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13/1/2012

ENVIRONMENTAL COUNCIL OF ZAMBIA

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ZESCO AUTHORITY			
FROM	TO	DATE	ACTION
Managing Director			
Director HR & Admin			
Director Finance			
Director - Distribution & CB			
Director Generation			
Director Transmission			
Director Corp. Affairs & Business Devel.		09/1	
Director Legal / Company Secretary			
DATE		6/10/12	

In reply please quote

ECZ/INS/101/4/1

January 4, 2012

The Managing Director
ZESCO Limited
P.O. Box 33304
Tel: +260 211 361111
LUSAKA

Dear Sir,

Proposed Connection of North-western Province to the National Grid at 132kV by ZESCO Limited

Reference is made to the above captioned project report submitted to the Zambia Management Agency (ZEMA) on 18th May, 2011 for consideration in accordance with the requirements of the Environmental Impact Assessment (EIA) Regulations, Statutory Instrument No. 28 of 1997.

The ZEMA has since reviewed the Environmental Impact Statement (EIS) and based on the information provided by yourselves and from written and verbal comments from interested and affected parties and our site verification inspection findings, the said EIS has been **approved**.

Find attached to this Decision Letter, conditions governing this approval.

Yours faithfully,

Joseph Sakala
Acting Director General

ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

Cc: The Town Clerk –Solwezi Municipal Council, **Solwezi**
The Council Secretary – Kasempa District Council, **Kasempa**
The Council Secretary – Mwinilunga District Council, **Mwinilunga**

