NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)
THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT
ENVIRONMENTAL IMPACT ASSESSMENT LICENSE

License No: NEMA/EIA/PSL/558
Application Reference No: NEMA/EIA/SR/333

This is to certify that the Environmental Impact Assessment Study Report received from

Kenya Electricity Generating Company Limited
P.O BOX 47936-00100 NAIROBI
submitted to the National Environmental Management Authority in accordance with the
Environmental Impact Assessment & Audit Regulations regarding

Proposed 140 MW Olkaria V Geothermal Power Plant
whose objective is to carry on
Construction of 140 MW Olkaria Geothermal Power Plant,
located at
Great Olkaria Geothermal Fields in Naivasha Sub-County, Nakuru County.

has been reviewed and a license is here by issued for the implementation of the project,
subject to attached conditions.

Issue Date: 12 September, 2014
Expiry Date: 12 September, 2016

Signature
(Seal)
Director-General
The National Environment Management Authority.

P. T. O.
ISO 9001 : 2008 Certified
1.0 **General Conditions**

1.1 The development is construction of 140 MW Olkaria Geothermal Power Plant at the Great Olkaria Geothermal fields in Naivasha Sub-County, Nakuru County at an estimated cost of USD 480 million.

1.2 The license shall be valid for **24 months** from the date of issue.

1.3 Without prejudice to the other conditions of this license, the proponent shall implement and maintain an environmental management system, organizational structure and allocate resources that are sufficient to achieve compliance with the requirements and conditions of this license.

1.4 The Authority shall take appropriate action against the proponent in the event of breach of any of the conditions stated herein or any contravention to the Environmental Management and Coordination Act, 1999 and regulations therein.

1.5 This license shall not be taken as statutory defence against charges of environmental degradation or pollution in respect of any manner of degradation/pollution not specified herein.

1.6 The proponent shall ensure that records on conditions of licenses/approval and project monitoring and evaluation shall be kept on the project site for inspection by NEMA’s Environmental Inspectors.

1.7 The proponent shall submit an Environmental Audit report in the first year of occupation/operations/commissioning to confirm the efficacy and adequacy of the Environmental Management Plan.

1.8 The proponent shall comply with NEMA’s improvement orders throughout the project cycle.

2.0 **Construction Conditions**

2.1 The proponent shall put up a project signboard at the project office as per the Ministry of Transport and Infrastructure standards showing the NEMA EIA license number among other details.

2.2 The proponent shall ensure that adequate and appropriate sanitary facilities are provided for the workers during construction phase and that proper decommissioning of the facilities is carried out once construction is complete.

2.3 The proponent shall undertake a comprehensive initial environmental audit for the existing quarry within thirty (30) days from the date of the conditions for licensing of the project.

2.4 The proponent shall undertake a specific environmental impact assessment study for the 24 kilometer transmission line to Suswa sub-station before implementation of the project.

2.5 The proponent shall ensure that the cooling systems fitted are suitable alternatives with zero ozone depleting potential as per the Environmental Management and Coordination (Controlled Substances) Regulations of 2007.

2.6 The proponent shall ensure that the construction site is sealed off and all entries closed when there is no work in progress.

2.7 The proponent shall minimize the installation and use of artificial lighting at night.

2.8 The proponent shall ensure that all steam pipes along wildlife migratory and dispersal routes and road crossings are installed underground.
2.27 The proponent shall ensure that the development adheres to zoning specifications issued for development of such a project within the jurisdiction of the County Government of Nakuru, with emphasis on approved land use for the area.

3.0 Operational Conditions

3.1 The proponent shall ensure that waste water is managed in accordance with the provisions of the Environmental Management and Coordination (Water Quality) Regulations of 2006.

3.2 The proponent shall minimize vehicular movements to the plant and ensure compliance with the set speed limit.

3.3 The proponent shall put in place a monitoring plan for the H₂S gas and ensure measures are taken to maintain the levels at permissible levels.

3.4 The proponent shall provide adequate mitigation measures against explosion and fire hazards.

3.5 The proponent shall put adequate signage and conduct safety campaigns along the distribution alignments.

3.6 The proponent shall ensure that all equipment used are well maintained in accordance with the Environmental Management and Coordination (Noise and Excessive Vibration Pollution Control) Regulations of 2009.

