LINES FOR LOT 1 PROJECT.

Please refer to the EIA Panel Review meeting conducted for the above stated project on 19<sup>th</sup> October, 2018.

- 2. Following the conclusion of the review exercise, I am directed to inform you that the Draft EIA Report was adjudged satisfactory despite some omissions and inadequacies.
- 3. I am further directed to convey the following information on matters to be handled by your Organization:
  - a) Submission of five (5) hard copies and two (2) e-copies (in PDF) of the Final EIA Report addressing the harmonized comments from the review meeting (attached); and
  - b) Payment of the Final Assessed Charge (FAC) to the Ministry for the EIA Approval as per the attached invoice.
- 4. Kindly note that this is not an approval letter and that the EIA Approval Letter shall only be issued on the confirmation that items 3(a) and (b) above have been satisfactorily complied with.
- Thank you for your co-operation.

J. A. Alonge Director, Environmental Assessment Dept.

For: Honourable Minister



### FEDERAL MINISTRY OF ENVIRONMENT

### **Environment House**

Independence Way South, Central Business District, Abuja - FCT. Tel: 09-2911 337 www.environment.gov.ng, ea-environment.org

### **ENVIRONMENTAL ASSESSMENT DEPARTMENT**

Ref: FMEnv/EA/EIA/4272/1/221 Date: 28<sup>th</sup> November, 2018

The Managing Director/CEO, Transmission Company of Nigeria (TCN) Corporate Headquarters, Plot 14 Zambezi Crescent, Maitama, Abuja, FCT.

#### INVOICE

# ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED LAGOS AND OGUN STATES TRANSMISSION LINES FOR LOT 1 PROJECT.

	ITEM DESCRIPTION	AMOUNT (N)
S/N		50,000.00 Paid
	Registration fees	
ii.	Impact Mitigation Monitoring (IMM) for the first exercise	500,000.00
iii.	Assessed Charge for the proposed construction and installation of 54.6Km  Transmission Lines for LOT 1 is 1,365,000.00.  (a) Revenue – 1,023,750.00  (b) Operational- 341,250.00	1,365,006.00
Iv	Final Assessed Charge	1,865,000.00

The total amount to be paid to the Federal Ministry of Environment for issuance of Environmental Impact Statement (EIS) and Environmental Impact Assessment (EIA) Certificate for the proposed project is One Million, Eight Hundred and Sixty-Five Thousand Naira (\*1,865,000.00) only, as follows:-

a) EIA Operational Charge: Eight Hundred and Forty-One Thousand, Two Hundred and Fifty Naira (N841,250.00) only

b) EIA Government Revenue: One Million and Twenty-Three Thousand. Seven Hundred and Fifty Naira (\$1,023,750.00) only

2. The payments are to be made separately into the Federal Government Treasury Single Account (TSA)

Platform (www.remita.net)

3. The evidence of both payments shall be forwarded to the Ministry's Headquarters at Mabushi. Abuja.

Director, Environmental Assessment Dept.

For: Honourable Minister.

# FEDERAL MINISTRY OF ENVIRONMENT'S HARMONIZED COMMENTS ON THE DRAFT ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT OF THE PROPOSED LAGOS -OGUN TRANSMISSION LINES AND OTHER ASSOCIATED FACILITIES LOT 1

### **Preliminary Pages**

### Cover/title pages

 The cover page should be rephrased to indicate 'substations' instead of 'substation' since there are number's of associated substations.

- The title page has an extension of the cover page to include "line study, ESIA and RAP". The extensions should be expunged to maintain uniformity which reflects the content of the report.

- Please include submitted to the Federal Ministry of Environment in the

revised title.

#### Table of contents

- There are so many items in the executive summary which are also repeated as subsections of other chapters. The Executive Summary should be revised to have only the key topics and not detail's of all the key topics and subsections.

- There are inconsistencies in the writing of chapters and their titles, chapters and their titles should be properly written e.g. Chapter One: Introduction, Chapter Two: Project Justification, Chapter Three: Project Description, Chapter Four: Environmental Baseline Data Acquisition, Chapter Five: Potential and Associated Impacts, Chapter Six: Mitigation Measures, Chapter Seven: Environmental and Social Management Plan (ESMP), etc.

Page x: List of Tables 'Ground Water' in Table 4.21 should be corrected to 'Groundwater' this should be applied to all other relevant sections of the report.

### Pages xvii-xx: List of Abbreviations and Acronyms

- The list of Abbreviation and Acronyms should be arranged in an alphabetical order not randomly as presented.
- ISO means International Organization for Standardization
- The list should also be updated with all other abbreviations and acronyms used in the body of the report.

Page xxi: List of EIA Preparers

- The column on the qualification of the members is vague because it fails to provide their specific disciplines e.g. B. Sc, M. Sc. Ph. D. This column should be updated with specific disciplines of all the members..

#### **EXECUTIVE SUMMARY**

Page xxiv refer. Project Location

Para 1, line 6, Olorunsogo Power Station is in Ewekoro LGA and not Ifo LGA.

Page xxxiv refers:

### **Wastes Generation and Management**

Item (b)

AEPB's sewage treatment facility does not exist in Lagos state or Ogun state. This should be expunged in the updated report.

Page xxxvi, the Table E1 the entire table should be expunged from the executive summary since it's a non technical.

### **Project Schedule**

The projects construction commencement date of 2019 is contrary to late 2019 on page xxxi under Project Phases and Activities, which declare it "will" commence in late 2019. Reconciled this statement in the updated report.

### **Chapter One: Introduction**

Para.1, Line 1, ESMP should read Environmental and Social Management Plan not 'Environmental Management Plan' as stated.

Page 3: Subsection 1.1.3 Project Location,

Para 1, line 6, it stated that the lines in lot 1 have a total length of 54.55km contrary to the breakdown provided in lines 7-13 of same paragraph as well as page 2 and the executive summary. These inconsistencies should be reconciled.

### Pages 4-5:

- Figures 1.1 and 1.2 are not legible; they should be replaced with enlarged and legible ones.

- Figure 1.2 should be rephrased as 'plate' not figure in the up dated report.

- The title of figure 1.3 should be rephrased to read 'Map of Ogun State showing the proposed project (Lot-1) route'

Page 9: Section A- National Environmental Policy, para.3 stated 'Some specific laws include' however, all the information presented in 7 bullet points are for regulations and not laws. The statement should be rephrased to reflect the contents.

### Page 19: Item xiv National Environmental Regulations

- This section should be harmonized with information presented in section 'A' where some 7no. regulations were presented. It is wrong to state that the Minister issues the listed regulations as a result of NESREA Act, the regulations listed predates the NESREA Act of 2007. This should be corrected.
- Bullet points 1-2, the date of production for S.I. 8 and S.I. 15 regulations is 1991 contrary to 1999 as presented. This should be corrected in the updated report.
- Bullet point 3; the regulation should be properly cited as 'S.I. 9 National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations, 1991'

### Page 19 refers. Ogun State Laws

Environmental Management (Miscellaneous) Provisions Law, 2004 should be cited.

Page 26, Power Holding Company of Nigeria (PHCN) is no longer existing as such cannot be an agency under the Federal Ministry of Power, Works and Housing (FMPW&H).

- ✓ The following are not part of the responsibilities of Federal Ministry of Power, Works and Housing (FMPW&H):
  - Licensing of electrical contractors and electric generating sets of 1MW capacity and below
  - Conducting investigation on electrical accidents and to ensure safety in the electricity industry in Nigeria
  - Conducting statutory tests and certification of electric poles (concrete, wooden, steel etc.) and other major electrical materials before they are used on the grid and networks in Nigeria

Page 28, section 1.4.2.16 Ibadan Electricity Distribution Company;

The Ibadan Electricity Distribution Company is one of the 11 and NOT 13 distribution companies unbundled from defunct PHCN during electricity reform in 2005.

The revised section on legal and administrative framework should include other relevant ones such as National Inland Waterways Authority Act, African Development Bank and Convention on Conservation of Migratory Species of Animals and RAMSER Convention on Wetlands of International Importance amongst others.

### Chapter Two: Project Justification

Page 3, Figure 2.1: the presented figure is not clear, it should be presented on A3 paper in the updated report.

Page 4: Subsection 2.3.1 Technical Sustainability; the availability of adequate and qualified manpower for the project execution and operation should form part of its technical sustainability. This should be incorporated in the revised subsection.

Pages 37-38: Substations, the alternative sites considered for the location of the proposed substations should be highlighted and justification for chosen the preferred locations.

Pages 5-6, Section 2.4.2.1 refers. Design / Technology Alternatives

Substations: Air-insulated Substation is preferred to Gas-insulated and hybrid sub-station on account of availability of land. The silence on comparative cost, efficiency and environmental friendliness should be reversed in the final report.

Page 6, Underground versus Surface Transmission Alternatives: Surface transmission in Nigeria has its climatic and security challenges. Do these still place it environmentally better than underground transmission?

