

12th IRENA Assembly virtual side event

Long-term energy scenarios (LTES) for developing national energy transition plans in Africa

EAPP Regional Power System Master Plan – LTES development

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1 – Development of Scenarios - EAPP case

Governance structure in line with the Long-Term Energy Scenarios (LTES)

- Since the establishment of the Eastern Africa Power Pool, only two Power System Master Plans have been developed; in 2011 and 2014.
- The first EAPP Power System Plan was developed by a Consulting Firm. But the second Master Plan was done through a twinning arrangement where EAPP General Secretariat, EAPP member utilities; EAC; COMESA and the Consultant worked together to develop the 2014 EAPP Master Plan.
- EAPP has not a specific team to develop scenarios, but this is planned to be established within the EAPP Planning Technical Committee during the development of the next EAPP Master Plan.
- The process of developing the LTES in EAPP is a bottom – up approach; national level first then regional level.

1 – Development of Scenarios - EAPP Case. Cont'd

- Effective measures to develop the EAPP LTES is through Planning Technical Committee and other partners to ensure involvement of all EAPP members; utilities, ministries and RECs (EAC and COMESA).

Boundary of planning scenarios

- The scopes of the LTES is suggested in the Terms of Reference submitted to the Consulting firm.
- Clean energy transition features is always considered in the Terms of Reference of the EAPP Master Plan development. Example of two of the components of the EAPP Master Plan development is to develop –

a) Spatial mapping of generation and transmission resources throughout the EAPP region,

b) Benchmark Scenario and planning studies based on independent Country Generation and Transmission Plans.

2 – Use of scenarios

Purpose of the use of the scenario building

- EAPP LTES development is used for analysing impacts of existing and planned energy generation sources on the infrastructure development priorities in the Master Plan and on the operational readiness requirements of the power pool.
- The main purpose of the EAPP LTES is to analyse and explore all scenarios, then come up with the best option for a power pool.

Communication of scenario results

- EAPP Planning Technical Committee members and RECs (EAC and COMESA) are always involved in the development of scenarios assumptions and scenario results through workshops pre-defined. Each step is always validated by the EAPP Planning Technical Committee members and other partners before taking further steps of the assignment. Transparency during development of the EAPP LTES is very crucial to ensure results are validated by all members before they are published on EAPP platforms.

3 – Scenarios capacity building

Planning capacity in government

- EAPP General Secretariat yearly prepare capacity building for all EAPP members. Any consultancy services always includes related capacity building to be provided as a standalone deliverable.
- Capacity building plan is always incorporated in EAPP Short – Term Action Plan (3 years)
- EAPP has dedicated focal teams (in-house) composed by few of the EAPP Planning Technical Committee members and the Secretariat staff for modelling to minimize costs used to hire consultant if possible.

4 – Lessons for the Continental Master Plan.

Africa Continental Power System Master Plan (CMP)

- Coordination of all involved players during development of the CMP is very important.
- LTES needs to be agreed upon by all players,
- Development of the CMP needs an organization structure which is not complex in order to better coordinate the CMP development and effectively make decisions to avoid delays from contractual schedules of different deliverables (Consultant and AUDA – NEPAD),
- Recommendation of the CMP need to be clear and easy to be understood by all decision makers for further actions of the recommended actions and schedules of all plans.

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