ETG Bulletin Issue 19, April 2019

SADC begins reviewing energy protocol

SOUTHERN AFRICA has begun steps to review the SADC Energy Protocol so as to consolidate the policy and regulatory environment for the region's energy sector.

This is in line with a decision by the Ministers responsible for Energy, at their June 2018 meeting, approved a comprehensive review and rationalization of the governing instruments and policy guidelines for the region's energy sector, in particular the SADC Energy Protocol of 1996.

This protocol seeks to promote the balanced and eq uitable development of the energy sector throughout the SADC region.

Since 1996 however, significant changes have occurred in the regional and global environment that have necessitated a review of the protocol so as to eliminate policy inconsistencies.

The review of the SADC Protocol on Energy of 1996 is also set as one of the SADC energy targets in the revised Regional Indicative Strategic Development Plan (RISDP) 2015-2020.

Updating the April 2019 Energy Thematic Group (ETG) meeting, the SADC Infrastructure Directorate reported that steps to review the Energy Protocol has already begun.

The Secretariat is working with International Coope rating Partners (ICPs) such as the Southern Africa Energy Programme (SAEP) on some of the planned activities for the review of the SADC Protocol on Energy.

Through SAEP, a gap analysis on the Protocol on Energy has since been presented to the SADC Secretariat and Member States, which identifies clauses within the Protocol that are eligible for amendment, modification or repealing.

Article 18 of the SADC Protocol on Energy provides for steps which must be followed in order to substantively amend the Protocol.

For example, the provisions of the article state that amendments may be proposed by any Member

State to the Director, who in turn duly notifies all Member States of the proposed amendments at least thirty days prior to the consideration of such amendments by the Committee of Ministers.

While the notice period can be waived by Member States, the article also provides that any amendment to the Protocol would require the decision of three quarters of all the members of Summit.

This means that for the amendment process to comply with Article 18, the gap analysis and the proposals to deal with those gaps should therefore form part of the discussions with the subcommittees from Member States.

The Secretariat is working on a roadmap to guide the amendment process, beginning at the Member State level with internal consultations and the submission of proposed amendments by the end of July 2019.

Thereafter, the SADC Secretariat will incorporate submissions by Member States into the draft agreement amending the Protocol on Energy of 1996 and circulate the draft to Member States by the end of August 2019.

As part of this process, the Secretariat plans to convene a workshop of Energy Officials and Legal Experts to validate the Draft Agreement amending the SADC Protocol on Energy of 1996 in October 2019.

Once this is done, the SADC Secretariat intends to submit the draft agreement amending the Protocol on Energy to the Committee of Senior Officials and Ministers responsible for Energy at their next ordinary meetings in May 2020 for consideration, endorsement and forwarding for legal clearance by the Committee of Ministers of Justice at its meeting in June, 2020.

The final steps would involve the submission of the draft agreement to the Council of Ministers at its meeting in August 2020 for consideration, final approval and forwarding to Summit for consideration and adoption.



THE SOUTHERN African Pool (SAPP) intends to commission at least 15 power generation projects in 2019, whose impact will be an additional 4,883 MW to the installed capacity of the region.

These projects are being implemented in eight SADC Member States, namely Angola, DRC, Eswatini, Malawi, Mozambique, Namibia, South Africa and Zimbabwe.

In Angola, two power generation projects are being constructed, the first of which is the Luaca hydro-electricity plant, now the country's largest hydro power plant after surpassing capacities at both Capanda (520 MW) and Cambambe (960 MW) plants.

To date, the Luaca project has commissioned over 1,000 MW and is expected to add 668 MW within the current year.

The second project in Angola is the Soyo Combined Cycle Gas Turbine (CCGT) plant which is set to contribute 375 MW to the SAPP power generation target for 2019.

This CCGT plant is designed to improve energy production efficiency by first heating natural or synthesis gas, which process in turn powers a steam plant to generate electricity.

The Democratic Republic of Congo is expected to add 153.4 MW to its installed capacity through the Inga II Expansion (148 MW) and the Sanga hydro plant (5.4 MW).

Five solar projects are included in the additional power generation targets for 2019 in the region, an indication that southern Africa is indeed promoting clean renewable energy solutions.

One such project is the 10 MW Lavumisa Solar Park located in the southern-eastern

parts of Eswatini, with the plant expected to be in operation by December 2019.

SAPP reports that an independent power producer (IPP) is also currently constructing a solar plant in Malawi, whose total generating capacity is 100 MW.

Mozambique has also invested in solar energy solutions, with the 36 MW Mocuba solar plant, which is located in the Zambezia province, becoming operational as of March 2019.

In addition to this, a photovoltaic (PV) farm with an installed capacity of 37 MW is under construction in Namibia, with projections that it should be commissioned by September 2019.

South Africa continues to promote renewable energy investments, particularly in solar energy, with SAPP estimating that in 2019 alone, the country will commission PV plants with a combined installed capacity of 570 MW and concentrated solar power (CSP) plants with an installed capacity of 250 MW.

The country has also taken a leading role in the production of biomass energy plants which are projected to contribute at least 250 MW in installed capacity in 2019 alone.

Other non-renewable energy projects being implemented in South Africa include the Kusile (740 MW) and the Medupi Phase I (1,444 MW) thermal power plants.

Zimbabwe's is set to contribute 240 MW through the commissioning of a small thermal power plant, while Malawi is expected to complete its 36 MW diesel powered energy plant.

Over the next four years, SAPP targets to commission projects with an average capacity of 6,374 MW each year.

Plans to interconnect SADC with East Africa electricity grid gather pace

THE POWER pools of both East and Southern Africa are stepping up plans to ensure that the electricity grids within the two regional economic blocs are interconnected.