How reliable are the data obtained from **Lagos State Electricity Board** as compared to those available with Eko Electricity Distribution Company (EKEDC) and Ikeja Electricity Distribution Company (IKEDC)?

What study/test was carried out and nature of result(s) obtained that justified the conclusion on the technical viability of the proposed project as asserted?

### Page 22, Table 3.1 Disposal Company Column

Rows 1- 3, and 4 should read OGEPA allotted but OGSMEvn. registered Waste Contractor.

Same column, it reads "OGEPA sewage treatment facility, Abuja" How? this is evidence of copy and paste. Please edit properly in the updated report

Page 49, Figure 3.15 is a plate not a figure.

Chapter three should be revised and a lot of generic information that is not relevant to the proposed project should be expunged.

- Design standards references was not in line with Nigerian Electricity Supply and Installation Standards (NESIS), 2015 but TCN standards.
- ✓ There is no information about types and sizes of Conductors and cables.
- ✓ Type of substation fence construction is not clearly stated.
- ✓ There are no Single line diagrams (SLD) or schematic drawings for some
  of the proposed substations (Eg Ejio). Layout plan drawings are
  provided instead and the SLD that are available for some other
  substations are not legible (Eg New Abeokuta and Olorunsogo
  substations).
- ✓ The Google earth route maps does not show proposed positions for towers. The maps are pictures that cannot be work-on to verify details of information submitted.

# Chapter Four: Description of Existing Environment Page 3, Table 4.1 Inventory of Biophysical and Socio Samples

Groundwater column, there is no way the FMEnv will not asked to collect Groundwater samples except otherwise. This should be printed in the updated report.

Page 5 Figure 4.1 Generalized Sampling Map for all the Environmental Components;

The presented figure is not legible therefore should be replaced with an enlarged and legible one.

### Page 12, Figure 4.7: Ambient Air Quality

Figures are titled at the bottom not on top as presented. These should be addressed and corrected.

### **Chapter Three: Project Description**

Page 6, Section 3.4.2 refers. Access Track Repair/ Upgrade/ Construction

"....final route of access road will be determined in consultation with the landowner, giving consideration to environmental impacts" how realistic is this statement.

Pages 7-8 Fig. 3.3 and 3.4, the figures should be presented on A3 paper for legibility in the updated report.

Page 17, Section 3.4.8.2 Hours of Operation,

lines 3-4 stated 'All construction activities that are likely to generate noise shall not be undertaken during night time' please specify the activities that will be conducted at night.

Page 17 Item (i) Clean-Up and Final Inspection

- Bullet points 5-6 are on irrigation ditches and facilities. Please state the relevance of these points and the specific location at which irrigation facilities will be affected by the proposed power transmission line projects.
- Bullet point 'Any fences, gates, etc., which have been damaged during construction shall be restored' is confusing, the re-construction of structures along the line routes and substation sites are very unlikely. The bullet point should be expunged.

Page 18, Section 3.5.2, Easement Maintenance

Last paragraph, NSCDC stands for Nigeria Security and Civil Defence Corps and not <u>National</u> Security and Civil Defence Corps as presented. This should be corrected throughout the report.

Page 21, Section 3.6.2 Waste Disposal

Para 1, line 1, "Sewage from site .....will be vacuum-sucked into septic tanks trucks and taken to facilities approved by OGEPA". Any approval so received for this exercise within the State is illegal as Ogun State has no such facility.

# Page 22 Table 3.1 Proposed Transmission Project Waste Estimates and Disposal Plan

The liquid wastes such as spent oil from heavy duty vehicles and sanitary from camp during pre-construction and construction phases should be identified, characterized, quantified and the management strategies should be provided.

The presented figure is not legible therefore should be replaced with an enlarged and legible one.

Pages 19-20: Section 4.5.1 Noise Quality Measurement;

It was stated that the IFC, WHO and FMEnv limits shall be used to benchmark the ambient noise levels; only WHO limits was used as presented on table 4.10. The IFC standards and FMEnv limits should also be provided in the revised section.

Page 39 Table 4.13 Groundwater Physico-Chemical Characteristics

- There is need to add a column for FMEnv Limits to the table in the updated report

### Page 40, Figure 4.21: Groundwater sampling location map

The presented map is not clear and the title at the bottom not on top as presented, it should be represented with a clearer map in the updated report.

Same applied to figure 4.22 Surface water sampling map on page 51 of the report.

Page 77-93 4.10 Biodiversity;

The section highlights the richness &diversity of flora within the study area but fails to highlight the possible areas where vegetation will be cleared. This should include the measurement estimate since the vegetation are carbon sinks that would be lost.

Pages 81-82, the presented plates 4.14-4.17, the exact community were those pictures taken should be stated in the updated report.

Page 123: Figure 4.28b Map showing communities; the map should be represented on A3 paper and be more legible and enlarged manner.

### Page 124, Section 4.12.3 Household Characteristics

The report stated that 500 questionnaires were used! This should be corrected to read 500 copies of the questionnaire were administered. Even though the report stated that 36% of the adult population was covered. In a population of about seven (7) household members, the household heads would not have been 36% of the population.

It is expected that the number of questionnaires administered and retrieve per each community should be stated.

It said 488 questionnaires were retrieved from the respondents what happened to the remaining number?

### Marital status of head of household

It was stated that' The total adults sampled consisted of 280 males and 208 females'. The sum of the household head contradicts the total number of 500 copies of questionnaires deployed for the studies. please reconciled.

Page 131, there is the need to tabulate the figures under income (4.12.4.3) and educational level (4.12.4.4) and not in prose as presented currently. Also the number of the responded per community should be stated.

Page 139 Table 4.56; suggests that everything is normal for the 50 children chosen for investigation and yet malnutrition and others were reported to be common in the area. Please examine your data again. Plate 4.46 read processing of garri, it should be processing of cassava!

Also, Table 4.55 the Body Mass Index of the respondents should be presented based on age and gender of the study area.

### Page 145-146 Item (a) Government Authorities

- Federal Ministry of Power, Abuja should be corrected to Federal Ministry of Power, Works and Housing.
- There is a mixed-up in the listed bullet points. While bullet points 1-3 referred to the institutions, bullet points 4-5 referred to teams from some institutions. Please reconcile.
- Other relevant government institutions such as National Energy Commission should also be captured in the revised section.
- Same text was repeated, One should be expunged in the updated report.

### Note;

It would be more appropriate to indicate the number of respondents interviewed per community or at least per LGA specifying the various villages or communities covered in each LGA, in the state.

Under the Focus Group Discussion, the felt needs of the communities were not presented. This is key for each community or village.

The percentage land area allocated by each LGA should be presented in the updated report.

"Household" not "Houshold" should be corrected in the entire chapter.

### **Chapter Five: Associated and Potential Impacts**

Page 1, Section 5.1 Introduction

- Para.5 on project activities is completely silent on the activities related to pre-construction phase of the project activities. The section should be updated with all the key project activities for all the project components.
- Some items listed are impacts and not project activities as stated e.g. spills, traffic, accidents and tower collapse amongst others. This should be addressed.
- The section should be revised to include other phases of the project as well as their corresponding activities e.g. pre-construction and decommissioning phases as outlined in other sections of the report.

### Page 2, Section 5.3.4 Construction phase

Emissions from vehicles and equipment (SO2, CO, NOx, CO2, PM) should be corrected to '....( $SO_2$ , $CO_2$ )' were applicable in the entire report.

Page 8 Section 5.3.3 Process from Material Production

The GHG production embodied from the material that will be used for construction is not part of the contributions to climate change from the project due to the fact that the proponent is not the manufacturer of these products. This section should be removed.

Page 9 Section 5.3.3 Energy used in the Construction Activity

The proponent failed to highlight what contributions of GHG the energy used in the construction activity for the project could generate. It is understood that diesel fueled transportation, equipment and generators would be used during construction activities, these will lead to gas emissions.

Emission rate per hour for the engines with consideration for the engine efficiency which would lower emissions significantly should be highlighted. This can be obtained from secondary data.

Pages 9-10, Section 5.3.3; Land Clearing

The references with regards to GHG emissions due to material production are not contributions from this project thus should be removed from the draft. Only direct contributions should be highlighted.

### Page 13, Section 5.4.2 Operation Phase

Item 2, The baseline data of corona discharge from the existing transmission lines in the area of influence of the project should have been documented for benchmarking the project in future.

Page 15, Section 5.6.2 operation phase, the information provided that no impact was anticipated on surface water during operational phase is not correct. Please revise the section to clearly identify impacts associated with project activities e.g. maintenance of the lines and substations could result in some impacts.

