Access to electricity is a priority for the Nile Equatorial Lakes (NEL) countries’ economies because it is a prerequisite to poverty reduction and economic growth. The majority of NEL countries have very low access to electricity, with an average of about 11%. Load shedding is common to all countries such that industrial and domestic consumers often experience erratic service. This is mostly due to demand surpassing supply and countries’ need to be economically self-sufficient such that there has been limited power trade in the region which could arrest the situation. Only small-scale interconnections between Uganda and Kenya and between Kenya and Northern Tanzania exist and also between Rwanda-Burundi-DR Congo based on inter-utility operation of SINELAC. Cross-border exchange between Tanzania and Uganda is also minimal.
The current impetus will enhance commitment to regional integration of the countries' electricity grids. An integrated NEL/East Africa power market holds the promise of increasing access, improving reliability, and reducing the costs of power supply to each Member State. The project targets evacuation of power generation from the planned plants in the NEL Region which include Isimba (183 MW) and Karuma (600MW) plants in Uganda and Ruzizi III (145 MW) and Methane Gas from Lake Kivu in Rwanda, Renaissance Dam in Ethiopia (about 6,000 MW), the geothermal plants in Kenya and Tanzania. The project will also create a platform for the East African Power Pool's operation.

In order to promote these transboundary projects, the Nile Basin Initiative through NELSAP developed the “Interconnection of Electric Grids of the Nile Equatorial Lakes Countries Project with an aim to improve the living conditions of the NEL communities and their quality through increased availability of affordable energy and established the Regional Project Coordination Unit in Kigali, Rwanda, in NELSAP Offices.

**PROJECT GOAL**
To improve the living conditions of the NEL communities and their quality the through increased availability of affordable energy

**OVERALL OBJECTIVE**
To improve the access to electricity in Nile Basin Initiative (NBI) countries through increased cross-border sharing of energy and power.

**PROJECT COMPONENTS**
This project will achieve its objectives through main activities comprising construction of a total of 946km of 220kV and 400kV transmission lines and 17 associated substations.

(i) 260km Uganda to Kenya (Bujagali-Lessos);
(ii) 172km Uganda to Rwanda (Mbarara-Mirama-Shango);
(iii) 293km DRC to Rwanda (Buhandalhanda-Goma-Gisenyi-Kibuye-Shango);
(iv) 78km DRC to Burundi (Kamanyora-Bujumbura);
(v) 143km Rwanda to Burundi (Kigoma-Butare-Ngozi-Gitega)

The project has now entered into implementation in all countries with all modalities of procurement.
Erection of Gantries at Shango Substation (Rwanda) Compacting Works at Goma Substation in DRC

ACHIEVEMENTS TO-DATE

- Interconnection feasibility study completed (October 2008).
- Project officially launched (September 2009 in Kampala)
- About USD 390 million Project Funding mobilized
- Regional Project Coordination Unit established at NELSAP Coordination Unit, Kigali (February 2010).
- Procurement of consultants completed in all countries starting June 2011.
- EPC contractor procurement completed in Burundi for overhead transmission line (OHTL), DRC (for Gisenyi-Goma), Kenya, Rwanda and Uganda and physical implementation under way
- Procurement of EPC contractors is underway in DRC for Goma-Buhandahanda OHTL and Bujumbura Substation in Burundi.
- Procurement of the EPC contractor for Rwanda-Burundi Interconnection at infancy at preparation of Prequalification and Tender documents
- Procurement of consultancy services for supplementary studies for operationalisation of an integrated network is ongoing.
Rwanda to Uganda Interconnection (Mirama-Shango)

CHALLENGES

- **Scope change** in all countries necessitating new feasibility studies in Rwanda, Burundi and DRC and extension of last disbursement date, harmonization of commissioning challenges due to different completion dates
- **Schedule slippage** in all countries – due to Right of Way (ROW) issues, and contract management issues: quality of Contractor performance, Design delays due feedback/approvals, mobilization, staffing
- **Coordination and harmonization** between Substation and OHTL contracts
- **Low disbursement levels** due to slow pace of works contracts
- **Project Management issues** overall
- **Securing Right of Way** from Project Affected Persons (PAPs)
- **Communication flow** between many implementers and stakeholders