The purpose of this project is to broaden the regional electricity market so as to make power trading more efficient particularly between countries experiencing surpluses and those in deficit.

Following meetings held in March 2019 between the Secretariats of the Southern African Power Pool (SAPP) and the East African Power Pool (EAPP), a coordinating committee has since been established.

The mandate of this coordinating committee is to provide a facilitative role required to ensure the successful implementation of this project.

EAPP was established in 2005 with the signing of an Inter-Governmental Memorandum of Understanding by seven Eastern Africa countries, namely: Burundi, Democratic Republic of Congo (DRC), Egypt, Ethiopia, Kenya, Rwanda and Sudan.

SAPP is a SADC initiative, established in 1995 and has since grown to include nine operating members, three non-operating members, two independent transmission companies and three independent power producers.

Of the 12 mainland SADC Member States, Angola, Malawi and Tanzania are not yet connected to the SAPP grid.

In order to rectify this challenge and in line with the regional integration thrust in the energy sector, several transmission projects are planned that will help distribute power within east and southern Africa.

The target is to connect all the mainland Member States by 2022, through a number of interconnection projects designed to link non-operating SAPP Members to the regional grid.

These include the Angola-Namibia Interconnector, a project which is at the feasibility stage and is projected to cost about US\$250 million, according to estimates outlined in the SADC Regional Infrastructure Development Master Plan.

The Malawi-Mozambique Interconnector is a project also at the feasibility stage and will be implemented at an estimated cost of US\$93 million.

In addition to this is the DRC-Angola and the Mozambique-Tanzania Interconnectors, both of which are at pre-feasibility stages.

One of the most significant is the Zambia-Tanzania-Kenya Interconnector, a project expected to cost about US\$860 million dollars.

This interconnector, which is undergoing feasibility studies as well, will not only link the United Republic of Tanzania to the SAPP grid but will also connect EAPP to SAPP.

Other interconnection projects are also being im plemented in the region, to consolidate the already existing regional power pool infrastructure.

Examples of such projects include the Zimbabwe-Zambia-Botswana-Namibia and the Mozambique-Zimbabwe-South Africa Interconnectors whose main purpose is to relieve transmission congestion on the SAPP network.

Other transmission projects being implemented in the region are those designed to move power from new generating stations to load centres.

These include the Kolwezi-Solwezi Transmission between Zambia and the DRC, Mozambique-Zambia Transmission, South Africa-Namibia Transmission, Botswana-Namibia Transmission and the Grand Inga Transmission.

At present, there are five power pools on the African continent, namely the Central African Power Pool, the West African Power Pool, the North African Power Pool, EAPP and SAPP.

The plan by SAPP and EAPP to interconnect is in line with the broader strategy at the continental level, whose vision is to establish an integrated network of power pools for the whole of Africa.



RERA's mandate reviewed

THE SCOPE of the Regional Electricity Regulators Association of Southern Africa (RERA) is being broadened to cover the entire energy sector, lifting the earlier restriction to electricity alone.

In an update to the Energy Thematic Group (ETG) meeting held in Gaborone, Botswana in April 2019, RERA reported that its constitution has been reviewed to provide for a more expanded mandate which now encompasses the regulatory oversight of the entire energy sector.

RERA is a SADC subsidiary organisation set up in 2002 to promote cooperation in the regulation of the region's electricity sector by harmonising policies and standards within southern Africa. Among other functions, RERA was established to help build the regulatory capacities of its members by supporting the development of energy regulators within the region.

In addition, RERA was tasked with the role of monitoring and evaluating electricity regulatory practices among Members States.

Given the need within SADC to develop sustainable regional energy markets, the functions of RERA are now being broadened beyond the original electricity sub-sector.

Going forward, RERA sees its role as that of consolidating its regional energy regulatory initiatives in a manner that ensures competitively priced energy services, promotes additional investments, provides quality infrastructure, ensures the financial viability of utilities and energy providers while also increasing access to reliable forms of energy in the region.

These reforms are also part steps of towards the establishment of an energy regulator for the SADC region.

This will be achieved by transforming RERA from an association, into a fully-fledged regional regulator for southern Africa's energy sector.

Out of 16 SADC Member States, 14 of them have established electricity, energy or water regu-

latory bodies with the exception the DRC and Comoros.

Work is being done through the European Union (EU) funded Enhancement of a Sustainable Regional Energy Market in the Eastern and Southern Africa and Indian Ocean Region (ESREM) Project to provide the necessary technical assistance to both the Comoros Islands and the DRC to enable them to establish their regulators.

The current membership of RERA consists of regulatory bodies drawn from within the 11 participating Member States.

Such RERA members include the Institute for Electricity Sector Regulation of Angola, the Botswana Energy Regulatory Authority, the Eswatini Energy Regulatory Authority and the Lesotho Electricity and Water Authority.

Other members are the Malawi Energy Regulatory Authority, the National Electricity Advisory Council of Mozambique, the Electricity Control Board of Namibia as well as the National Energy Regulator of South Africa.

Tanzania is represented by the Energy & Water Utilities Regulatory Authority, Zambia by the Energy Regulation Board with the Zimbabwe Energy Regulatory Authority concluding the list of RERA members to date.

Ahead of its transformation into a fully-fledged regional regulator, RERA is working with various International Cooperating Partners (ICPs) to strengthen its operating capacity.

For example, RERA is working with the African Development Bank (AfDB) to develop regional regulatory principles, develop an energy data portal, develop regional tariff publications for the period 2015 to 2018 and develop a cost reflective tariff assessment tool.

RERA has also partnered with the World Bank in order to explore ways in which the region can accelerate investments in energy storage solutions, such as batteries.