# Page 16, Section 5.7.1 Impact on Terrestrial flora and Fauna

It was stated that 'However, the identified species that fall within the IUCN Red list classification are as follows; *Albizia ferruginea, Albizia zygia, Sterculia oblonbata, Terminalia ivorensis, and Diospyros barteri' therefore the impact cant not be rated as minor since these species will be displaced.* 

### Page 23, 5.13 refers. Resettlement

The Resettlement Action Plan (RAP) report as referred to in this section and some other section's of the report is missing. The RAP report should be integrated into the ESIA report or it should be submitted differently.

Section of 5.18.2 refers.

## Identification of Relevant Development(s)

Has Abeokuta Independent Power Project (Energy Culture) taken off? The Power Plant in that vicinity is Lisabi Power Plant and it should be included in the list of the existing project within 10km radius.

Chapter five on impacts should be revised in line with revised chapter three on project description. The revised chapter should take cognizance of all the key project activities as well as their associated and potential impacts including cumulative impacts.

### **Chapter Six: Mitigation Measures**

Page 29 Potential soil contamination

With regards to soil contamination impacts, the following measures will be implemented:

 Some of the point listed are not applicable to this project eg, Regular checking and maintenance of all plant and equipment to minimize the risk of fuel or lubricant leakages; Install oil/water separators and silt traps before effluent leaves the site; etc, specific potential related contamination to the project should be stated.

Page 6, para 2, does this project involved handling of any hazardous chemicals during the construction of the towers? If so, please state those hazardous chemicals.

Operational Phase,

The impacts will not be considered negligible since considering the fact that some leakages of hazardous chemicals, spill during fuelling of machineries were identified as impact therefore the impact should not be negligible.

Pages 15-285: Tables 6.1a & 6.2b: Summary of Mitigation Measures; the Tables should be revised to include the key project activities, the phases as well as their corresponding mitigation measures.

Chapter six on mitigation measures should be revised in line with revised chapters three on project description and five on associated and potential impacts. The revised chapter should take cognizance of all the key project activities in the revised chapter three and identified impacts in revised chapter five.

### Chapter Seven: Environmental Management Plan

Page 1, Section 7.1 Introduction, line 1 stated 'This chapter provides the ESMP for the Lagos and Ogun Transmission Line Project' the sentence should be revised to include the associated substation facilities.

### Page 2, Table 7.1 Major roles and Responsibilities

Ogun State Environmental Protection Agency should be replaced with Ogun State Ministry of Environment as the mother Ministry in the updated report.

### Page 4, Section 7.3.3 refers. Regulatory Agencies

Ogun State Ministry of Environment should be listed as one of the Regulatory agencies of the proposed project.

Page 11, Table 7.2a is in conflict with Table 1 as Table. 7.2a does not assign any responsibility to the identified regulatory bodies i.e FMEnv, OGMEnv etc on the Environmental and Social Monitoring Plan. It should be revised to capture the relevant regulatory bodies on the Responsibility column. Also, Table 7.2a is silent on RAP. It is part of the project to be monitored and should be captured on the table.

Pages 31 Table 7.2b ESMP during construction; there is need to re-examine the monitoring frequencies as proposed e.g. Annual monitoring of air quality, nothing was mentioned on noise levels and vibration during construction phase in the Table. The air quality, noise levels and vibration should be monitored more frequently (e.g. daily & weekly) during the construction phase to ensure all associated issues are adequately addressed.

Chapter seven on EMP should be revised in line with revised chapters three on project description, five on associated and potential impacts and six on mitigation measures.

#### **General Comments**

- The Report should be carefully edited to correct/expunge all typo, spelling and grammatical errors.
- ii) The Corporate Social Responsibility (CRS) specific for the proposed project should be clearly and concisely presented in the revise report.
- iii) All illegible tables, figures and maps should be made legible in the revised report.
- iv) All sources of information used in the report should be properly cited and included in the reference list and those not relevant should be expunged.
- v) The executive summary should be revised to reflect the comments on all the chapters of the report.



### FEDERAL MINISTRY OF ENVIRONMENT

### **Environment House**

Independence Way South, Central Business District, Abuja - FCT. Tel: 09-2911 337 www.environment.gov.ng, ea-environment.org

### **ENVIRONMENTAL ASSESSMENT DEPARTMENT**

Ref: FMEnv/EA/EIA/4318/180 Date:28th November, 2018.

The Managing Director/CEO, Transmission Company of Nigeria (TCN) Corporate Headquarters, Plot 14 Zambezi Crescent, Maitama, Abuja, FCT

# ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED LAGOS AND OGUN STATES TRANSMISSION LINES AND ASSOCIATED SUBSTATIONS FOR LOT 2 PROJECT

Please refer to the EIA Panel Review meeting conducted for the above stated project on 19th October, 2018.

- 2. Following the conclusion of the review exercise, I am directed to inform you that the Draft EIA Report was adjudged satisfactory despite some omissions and inadequacies.
- 3. I am further directed to convey the following information on matters to be handled by your Organization:
  - a) Submission of five (5) hard copies and two (2) e-copies (in PDF) of the Final EIA Report addressing the harmonized comments from the review meeting (attached); and
  - b) Payment of the Final Assessed Charge (FAC) to the Ministry for the EIA Approval as per the attached invoice.
- 4. Kindly note that this is not an approval letter and that the EIA Approval Letter shall only be issued on the confirmation that items 3(a) and (b) above have been satisfactorily complied with.
- 5. Thank you for your co-operation.

J. A. Alonge

Director, Environmental Assessment Dept.

For: Honourable Minister



## FEDERAL MINISTRY OF ENVIRONMENT

### **Environment House**

Independence Way South, Central Business District, Abuja - FCT.
Tel: 09-2911 337 www.environment.gov.ng, ea-environment.org

### **ENVIRONMENTAL ASSESSMENT DEPARTMENT**

Ref: FMEnv/EA/EIA/4318/1/181 Date: 28<sup>th</sup> November, 2018

The Managing Director/CEO, Transmission Company of Nigeria (TCN) Corporate Headquarters, Plot 14 Zambezi Crescent, Maitama, Abuja, FCT.

#### INVOICE

# ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED LAGOS AND OGUN STATES TRANSMISSION LINES AND ASSOCIATED SUBSTATIONS FOR LOT 2 PROJECT.

	ITEM DESCRIPTION	AMOUNT (N)
S/N		50,000.00 Paid
i	Registration fees	
ii.	Impact Mitigation Monitoring (IMM) for the first exercise	500,000.00
III.	Assessed Charge for the proposed construction and installation of 69.98km Transmission Lines and 3 nos high voltage substations for LOT 2 project in Lagos and Ogun States is 2,199,500.00.  (a) Revenue – 1,649,625.00  (b) Operational- 549,875.00	2,199,500.00
Iv	Final Assessed Charge	2,699,500.00

The total amount to be paid to the Federal Ministry of Environment for issuance of Environmental Impact Statement (EIS) and Environmental Impact Assessment (EIA) Certificate for the proposed project is Two Million. Six Hundred and Ninety-Nine Thousand Five Hundred Naira (№2,699,500.00) only, as follows:-

- a) ElA Operational Charge: One Million and Forty Nine Thousand, Eight Hundred and Seventy-Five Naira (N1.049,875.00) only
- EIA Government Revenue: One Million, Six Hundred and Forty Nine Thousand, Six Hundred and Twenty- Five Naira (N1,649,625.00) only
- 2. The payments are to be made separately into the Federal Government Treasury Single Account (TSA)
  Platform (www.remita.net)
- 3. The evidence of both payments shall be forwarded to the Ministry's Headquarters at Mabushi, Abuja.

J. A. Alonge

Director, Environmental Assessment Dept.

For: Honourable Minister.

# FEDERAL MINISTRY OF ENVIRONMENT'S HAMORNIZED COMMENTS ON THE DRAFT ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT OF THE PROPOSED LAGOS - OGUN TRANSMISSION LINES AND OTHER ASSOCIATED FACILITIES LOT 2

### **Preliminary Pages**

### Cover/title pages

- The cover page should be rephrased to indicate 'substations' instead of 'substation' since there are number's of associated substations.
- The title page has an extension of the cover page to include "line study, ESIA and RAP". The extensions should be expunged to maintain uniformity which reflects the content of the report.
- Please include submitted to the Federal Ministry of Environment in the revised title.

### Pages iii-x: Table of contents

- There are so many items in the Executive Summary which are also repeated as subsections of other chapters. The executive summary should be revised to have only the key topics and not details of all the key topics and subsections.
- There are inconsistencies in the writing of chapters and their titles and should be properly written e.g. Chapter One: Introduction, Chapter Two: Project Justification, Chapter Three: Project Description, Chapter Four: Environmental Baseline Data Acquisition, Chapter Five: Potential and Associated Impacts, Chapter Six: Mitigation Measures etc.

Page vii, Table of Content, chapter nine should be captured as Conclusion and Recommendations

Page xiii: List of Tables 'Ground Water' in Table 4.13 should be corrected to 'Groundwater' this should be applied to all other relevant sections of the report.