3.7 The proponent shall ensure that all solid waste is handled in accordance with the Environmental Management and Coordination (Waste Management) Regulations of 2006.

3.8 The proponent shall ensure that all workers are well protected and trained as per the Occupational Safety and Health Act (OSHA) of 2007.


3.10 The proponent shall ensure that environmental protection facilities or measures to prevent pollution and ecological deterioration such as soil erosion control measures, tree planting and re-vegetation programmes, protection of archaeological and heritage sites, integrated solid waste management system, traffic management system, waste water management plan, wildlife protection and conservation measures, emergency response plan (ERP), installation of safety signage, installation of adequate surge and lightening protection, solid waste management facilities, storm water drains are designed, constructed and employed simultaneously with the proposed project.

4.0 Notification Conditions

4.1 The proponent shall notify the Energy Regulatory Commission in writing of any accident or incident causing loss of life, personal injury, explosion, oil spill, fire or any other accidents or incidents as per section 117(1) of the Energy Act of 2006.

4.2 The proponent shall seek written approval from the Authority for any operational changes under this license.

4.3 The proponent shall ensure that the Authority is notified of any malfunction of any system within 12 hours on the NEMA hotline No. 020 6006041/0786101100 and mitigation measures put in place.
2.9 The proponent shall ensure that all above-ground steam pipes are painted in such a way as to camouflage with the natural environment.

2.10 The proponent shall ensure that the road network to the site is constructed using materials that camouflage with the natural environment and avoid black tarmac.

2.11 The proponent shall put in place a waste water management plant with sufficient capacity to treat all the waste water from the proposed plant.

2.12 The proponent shall submit design drawings of the proposed waste water treatment plant to the Water Resources Management Authority and the area Water Services Board for approval prior to commencement of works.

2.13 The proponent shall establish an effective traffic management to ensure that the vehicular movement to the site is minimized and ensure compliance with the set speed limit.

2.14 The proponent shall ensure that all contractors on site adhere to the EIA license conditions.

2.15 The proponent shall obtain a transmission license from Energy Regulatory Commission in accordance with Section 27 of the Energy Act No. 12 of 2006.

2.16 The proponent shall install adequate safety signs showing areas of electrical hazards during construction.

2.17 The proponent shall adhere to the approved construction procedures for this type of project and shall closely liaise and collaborate with the Kenya Wildlife Service during the construction phase.

2.18 The proponent shall strictly adhere to safety and health considerations during all phases of the project.

2.19 The proponent shall obtain requisite approval from Kenya Forest Service, Kenya Wildlife Service and the affected County Governments before cutting down any trees.

2.20 The proponent shall ensure measures against explosion, fire hazards, surge and power lightening are provided.

2.21 The proponent shall ensure that the design of the equipment and site comply with the Environmental Health and Safety Policy for the electric power sub-sector.

2.22 The proponent shall ensure that the trenches dug are refilled as fast as practically possible.

2.23 The proponent shall ensure that all excavated material and debris is collected, re-used and where need be, disposed off as per the Environmental Management and Coordination (Waste Management) Regulations of 2006.

2.24 The proponent shall ensure strict adherence to the provisions of Environmental Management and Coordination (Noise and Excessive Vibrations Pollution Control) Regulations of 2009.

2.25 The proponent shall ensure strict adherence to the Occupational Safety and Health Act (OSHA), 2007.

2.26 The proponent shall ensure that construction workers are provided with adequate personal protection equipment (PPE) as well as adequate training.

2.27 The proponent shall ensure that construction activities are undertaken during the day (and not at night) between 0800 hours and 1700 hours and that transportation of construction material to site are undertaken during weekdays at off peak hours.

2.26 The proponent shall ensure strict adherence to the Environmental Management Plan developed throughout the project cycle.
4.4 The proponent shall keep records of all pollution incidences and notify the Authority within 24 hours.

4.5 The proponent shall notify the Authority in writing of its intent to decommission the facility three (3) months in advance.

5.0 Decommissioning Conditions

5.1 The proponent shall ensure that a decommissioning plan is submitted to the Authority for approval at least three (3) months prior to decommissioning.

5.2 The proponent shall ensure that all pollutants and polluted material is contained and adequate mitigation measures provided during the phase.

The above conditions will ensure environmentally sustainable development and must be complied with.