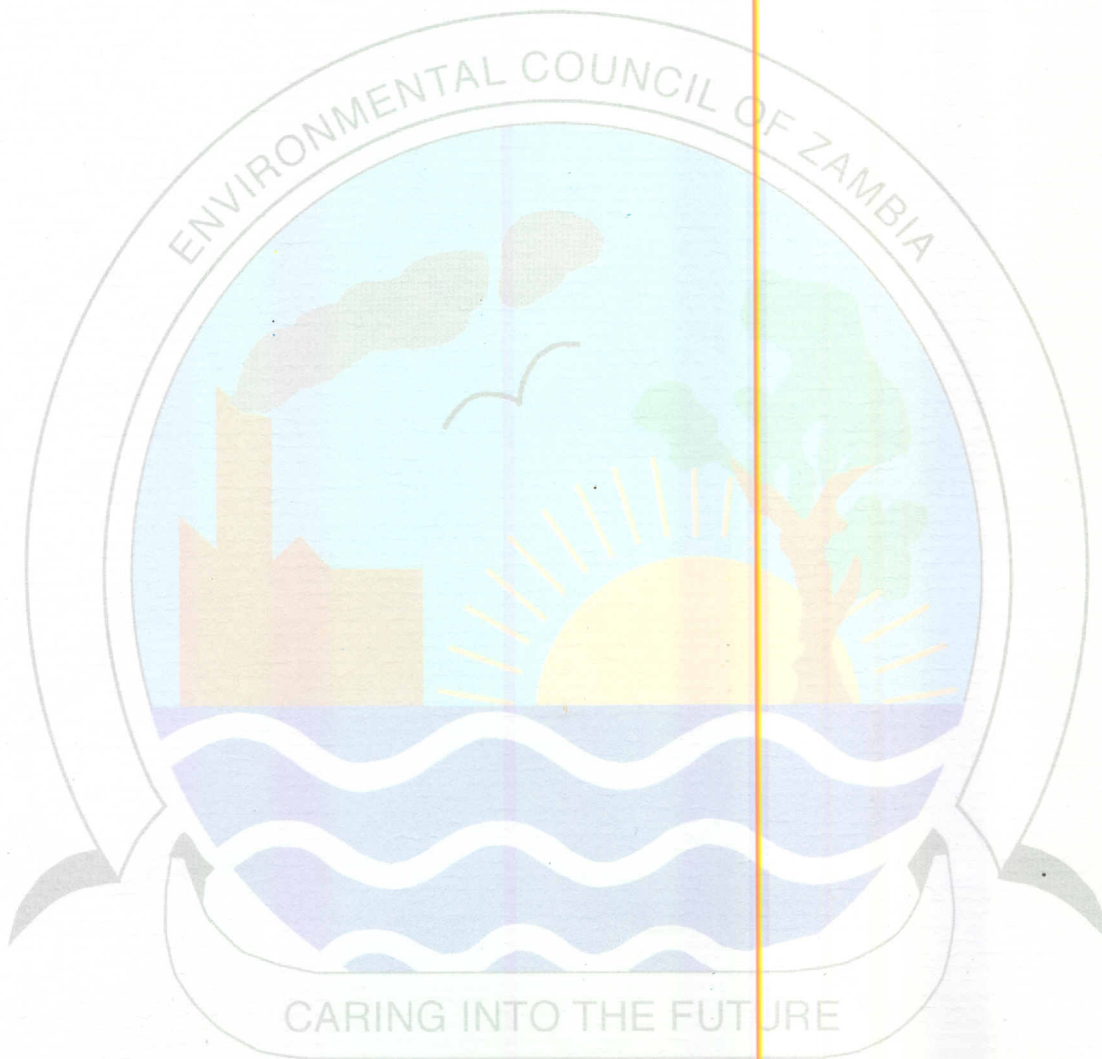




ENVIRONMENTAL COUNCIL OF ZAMBIA (ECZ)

DECISION LETTER

The Council Secretary – Mufumbwe District Council, **Mufumbwe**
The Council Secretary – Kabompo District Council, **Kabompo**
The Council Secretary – Zambezi District Council, **Zambezi**
The Council Secretary – Chavuma District Council, **Chavuma**
The Director –Energy Regulation Board, Kitwe





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1.0 PROJECT BACKGROUND

1.1 PROJECT TITLE:

Proposed Connection of North-western Province to the National Grid at 132kV by ZESCO Limited

1.2 PROJECT PROPONENTS:

The Managing Director
ZESCO Limited
P.O. Box 33304
LUSAKA

Contact Person

Name	Cyprius Chitundu
Designation	Managing Director
Tel No.:	+260 211 361111
Address	P.O. Box 33304
Email:	zesco@zesco.co.zm

1.3 PROJECT LOCATION:

The proposed project site is located in North-western province. The proposed project designated as the connection of North-western Province to the National Grid at 132kV will originate from the substation at Kasempa T-off (Nselaube) and will connect Mufumbwe, Kabompo, Zambezi and Chavuma. A second line will start from Lumwana substation to Mwinilunga.

1.4 DATE OF SUBMISSION BY PROPONENT:

18/05/2011

1.5 DATE OF CONSIDERATION BY AGENCY:

21/12/2011





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2.0 DETAILS OF THE PROJECT:

ZESCO Limited proposes to connect five (5) districts of North-western Province to the national grid. The proposed project will be implemented in Mwinilunga, Mufumbwe, Kabompo, Zambezi and Chavuma districts. Power supply to these 5 districts is currently from diesel power generation plants run by ZESCO Limited. However, these plants are characterised by high operational costs, inadequate capacity, very low reliability and high gaseous emissions.

The main objective of the proposed project is to replace the diesel power stations with clean, efficient and more reliable form of electricity by connecting them to the national grid at 132 kilovolts (kV).

The power supply connection will originate from the substation at Kasempa turn-off and will connect Mufumbwe, Kabompo, Zambezi and Chavuma districts. A second line will start from Lumwana substation to Mwinilunga district. The proposed power transmission lines will have a way-leave width of 32 metres (m).