Pages L i-iii: List of Abbreviations and Acronyms

Units of Measurement: All quantities that has 'meter' in their measurement should be edited to "metre".

m³ is 'metre cubed' and not 'meter cube'.

Chemical elements and Compound:  $PO_4^{3-}$  is 'Phosphate ion' and not 'Phosphate'.

### **Organizations**

- ISO mean 'International Organization for Standardization' and not 'International Standard Organization'.
- The list should also be updated with all other abbreviations and acronyms used in the body of the report.

Page iv: List of ESIA Preparers Not "List of Prepares"

Page A-i: Acknowledgement; the acknowledgement should come after the executive summary and not before as presented in the report.

#### **EXECUTIVE SUMMARY**

Page i, para 1, last sentence, Environmental and Social Management Plan not Environmental Management Plan

Page ii, The Need and Benefits of the Project;

Bullet 5, "use" not "Used" should be corrected.

Project Sustainability

The sustainability should be captured and the social and Economic aspect of the project.

Same page under Project description;

'Transmit' should be corrected to read 'transmission', Page iv, **Description of Existing Environment** 

"Secondary data from previous studies was obtained to cover rainy season", the Source of the secondary data in reference needs disclosure should be stated.

Page vi, para1, first sentence under Soil and Land Use Studies:

"....were collected in bulked mixed and sub-sampled for laboratory analysis" should be edited to convey the name.

Page xiv, row 2 refers. The potential impact.

"the high resistivity subsoil at the upper 2m beneath the proposed substation at Likosi/Dejuwogbo and Redeem are poor earthing media" and the corresponding mitigation and enhancement measures are not in tune because the latter was probabilistic and non-commutant, through the statement "may be need to be artificially enhanced". This was also repeated in section 6.5.

Page xv, last row, column 5 refers. It is OGMEnv. that registers environmental contractors not OGEPA, it only allots. This should be corrected in the updated report.

Page xxv, row 2 Terrestrial and Aquatic Ecology.

"Maximum of 7.5m wide within centre line of RoW shall be maintained for TL maintenance". This leaves about 22.5m to 42.5m of the RoW unattended to. How will this be secured against encroachers' intrusion?

### Page xxviii Conclusions

TCN is recommending ESMP. Who is to implement the recommendation? This should be edited.

Note,

Nothing was mentioned on waste generation, categorization and management of the project.

Value of the proposed project should also be included in monetary terms.

### Chapter One: Introduction

Page 1, Para.4, Line 5, ESMP should read Environmental and Social Management Plan not 'Environmental Management Plan' as stated.

Page 3: Subsection 1.1.3 Project Location,

Para 1, line 1, "the entire project consists of about 203km high transmission lines and <u>6 high voltage substations</u>.." not '<u>5 high voltage substations</u>'

Also, last sentence on the same page it stated that 'Table 1.1 shows the description of the proposed Transmission line with a total length of about 60.5km and substations' this is contrary to the breakdown provided in the table which sum up 63.97km on page 1 and the executive summary. These inconsistencies should be reconciled.

### Pages 4-5:

- Figures 1.1.1-1.1.5 are not legible; they should be replaced with legible ones on A3 papers in the updated report.
- The title of figure 1.3 should be rephrased to read 'Map of Ogun State showing the proposed project (Lot-2) route'

Page 9 Section 1.3 Scope of the Project Component

The Resettlement Action Plan (RAP) report should have been attached to the report since references were made to it in the ESIA report.

Page 9, item 1.4.1.14 Section A- National Environmental Policy, para.3 stated 'Some specific laws include' however, all the information presented in 6<sup>th</sup>

bullet points are for regulations and not laws. The statement should be rephrased to reflect the contents.

### Page 20 Item xiv National Environmental Regulations

- This section should be harmonized with information presented in section '1.4.1.14 on page 9' where some 6 numbers of regulations were presented. It is wrong to state that the Minister issues the listed regulations as a result of NESREA Act, the regulations listed predates the NESREA Act of 2007. This should be corrected.
- Bullet points 1-2, the date of production for S.I. 8 and S.I. 15 regulations is 1991 contrary to 1999 as presented. This should be corrected in the updated report.
- Bullet point 3; the regulations should be properly cited as 'S.I. 9 National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations, 1991'

Pages 20-21: there are a lot of information that is bolded unnecessarily e.g. bullet points 6-16 of section 1.4.3 and bullet points 1-8 of section 1.4.6 IFC PS amongst others. These should be addressed throughout the report.

### Page 20 Ogun State Laws

Environmental Management (Miscellaneous) Provisions Law, 2004 should be cited. This is omnibus environmental law in Ogun State.

Page 26, Power Holding Company of Nigeria (PHCN) is no longer existing as such cannot be an agency under the Federal Ministry of Power, Works and Housing (FMPW&H).

✓ The following are not part of the responsibilities of Federal Ministry of Power, Works and Housing (FMPW&H):

- Licensing of electrical contractors and electric generating sets of 1MW capacity and below
- Conducting investigation on electrical accidents and to ensure safety in the electricity industry in Nigeria
- Conducting statutory tests and certification of electric poles (concrete, wooden, steel etc.) and other major electrical materials before they are used on the grid and networks in Nigeria

### Page 27 Section 1.4.9.6 Ministry of Physical Planning.

This Ministry does not exist in Ogun state but "Ministry of Urban and Physical Planning" this should be corrected in the updated report.

### Page 28, section 1.4.2.16 Ibadan Electricity Distribution Company;

**The Ibadan Electricity Distribution Company** is one of the **11** and NOT **13** distribution companies unbundled from defunct PHCN during electricity reform in 2005.

 The revised section on legal and administrative framework should include other relevant ones such as National Inland Waterways Authority Act, African Development Bank and Convention on Conservation of Migratory Species of Animals and RAMSER Convention on Wetlands of International Importance amongst others. Electric Power Sector Reform Act 2005 should also be reviewed.

### **Chapter Two: Project Justification**

Page 3, Figure 2.1.1 the presented figure is not clear, it should be presented on A3 paper in the updated report.

Page 2: Subsection 2.3.1 Technical Sustainability; the availability of adequate and qualified manpower for the project execution and operation should form part of its technical sustainability. This should be incorporated in the revised subsection.

### Pages 5-6, Section 2.4.2.1 refers. Design / Technology Alternatives

Substations: Air-insulated Substation is preferred to Gas-insulated and hybrid sub-station on account of availability of land. The silence on comparative cost, efficiency and environmental friendliness should be reversed in the final report.

Page 6, Underground versus Surface Transmission Alternatives: Surface transmission in Nigeria has its climatic and security challenges. Do these still place it environmentally better than underground transmission?

How reliable are the data obtained from **Lagos State Electricity Board** as compared to those available with Eko Electricity Distribution Company (EKEDC) and Ikeja Electricity Distribution Company (IKEDC)?

What study/test was carried out and nature of result(s) obtained that justified the conclusion on the technical viability of the proposed project as asserted?

Page 8, second to the last paragraph, the location of Redeemed substation is still uncertain. When it is resolved, what is the assurance that LRS will still be relevant?

Chapter two should be revised to capture the value of the project,.

Chapter Three: Project Description

Page 1, section 3.1 Nature of the project;

Para 1, line 1, it should read 'the proposed project (LOT 1) by transmission Company of Nigeria (TCN)...' in the updated report.

Page 2, '... the existing Transmission line between Ikeja West S/S and Omotosho S/S is double circuit and TCN is planning to change it to four circuit system tower near the branching point...' is this plan part of this project? If yes, it should be clearly spelt out in the updated report.

Pages 3-4, Project Phase and Activities

The listed points should be numbered using Roman Numerals instead of Alphabet which is confusing to an abbreviation e.g AA, BB etc.

Page 6, Section 3.4.2 refers. Access Track Repair/ Upgrade/ Construction

".....final route of access road will be determined in consultation with the landowner, giving consideration to environmental impacts" how realistic is this statement.

Pages 7-8 Fig. 3.3 and 3.4, the figures should be presented on A3 paper for legibility in the updated report.

Page 12, Section 3.4.8.2 Hours of Operation,

lines 3-4 stated 'All construction activities that are likely to generate noise shall not be undertaken during night time' please specify the activities that will be conducted at night.

Page 12 Item (i) Clean-Up and Final Inspection

- Bullet points 5-6 are on irrigation ditches and facilities. Please state the relevance of these points and the specific location at which irrigation facilities will be affected by the proposed power transmission line projects.
- Bullet point 'Any fences, gates, etc., which have been damaged during construction shall be restored' is confusing, the re-construction of structures along the line routes and substation sites are very unlikely. The bullet point should be expunged.

Page 13, Section 3.5.2, Easement Maintenance

Last paragraph, NSCDC stands for Nigeria Security and Civil Defence Corps and not National Security and Civil Defence Corps as presented. This should be corrected throughout the report.

Page 15, Section 3.6.2 Waste Disposal

Para 1, line 1, "Sewage from site .....will be vacuum-sucked into septic tanked trucks and taken to facilities approved by OGEPA". Any approval so received for this exercise within the State is illegal as Ogun State has no such facility.

# Page 22 Table 3.6.1 **Proposed Transmission Project Waste Estimates and Disposal Plan**

The liquid wastes such as spent oil from heavy duty vehicles and sanitary from camp during pre-construction and construction phases should be identified, characterized, quantified and the management strategies should be provided.

Page 33, Tower erection/Accessories

Towers shall be erected at approved distance' what is the approve distance and by who was approval given? Please state it in the updated report.

Page 3.8.5 Line insulators type Analysis;

Based on the three listed type which one is selected to be used and state the reason for the selection, please.

Page 22, Table 3.1 Disposal Company Column

Rows 1- 3, and 4 should read OGEPA allotted but OGMEvn. Registers Waste Contractor.

Same column, it reads "OGEPA sewage treatment facility, Abuja" How? this is evidence of copy and paste. Please edit properly in the updated report

Pages 37-38: Substations, the alternative sites considered for the location of the proposed substations should be highlighted and justification for chosing the preferred locations.

Page 43, Figure 3.10 is a plate not a figure as captured.

Page 44, Table 3.10.1 Location and configuration of substation

It was stated during the presentation at the review meeting and the Site visit that all the substations will be constructed on a 25Ha of land. However the

land sizes varies on the presented table. Please reconcile in the updated report.

Pages 45-47 figures 3.10.1-3.10.3, the presented figures should be represented on A3 paper for clarity in the updated report.

Page 48, section 3.11 Land Take requirement for Transmission lines;

It was stated on the second paragraph that 'the land of the RoW under transmission lines will need to be acquired by TCN'. What is the current status of the RoW?

Chapter three should be revised and a lot of generic information that is not relevant to the proposed project should be expunged. The following should be captured in the chapter;

- ✓ Design standards references was not in line with Nigerian Electricity Supply and Installation Standards (NESIS), 2015 but TCN standards.
- ✓ There is no information about types and sizes of Conductors and cables.
- ✓ Type of substation fence to be constructed is not clearly stated.
- ✓ The Google earth route maps does not show proposed positions for towers. The maps are pictures that cannot be work-on to verify details of information submitted.

### **Chapter Four: Description of Existing Environment**

Page 35, Table 4.7.2 Physico-chemical characteristic of Groundwater source from the area;

It is expected that a column for regulatory limits should be included into the table in the updated report.

Page 26, the presented subsurface sequence and geo-electric characteristic of the study should be presented in a tabular form in the updated report.

Page 32, Section 4.7.1 Groundwater sources

The "Source of the water" is different from the "chemical properties of the water" the text should be rephrased to tally with the heading. Also para1, line 1, what is the relationship between the ambient air temperature and that of the groundwater, please explain in the updated report.

Pages 35-36, Table 4.7.2 Physico-Chemical Characteristics of "Groundwater" not "Underground water".

Also, a column for regulatory limits should be added to the table in the updated report.

Pages 39-40 Table 4.7.3 Physico-Chemical Characteristics of Surface water from the study area; A column for regulatory limits should be added to the table in the updated report.

Page 41, Section 4.8.1 Methodology;

Para1, lines 4-5, '...which were then used to pin point the exact locations as we moved along the route (Table 4.8.1)'. The statement should be captured as "...which were then used to pin point the exact locations along the routes (Table 4.8.1)'. in the updated report

Page 48, section 4.10.2.1 Methodology;

The total length of the route given and individual routes length given contradict with the figures given in other part of the report, this should be reconciled in the updated report.

Page 101, section 4.11.1.2 Country Location and Administrative structure;

Para 1, line 1, Nigeria lies between Latitude 4o and 14o north of the equator and longitudes 3o and 15o east ...' this should be captured as  $\underline{4}^0$  and  $\underline{14}^0$  North Longitudes  $\underline{3}^0$  and  $\underline{15}^0$  in the updated report.

Page 104, Table 4.11.1 Relevant livelihood indices in the project states;

This project is solely domiciled in Ogun State therefore the Lagos State data presented should be expunged in the updated report.

Page 105 section 4.11.2.4 Host Communities;

Para 1, line 1, it should read 'it was expected that more than 50 communities would be...' Not "it was expected that more 50 communities would be...".

Same paragraph, line 2, '...Out of <u>more than almost 80</u> communities...' this sentence need to be recast correctly if it's '<u>More than'</u> or '<u>Almost'</u> one of the adjective should be used to convey the meaning.

Also, the number of the affected communities is confusing it was stated more than 50 communities, In the ESIA out of more than almost 80 communities are potentially affected by the project, what is the actual number of the affected communities by the project?

The entire paragraph needs to be rephrased to convey the intended information.

Page 105, Table 4.11.3 Communities Potentially Affected by the Project

This table needs to be reviewed in order to appropriately place communities/LCDA in their respective LGAs e.g. Ofada/Mokoloki LCDA is not in Ifo LGA. Also Ifo is not in Sagamu LGA. This should be corrected in the updated report.

Page 121, figure 4.11.2 should be presented on A3 paper for legibility in the updated report.

Page 123: Item (a) Government Authorities

- Federal Ministry of Power, Abuja should be corrected to Federal Ministry of Power, Works and Housing.
- Other relevant government institutions such as Energy Commission of Nigeria should also be captured in the revised section.

**Chapter Five: Associated and Potential Impacts** 

# Page 9, Table 5.3.2 refers. Estimated land deforested for the proposed project component;

The area column should be reviewed in row 1 to give the actual land take.

### Page 1, Section 5.1 Introduction

- Para.2 on project activities is completely silent on the activities related to construction/installation and operation of associated substations.
   The section should be updated with all the key project activities for all the project components.
- Some items listed are impacts and not project activities as stated e.g. spills, traffic accidents and tower collapse amongst others. These should be addressed.
- The section should be revised to include other phases of the project as well as their corresponding activities e.g. pre-construction and decommissioning phases as outlined in other sections of the report.

Page 2 Section Para.1 line 1 '...the associated with the potential impacts...' should be corrected to read '...the associated and potential impacts...'

### Page 8, Climate Change impact due to construction activity;

The Greenhouse Gases (GHG) production embodied from the material that will be used for construction is not contributions from the project due to the fact that the proponent is not the manufacture of these products. This section should be expunged in the updated report.

Subsection 5.3.1.3 Climate Change Impact, 2<sup>nd</sup> sentence '...following activity is considered for climate change impact...' should be corrected to read '...following activities are considered for climate change impact...'

Page 15 Subsection 5.7.12 operation phase;

The information provided that no impact was anticipated on surface water during operational phase is not correct. Please revise the section to clearly identify impacts associated with project activities e.g. maintenance of the lines and substations could result in some impacts.

Page 23 Section 5.13 Resettlement;

Section 5.13 refers. Resettlement

It stated that "A Separate Resettlement Action Plan has been provided for the Proposed Transmission Line and Substation Projects.... (see RAP report)". RAP report is not in this draft report, hence, expunge the quoted sentence. Please provide some succinct highlight of resettlement issues instead of making reference to Resettlement Action Plan (RAP) report which many could not have access to.

Page 23Subsection 5.14.1 para.2 lines 3-4, 'The construction areas are close enough to Lagos and Abeokuta that a worker's accommodation camp...' this statement is not realistic and contradicts information provided in other sections of the report. Please reconcile.

Page 24 Subsection 5.15.1 Operation Phase,

- Para.1 line 1 stated 'The most important benefit generated by the project will certainly is the improved availability...' this statement should be rephrased to communicate its intending meaning.
- Para2, the entire para. does not make much meaning. The project is expected to serve as catalyst for the growth of small, medium and large scale activities therefore, it should not be limited to storage of agricultural produce in a refrigerator for one day. The para. should be revised as appropriate or to be expunged.

Page 27 Subsection 5.18.3 Cumulative Impact; this section should be revised to include corona effect and EMF of the existing and proposed power lines.

Chapter five on impacts should be revised in line with revised chapter three on project description. The revised chapter should take cognizance of all the key project activities as well as their associated and potential impacts including cumulative impacts from other Oil and Gas activities. It this an Oil & Gas Project? This is a clear indication that there are several cut and paste information in the report.

**Chapter Six: Mitigation Measures** 

Page 2 refers. Assessing Residual Impact

Assessing residual impacts;

Para 1, last sentence, it reads "The residual impacts are described in terms of their significance with categories identified in Box 5-2 above". There is no Box 5-2 on this page. Please insert the stated box in the updated report.

Page 2, Section 6.3 Air Quality;

Under Air Pollutant Emission, bullets 2 & 5; how realistic is it or it should be expunged in the updated report.

Pages 15-20 Tables 6.18, 1a & 6.18.1b Summary of Mitigation Measures, the tables should be revised to include the key project activities as well as their corresponding mitigation measures.