The proposed grid connection project shall consist of the following scope of works:

- a) Upgrading of the substation at Kasempa turn-off to create a source substation for the 132 kV power transmission line to Chavuma
- b) Construction of a total of 450 kilometre (km) long 132 kV sub-transmission lines from Kasempa turn-off through Mufumbwe, Kabompo, Zambezi up to Chavuma
- c) Construction of a total of 192 km long 132 kV sub-transmission line from Lumwana substation to connect Mwinilunga district to the grid
- d) Construction of five (5) 132-66/33/11 kV tap down load centre substations, one at each of the five sites of diesel generation, namely; Mwinilunga, Mufumbwe, Kabompo, Zambezi and Chavuma
- e) Construction of an additional 132-66/33/11 kV tap down load centre substation at Mumbeji
- f) Construction of a 132 kV switch station at Kasempa turn-off

The proposed power lines will be of the standard 132 kV structure which will be on steel poles.

The load centre substations shall be of the one transformer type, which may be of the three winding type to provide two outputs of 33kV and 11kV respectively. The 11kV supply shall feed into the existing 11kV distribution networks within the Bomas, while the 33kV shall be for supply to load centres that are far from the Bomas. The tentative transformer sizes are 12.5/8/2.5MVA, 132-66/33/11kV for the 3 winding type and 3.16MVA and 132-66/33kV for the two winding type.





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The substations shall be complete with a control building, guard house, water and sanitation.

3.0 DECISION BY AGENCY:

3.1 The Project is **approved** subject to the following conditions:

- 3.1.1 ZESCO Limited shall implement the project and all the environmental management commitments as proposed in the Environmental Impact Statement **with changes** as proposed by Zambia Environmental Management Agency in the Decision Letter and any other conditions that may be issued thereafter.
- 3.1.2 ZESCO Limited shall abide by the necessary legal procedure for acquiring customary land in all project areas that traverse customary land.
- 3.1.3 ZESCO Limited shall prepare a comprehensive **Resettlement and Compensation Action Plan (RCAP)** after full consultation with all affected parties. The RCAP shall include among other things, a complete inventory of affected households and agricultural fields, land and structures, a relocation plan, site proposed for relocation and the compensation packages. The RCAP shall be submitted for approval to the Zambia Environmental Management Agency prior to **project implementation**.
- 3.1.4 ZESCO Limited shall not conduct open air burning of any waste, wood and/or any material throughout the project cycle.
- 3.1.5 ZESCO Limited shall adequately consult with Road Development Agency and get consent prior to construction of power transmission lines that will cross public roads.
- 3.1.6 ZESCO Limited shall consult and comply in full with their specifications of the Energy Regulation Board, Forestry Department, National Heritage and Conservation Commission, Solwezi Municipal Council, Kasempa District Council, Mufumbwe District Council, Kabompo District Council, Zambezi District Council, Chavuma District Council and Mwinilunga District Council prior to the implementation of the project.
- 3.1.7 ZESCO Limited shall not construct the substation in Zone A residential area of Mufumbwe District. ZESCO Limited shall instead consider constructing the substation on the approved site in Senior Chief Chizela's area.
- 3.1.8 ZESCO Limited shall in full consultation with all the eight (08) affected Chiefs, namely; Senior Chief Ishindi, Senior Chief Ndungu, Senior Chief Sikufele, Senior Chief Chizela, Senior Chief Mukumbi, Senior Chief Sailunga, Senior Chief Kanongesha and Senior Chief Musele prepare and sign a Memorandum of Understanding.
- 3.1.9 ZESCO Limited shall fully consult with the affected chiefs to avoid disturbing grave sites and any other sites of cultural significance.
- 3.1.10 ZESCO Limited ensure that all its suppliers of construction aggregate and any other material whose extraction is likely to result in environmental damage has formal approval from the Zambia Environmental Management Agency.
- 3.1.11 ZESCO Limited shall preserve vegetation along the watercourses located in the project site.