Chapter six on mitigation measures should be revised in line with revised chapters three on project description and three (3) substations and potential impacts. The revised chapter should take cognizance of all the key project activities in the revised chapter three and identified impacts in revised chapter five.

Also, this chapter contains references to many plans e.g. RAP, Local Content Plan (Used), Traffic Safety Plan, Security Plan, Waste Management Plan, Occupational and HSE Plan, Stakeholders Engagement Plan and Emergency Response Plan which are not included in the report. They should be included in the updated report.

### Chapter Seven: Environmental Management Plan

Page 1 Section 7.1 Introduction;

Para 1, line 1, it stated that 'This chapter provides the ESMP for the Lagos and Ogun Transmission Line Project' the sentence should be revised to include the associated substations facilities.

### Page 2, Table 7.3.1 Roles and Responsibilities;

The first column, last row, the Ogun State Environmental Agency should be changed to <u>Ogun State Ministry of Environment</u> in the updated report.

Pages 23-29 Table 7.4 ESMP during construction; there is need to re-examine the monitoring frequencies as proposed e.g. quarterly monitoring of air quality, noise levels and vibration during construction phase is too wide. The air quality, noise levels and vibration should be monitored more frequently (e.g. daily & weekly) during the construction phase to ensure all associated issues are adequately addressed.

Chapter seven on EMP should be revised in line with revised chapters three on project description, three substations, other associated and potential impacts and six on mitigation measures.

#### **General Comments**

- The Report should be carefully edited to correct/expunge all typo, spelling and grammatical errors.
- ii) The Corporate Social Responsibility (CRS) specific for the proposed project should be clearly and concisely presented in the revised report.
- iii) All illegible tables, figures and maps should be made legible in the revised report.
- iv) All sources of information used in the report should be properly cited and included in the reference list and those not relevant should be expunged.



# FEDERAL MINISTRY OF ENVIRONMENT

### **Environment House**

Independence Way South, Central Business District, Abuja - FCT. Tel: 09-2911 337 www.environment.gov.ng, ea-environment.org

### **ENVIRONMENTAL ASSESSMENT DEPARTMENT**

**Ref:** FMEnv/EA/EIA/4267/1/173 **Date:** 28<sup>th</sup> November, 2018.

The Managing Director/CEO, Transmission Company of Nigeria (TCN) Corporate Headquarters, Plot 14 Zambezi Crescent, Maitama, Abuja, FCT

# ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED LAGOS AND OGUN STATES TRANSMISSION LINES AND ASSOCIATED SUBSTATIONS FOR LOT 3 PROJECT.

Please refer to the EIA Panel Review meeting conducted for the above stated project on 19<sup>th</sup> October, 2018.

- 2. Following the conclusion of the review exercise, I am directed to inform you that the Draft EIA Report was adjudged satisfactory despite some omissions and inadequacies.
- 3. I am further directed to convey the following information on matters to be handled by your Organization:
  - a) Submission of five (5) hard copies and two (2) e-copies (in PDF) of the Final EIA Report addressing the harmonized comments from the review meeting (attached); and
  - b) Payment of the Final Assessed Charge (FAC) to the Ministry for the EIA Approval as per the attached invoice.
- 4. Kindly note that this is not an approval letter and that the EIA Approval Letter shall only be issued on the confirmation that items 3(a) and (b) above have been satisfactorily complied with.

5. Thank you for your co-operation.

Director, Environmental Assessment Dept.

For: Honourable Minister



### FEDERAL MINISTRY OF ENVIRONMENT

### **Environment House**

Independence Way South, Central Business District, Abuja - FCT. Tel: 09-2911 337 www.environment.gov.ng, ea-environment.org

### **ENVIRONMENTAL ASSESSMENT DEPARTMENT**

Ref: FMEnv/EA/EIA/4267/1/174 Date: 28<sup>th</sup> November, 2018

The Managing Director/CEO, Transmission Company of Nigeria (TCN) Corporate Headquarters, Plot 14 Zambezi Crescent, Maitama, Abuja FCT.

#### INVOICE

### ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED LAGOS AND OGUN STATES TRANSMISSION LINES AND ASSOCIATED SUBSTATIONS FOR LOT 3 PROJECT.

S/N	ITEM DESCRIPTION	AMOUNT (N)
1	Registration fees	50,000.00 Paid
ii.	Impact Mitigation Monitoring (IMM) for the first exercise	500,000.00
iii.	Assessed Charge for the proposed construction and installation of 86.2km Transmission Lines and 3 nos high voltage substations for LOT 3 project in Lagos and Ogun States is 2,755,000.00.  (a) Revenue – 2,066,250.00  (b) Operational- 688,750.00	2,755,000.00
Iv	Final Assessed Charge	3,255,000.00

The total amount to be paid to the Federal Ministry of Environment for issuance of Environmental Impact Statement (EIS) and Environmental Impact Assessment (ESIA) Certificate for the proposed project is Three Million, Two Hundred and Fifty-Five Thousand Five Hundred Naira (N3,255,500.00) only, as follows:-

- a) EIA Operational Charge: One Million, One Hundred and Eighty-Eight Thousand, Seven Hundred and Fifty Naira (¥1,188,750.00) only
- b) **EIA Government Revenue:** Two Million and Sixty-Six Thousand, Two Hundred and Fifty Naira (N2,066,250.00) only
- 2. The payments are to be made separately into the Federal Government Treasury Single Account (TSA) Platform (www.remita.net)
- The evidence of both payments shall be forwarded to the Ministry's Headquarters at Mabushi, Abuja.

J. A. Alonge Director, Environmental Assessment Dept.

For: Honourable Minister.

# FEDERAL MINISTRY OF ENVIRONMENT'S HARMONIZED COMMENTS ON THE DRAFT ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT OF THE PROPOSED LAGOS -OGUN TRANSMISSION LINES AND OTHER ASSOCIATED FACILITIES LOT 3

#### **PRELIMINARY PAGES**

### Cover/title pages

- The cover page should be rephrased to indicate 'substations' instead of 'substation' since there are number's of associated substations in more than one.
- The title page has an extension of the cover page to include "line study,
  ESIA and RAP". The extensions should be expunged to maintain uniformity
  which reflects the content of the report.
- Please include submitted to the Federal Ministry of Environment in the revised title.
- The inclusion of the term "Resettlement Action Plan" in the cover page of the report is confusing and should be removed to give the report the desired meaning and so as not to confuse the reader;
- The information pertaining to EEMS Limited as consultants for the project's
   EIA indicated in the cover page of the document is not necessary and
   should be expunged while the report should be clearly marked as " Draft
   ESIA" and indicate TCN as owner of the project;

# Pages iii-x: Table of contents

- There are so many items in the executive summary which are also repeated as subsections of other chapters. The executive summary should be revised

- to have only the key topics and not detail of all the key topics and subsections.
- There are inconsistencies in the writing of chapters and their titles, chapters and their titles should be properly written e.g. Chapter One: Introduction, Chapter Two: Project Justification, Chapter Three: Project Description, Chapter Four: Environmental Baseline Data Acquisiton, Chapter Five: Potential and Associated Impacts, Chapter Six: Mitigation Measures etc.

Page xiii: List of Tables 'Ground Water' in Table 4.13 should be corrected to 'Groundwater' this should be applied to all other relevant sections of the report.

Pages xvi-xxii: List of Abbreviations and Acronyms

- AIDS should be written as Acquired Immuno-Deficiency Syndrome, ESIA
  was written twice, one should be expunged, ILO should be written as
  International Labour Organization instead of just 'International'
- Please ensure Nigerian Minerals and Mining Act (NMMA) 2007 and United Cement (UNICEM) etc are relevant to the proposed project otherwise they should be expunged.
- The following should be edited; D to d, DB to dB, K<sup>+</sup> to K, MOU to MoU, Na<sup>+</sup> to Na, PO<sub>4</sub><sup>2-</sup> to PO<sub>4</sub>, SO<sub>4</sub><sup>2-</sup> to SO<sub>4</sub>, Sqm<sup>2</sup> to m<sup>2</sup>, TOR to ToR, etc.
- The list should also be updated with all other abbreviations and acronyms used in the body of the report.

Page xxiii: List of EIA Preparers Please be consistent on the use of either ESIA or EIA except when making references to the existing legislations.

The column on the qualification of the members is vague because it fails to

provide their specific disciplines e.g. B. Sc, M. Sc. Ph. D. This column should

be updated with specific disciplines of all the members while the 3<sup>rd</sup> column

should provide information on the specific task/ role they played in the

ESIA studies.

Page xxiv: Acknowledgement; the acknowledgement should be revised to indicate

the project proponent instead of 'We wish to thank all stakeholders...' other

parties may also be acknowledged.

**EXECUTIVE SUMMARY** 

Page xxx Ogun State Laws

Environmental Management (Miscellaneous) Provisions Law, 2004, should

be listed. This should be replicated on page xxxviii of the report.

Page xxxviii Waste Generation and Management

Bullet b. '...AEPB's sewage treatment facility'. This is an evidence of direct

copy and paste. AEPB is located in Abuja while the proposed project is

domiciled in Ogun/Lagos State. What is the relationship of AEPB with the

proposed project? This should be corrected in the updated report.

Page xliii Performance Monitoring and Surveillance

Last paragraph, the Regulatory monitoring and oversight is not only conducted by

FMEnv but in conjunction with other relevant Regulators to the proposed project

and other tiers of Government.

CHAPTER ONE: INTRODUCTION

Page 2: Subsection 1.1.1 The Project

Para.1 – ESMP should read Environmental and Social Management Plan.

 Bullet points 1-3, the length of the proposed lines presented slightly contradicts the information provided on pg. xxv of the executive summary.
 These should be reconciled.

Page 3: Subsection 1.1.3 Project Location, line stated that the lines in lot 3 have a total length of 79.5km contrary to the breakdown provided in lines 5-7 as well as executive summary. These inconsistencies should be reconciled.

#### Pages 4-5:

- Figures 1.1 and 1.2 are not legible; they should be replaced with enlarged and legible ones.
- The title of figure 1.2 should be rephrased to read 'Map of Lagos and Ogun States showing the proposed project (Lot-3) route'

Pages 7-8: Section A- National Environmental Policy, para.3 stated 'Some specific laws include' however, all the information presented in 7 bullet points are for regulations and not laws. The statement should be rephrased to reflect the contents.

# Pages 17-18: Item xiv National Environmental Regulations

- This section should be harmonized with information presented in section 'A' where some 7no. regulations were presented. It is wrong to state that the Minister issues the listed regulations as a result of NESREA Act, the regulations listed predates the NESREA Act of 2007. This should be corrected.
- Bullet points 1-2, the date of production for S.I. 8 and S.I. 15 regulations is 1991 contrary to 1999 as presented. This should be corrected in the updated report.

 Bullet point 3; the regulation should be properly cited as 'S.I. 9 National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations, 1991'

Pages 18-21: there are a lot of information that is bolded unnecessarily e.g. all the bullet points under Lagos State laws, bullet points 6-16 of section 1.4.3 and bullet points 1-8 of section 1.4.6 IFC PS amongst others. These should be addressed throughout the report.

Page 29, sub-section 1.4.9.13 There is no Ministry in Lagos State called "Lagos State Ministry of Physical Planning" its "Lagos State Ministry of Physical Planning and Urban Development" this should be corrected in the updated report.

Page 26, section 1.4.9.4 Electricity Distribution Companies (Ibadan, Ikeja and Eko)

The Ibadan Electricity Distribution Company is one of the 11 and NOT 13 distribution companies unbundled from defunct PHCN during electricity reform in 2005.

Page 26, Power Holding Company of Nigeria (PHCN) is no longer existing as such cannot be an agency under the Federal Ministry of Power, Works and Housing (FMPW&H).

- ✓ The following are not part of the responsibilities of Federal Ministry of Power, Works and Housing (FMPW&H):
  - Licensing of electrical contractors and electric generating sets of 1MW capacity and below
  - Conducting investigation on electrical accidents and to ensure safety in the electricity industry in Nigeria
  - Conducting statutory tests and certification of electric poles (concrete, wooden, steel etc.) and other major electrical materials before they are used on the grid and networks in Nigeria

### Page 27 Section 1.4.9.6 Ogun State Ministry of Physical Planning.

This Ministry does not exist in Ogun state but "Ministry of Urban and Physical Planning" this should be corrected in the updated report.

The revised section on legal and administrative framework should include other relevant ones such as National Inland Waterways Authority Act, Water Resources Act CAP W2 LFN 2004, Lagos State Properties Protection Law, 2016, African Development Bank and Convention on Conservation of Migratory Species of Animals and RAMSER Convention on Wetlands of International Importance amongst others. The electric Power Sector Reform Act of 2005 should also be included and reviewed.

The arrangement of the laws and regulations should be reviewed such that
it shall start with National regulations followed by State and Local
regulations, and then International conventions;

#### **CHAPTER TWO: PROJECT JUSTIFICATION**

Page 36: Subsection 2.3.1 Technical Sustainability; the availability of adequate and qualified manpower for the project execution and operation should form part of its technical sustainability. This should be incorporated in the revised subsection.

Pages 37-38: Substations, the alternative sites considered for the location of the proposed substations should be highlighted and justification for choosing the preferred locations.

Page 39 item b, Tower Types (Tubular/Lattice) Alternatives;

The report made reference to two type of towers (Tubular and lattice) and justified the use of lattice tower type for 330 KV DC line but failed to state the type that shall be used for the remaining two (2) 132KV DC lines which runs from

Ajegunle to Agbara and from Ajegunle to Yafin in Badagry LGA of Lagos State. This should be stated in the updated report.

Page 43, figure 2.5 to 2.6 Alternative Analysis for Routes

The line routes are clear but the traversing settlements are not legible. The magnification of the figures should be enhanced to make the settlements legible, it could have been better if presented on A3 paper.

- ✓ How reliable are the data obtained from Lagos State Electricity Board as compared to those available with Eko Electricity Distribution Company (EKEDC) and Ikeja Electricity Distribution Company (IKEDC)?
- ✓ What study/test was carried out and nature of result(s) obtained that
  justified the conclusion on the technical viability of the proposed project
  as asserted?

#### **CHAPTER THREE: PROJECT DESCRIPTION**

Page 47: Section 3.1 Introduction, the total length of lines for lot 3 is given as 88km contrary to 86.2km, 87km, 79.5km etc in other sections of the report. These should be reconciled.

Page 52, item b, Access Track Repair/upgrade /construction;

Para 6, that EPC contractor shall prepare Erosion and sediment control Plan (ESCP) in accordance with regulatory standard and submit same to the Federal Ministry of Environment for approval is not acceptable. The ESCP along the project route ought to have been carried out and the statement would be better rephrased to imply that ESCP when completed shall be submitted to Federal Ministry of Environment by TCN who is the owner of the report and project;

Similarly, the statement in paragraph 7 of the same page 52 that the main and secondary roads **may** not require repair or upgrade and that the minor roads **may** need to be upgraded, needs to further explain what it meant by main, secondary and minor roads. It should be more specific on the intent and purpose of the project with regard to use of the word "may" in the statement;

Page 57, item f, Substation Construction;

Last bullet point, last sentence, it was indicate that 75% of materials for substation construction will come from offshore location while the remaining 25% will be sourced locally is not clear. There is need to specify what it meant by offshore location in the updated report.

Page 59, item g, construction equipment and transportation of materials to the sites;

Some listed articulated trucks that shall be used for this purpose but noted that some of the heavy cargos e.g steel stanchion and transformers shall be moved from Lagos Tin Can Port, in Apapa to the various sites. However, it was expected that information on the route to be used in Lagos should be provided taken cognizance of attendant traffic and possibly indicate if the selected route is free from any restrictions on the transport of heavy and large cargo in Lagos state.

Page 60: Para.2 on hours of operation, lines 3-4 stated 'All construction activities that are likely to generate noise shall not be undertaken during night time' please specify the activities that will be conducted at night.

Pages 60-61: Item (i) Clean-Up and Final Inspection

- Bullet points 5-6 are on irrigation ditches and facilities. Please state the
  relevance of these points and the specific location at which irrigation
  facilities will be affected by the proposed power transmission line projects.
- Bullet point 'Any fences, gates, etc., which have been damaged during construction shall be restored' is confusing, the re-construction of structures along the line routes and substation sites are very unlikely. The bullet point should be expunged.

Page 57, item f, Substation Construction;

Last bullet point, last sentence, it was indicate that 75% of materials for substation construction will come from offshore location while the remaining 25% will be sourced locally is not clear. There is need to specify what it meant by offshore location in the updated report.

Page 59, item g, construction equipment and transportation of materials to the sites;

Some listed articulated trucks that shall be used for this purpose but noted that some of the heavy cargos e.g steel stanchion and transformers shall be moved from Lagos Tin Can Port, in Apapa to the various sites. However, it was expected that information on the route to be used in Lagos should be provided taken cognizance of attendant traffic and possibly indicate if the selected route is free from any restrictions on the transport of heavy and large cargo in Lagos state.

Page 60: Para.2 on hours of operation, lines 3-4 stated 'All construction activities that are likely to generate noise shall not be undertaken during night time' please specify the activities that will be conducted at night.