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- 3.1.12 ZESCO Limited shall avoid **unnecessary** clearing of vegetation. In order to avert soil erosion, where possible, stumping as opposed to uprooting shall be used to clear vegetation. The clearing of forests shall be done in full consultation with the Forest Department.
- 3.1.13 ZESCO Limited shall employ the most environmentally friendly technology for sewage disposal throughout the project cycle.
- 3.1.14 Environmentally sound practices shall be put in place to manage the waste throughout the construction phase, and littering, burning and burying of waste in undesignated pits shall not be allowed.
- 3.1.15 ZESCO Limited shall employ dust suppression measures in all areas with potential to generate dust throughout the project cycle.
- 3.1.16 ZESCO Limited Plc shall ensure that noise levels are maintained to acceptable levels throughout the project cycle.
- 3.1.17 ZESCO Limited shall only use Polychlorinated Biphenyls (PCB) free transformers throughout the project cycle.
- 3.1.18 ZESCO Limited shall erect in English and local languages, signage around the project areas and shall use other means necessary to warn the public on the general risks surrounding the project throughout the project cycle.
- 3.1.19 ZESCO Limited shall place adequate signage along the access routes indicating speed limits and any hazards that road users should be aware of.
- 3.1.20 ZESCO Limited shall obtain permits from the Zambia Environmental Management Agency and comply in full with the following regulations throughout the project cycle:
- a) The Waste Management (Licensing of Transporters of Wastes and Waste Disposal Sites) Regulations, 1993
 - b) The Water Pollution Control (Effluent and Waste Water) Regulations, 1993
 - c) The Hazardous Waste Management Regulations, 2001
 - d) Air Pollution Control (Licensing and Emissions Standards) Regulations, 1996
- 3.1.21 ZESCO Limited shall prepare an Emergency Preparedness and Response Plan (EPRP) and the EPRP shall include measures that shall be employed in the event of an emergency.
- 3.1.22 ZESCO Limited shall undertake an environmental audit of the project within a period of **not less than twelve months** and **not more than thirty six months** after completion of the project construction or commencement of its operations, whichever shall come first. This environmental audit shall be conducted using an independent and competent person.
- 3.2 The Agency **advises** ZESCO Limited:





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- 3.2.1 To obtain any other relevant authorisations such as but not limited to:
- a) The National Heritage and Conservation Commission Act;
 - b) The Forest Act;
 - c) The Factories Act,
 - d) The Employment Act;
 - e) The Worker's Compensation Act,
 - f) The Animal Act;
 - g) The Lands Act;
 - h) The Land Acquisition Act;
 - i) The Water Resources Management Act;
 - j) The Town and Country Planning Act;
 - k) The Public Health Act;
 - l) The Local Government Act;
 - m) The Petroleum Act;
 - n) The Roads Act;
 - o) The Electricity Act; and,
 - p) The Energy Regulation Act.
- 3.2.2 Make available information on hygiene, malaria control and HIV/AIDS to employees.
- 3.2.3 Provide workers with appropriate personal protective equipment, fire fighting equipment and train all workers in fire fighting, safety and emergency response.
- 3.3 ZESCO Limited shall comply with environmental standards and/or specific limits of particular pollutants as its responsibility. Thus, compliance with the Zambia Environmental Management Agency recommended measures **does not** absolve ZESCO Limited from its responsibility if such measures do not achieve compliance with environmental control standards.
- 3.4 ZESCO Limited shall in accordance with Section 15 of the Environmental Management Act, 2011, allow Zambia Environmental Management Agency inspectors **unrestricted entry** into the project site at any reasonable time with or without making prior notice throughout the project cycle.
- 3.5 The Zambia Environmental Management Agency may suspend or cancel this Decision Letter **without notice** should ZESCO Limited fail to comply with any of these conditions.





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- 3.6 ZESCO Limited shall implement the project **within three years** from the date of approval. Failure to implement the project within the said period shall render this Decision Letter invalid and the Developer shall re-submit the EIS.



Date

04 JAN 2012

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Joseph Sakala

Acting Director General

ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