Pages 60-61: Item (i) Clean-Up and Final Inspection

- Bullet points 5-6 are on irrigation ditches and facilities. Please state the
  relevance of these points and the specific location at which irrigation
  facilities will be affected by the proposed power transmission line projects.
- Bullet point 'Any fences, gates, etc., which have been damaged during construction shall be restored' is confusing, the re-construction of structures along the line routes and substation sites are very unlikely. The bullet point should be expunged.

with completion date set in 2018/2019 contrary to the report that the construction phase of the project shall commence in 1<sup>st</sup> Quarter of 2019. Also, the schedule should be positioned at the later part of the chapter;

Pages 69-72: Subsection 3.5.1-3.5.3, please be consistent with the length of the proposed lines. There is need to reconcile the length of the lines provided with other sections of the report including table 3.7

Page 88: Underground Transmission Cables, please state the relevance of the information provided in this section. The information provided is not clear whether there is any section of the lines that requires installation of underground transmission cables. This should be clarified.

Chapter three should be revised and a lot of generic information that is not relevant to the proposed project should be expunged.

#### CHAPTER FOUR: DESCRIPTION OF EXISTING ENVIRONMENT

Page 97, Section 4.3.2 Field Sampling/Measurement

Para 1, line 3 it reads "...field data gathering exercise was performed between 27th through 4th December 2017" should be edited as 27th cannot stand alone without month. Please indicate the Month in the updated report.

Pages 99-100: Table 4.2 Sampling Stations and Sampling Requirements; columns 6-11 on soil, air/noise, meteorology, surface water/ sediments, groundwater and biodiversity are completely blank. They should be provided with appropriate information otherwise be expunged.

Page 101: Figure 4.1 Sampling map for all Environmental/ Social Components; the figure is not legible therefore should be replaced with an enlarged and legible one in A3 paper.

## Pages 108-119: Section 4.5.2 Ambient Air Quality Result

- Para.1 lines 2-3 stated that 'Particular attention was paid to the Greenhouse gases (GHG) like CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub>.' However; only CO<sub>2</sub> amongst these three (3) was presented on table 4.5 on ambient air quality results. This should be reconciled.
- The numbering of the subsections started from j-q while a-i are missing.
   This should be corrected in the updated report.

### Page 110 refers. Sulphur Dioxide

 $SO_2$  concentration was found to be high at some sampling stations in the afternoon and evening. Yet the report says "the  $SO_2$  level is not projected to exceed regulatory limits during all phases of the project life cycle". How possible was this assertion?

Pages 112-115: Section 4.6 Noise Quality and Electromagnetic Fields, while it was stated the IFC, WHO and FMEnv limits shall be used to benchmark the ambient noise levels; only WHO and FMEnv limits were used. The IFC standards should also be provided in the revised section.

# Page 122: Table 4.13 Groundwater Physico-Chemical Parameters

- There is need to re-examine the values for Total Suspended Solids (TSS) and
  Turbidity which are relatively high (though below the limits) contrary to
  results for water colour which indicates that all the water samples were
  found to be clear and colourless.
- There is also need to provide results of the Total Dissolved Solids (TDS) for all the samples. This is conspicuously missing in the table.

Page 190: Figure 4.15 Map showing communities; the map should be represented in A3 paper which will make it more legible and enlarge manner.

#### Page 203:

- Plate 4.31, the 3<sup>rd</sup> picture is wrongly titled as 'Asbestos in Igbele' where as the roofing material presented is rusted corrugated Iron sheets. This should be corrected.
- Table 4.69 Walling Material of Houses; column 1 last row 'Others' the other building materials identified during the studies apart from those listed in the column 1 should be specified for better understanding of stakeholders.

Page 211: Subsection 4.16.3; the title 'Stake Holder Identification...' should be corrected to 'Stakeholders Identification...'

#### Page 212: Item (a) Government Authorities

- Federal Ministry of Power, Abuja should be corrected to Federal Ministry of Power, Works and Housing.
- There is mixed-up in the listed bullet points. While bullet points 1-3
  referred to the institutions, bullet points 4-5 referred to teams from some
  institutions. Please reconcile.
- Other relevant government institutions such as National Energy Commission should also be captured in the revised section.

Page 213: Table 4.74 List of Identified Stakeholders; column 1 row 2 referred to for the list of communities. However, table 4 does not exist in the entire report. This should be addressed.

Page 228: Table 4.83 NCF Comments and response, row 3 is blank and row 4 made reference to appendix xx which does not exist in the report. These should be corrected.

# **CHAPTER FIVE: ASSOCIATED AND POTENTIAL IMPACTS**

Page 229: Section 5.1 Introduction

- Para.2 on project activities is completely silent on the activities related to construction/installation and operation of associated substations. The section should be updated with all the key project activities for all the project components.
- Some items listed on impacts are not project specific activities as stated e.g. spills, traffic accidents and tower collapse amongst others. This should be addressed.
- The section should be revised to include other phases of the project as well
  as their corresponding activities e.g. pre-construction, Operation and
  decommissioning phases as outlined in other sections of the report.

Page 230: Section 5.1, Para.1 line 1 '...the associated with the potential impacts...' should be corrected to read '...the associated and potential impacts...'

# Page 235:

- Subsection 5.3.1.2, emissions from movement of vehicle was captured in both subsections 5.3.1.1 and 5.3.1.2. This should be addressed to avoid duplication of information.
- Subsection 5.3.1.3 Climate Change Impact, 2<sup>nd</sup> sentence '...following activity is considered for climate change impact...' should be corrected to read '...following activities are considered for climate change impact...'

Page 243: Subsection 5.6.2 operation phase, the information provided that no impact was anticipated on surface water during operational phase is not correct. Please revise the section to clearly identify impacts associated with project

activities e.g. maintenance of the lines and substations could result in some impacts.

Page 245: Subsection 5.7.1.1 Impact on Terrestrial Fauna and Flora, the total length of the proposed lines was given as 81km (30km+51km) contrary to other sections of the report. This should be reconciled.

Page 251: Section 5.13 Resettlement, please provide some succinct highlight of resettlement issues instead of making reference to Resettlement Action Plan (RAP) report which many could not have access to.

Page 252: Subsection 5.14.1.1 para.2 'The construction areas are close enough to Lagos and Abeokuta that a worker's accommodation camp...' this statement is not realistic and contradicts information provided in other sections of the report. Please reconcile.

Page 253: Subsection 5.15.2 Operation Phase,

- Para.1 line 1 stated 'The most important benefit generated by the project will certainly is the improved availability...' this statement should be rephrased to communicate its intending meaning.
- Para2, the entire para. does not make much meaning. The project is expected to serve as catalyst for the growth of small, medium and large scale activities therefre should not be limited to storage of agricultural produce in a refrigerator for one day. The para. should be revised as appropriate.

Page 255: Subsection 5.17.2 last line 'This is a negligible impact' this is meaningless therefore should be rephrased.

Page 257: Subsection 5.18.3 Cumulative Impact; this section should be revised to include corona effect and EMF of the existing and proposed power lines.

Chapter five on impacts should be revised in line with revised chapter three on project description. The revised chapter should take cognizance of all the key project activities as well as their associated and potential impacts including cumulative impacts from other Oil and Gas activities.

# **CHAPTER SIX: MITIGATION MEASURES**

Page 271 Section 6.12 Resettlement

"A separate resettlement framework has been prepared...." But the RAP report was not attached/included to this report. How will the decision of the panel be justified as regards this report?

Pages 275-285: Tables 6.1 & 62 Summary of Mitigation Measures, the tables should be revised to include the key project activities as well as their corresponding mitigation measures.

Chapter six on mitigation measures should be revised in line with revised chapters three on project description and five on associated and potential impacts. The revised chapter should take cognizance of all the key project activities in the revised chapter three and identified impacts in revised chapter five.

# CHAPTER SEVEN: ENVIRONMENTAL MANAGEMENT PLAN

Page 286: Section 7.1 Introduction, line 1 stated 'This chapter provides the ESMP for the Lagos and Ogun Transmission Line Project' the sentence should be revised to include the associated substation facilities.

Pages 315-317: Table 7.3 ESMP during construction; there is need to re-examined the monitoring frequencies as proposed e.g. quarterly monitoring of air quality, noise levels and vibration during construction phase is too wide. The air quality, noise levels and vibration should be monitored more frequently (e.g. daily & weekly) during the construction phase to ensure all associated issues are adequately addressed.

Chapter seven on EMP should be revised in line with revised chapters three on project description, five on associated and potential impacts and six on mitigation measures.

# CHAPTER EIGHT: DECOMMISSIONING AND CLOSURE

The report should discuss in details how the various decommissioning activities listed in bullet 1-4 of section 8.4 shall be carried out and how the materials either as recovery or wastes shall be disposed

#### **General Comments**

- The Report should be carefully edited to correct/expunge all typo, spelling and grammatical errors.
- ii) The Corporate Social Responsibility (CRS) specific for the proposed project should be clearly and concisely presented in the revise report.
- iii) All illegible tables, figures and maps should be made legible in the revised report.
- iv) All sources of information used in the report should be properly cited and included in the reference list and those not relevant should be expunged.
- v) The executive summary should be revised to reflect the comments on all the chapters of the report.