

RENEWABLE ENERGY

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Introduction

South Africa is rich in alternative forms of energy; they include solar, biomass, hydropower, biogas, landfill gas, wind energy and energy from cogeneration sources (sugar, bagasse, waste heat, paper and pulp). In line with South Africa's commitment to sustainable development, there has been a strong shift in focus from primary energy resources, such as coal and oil, to the development of the country's substantial alternative energy resources.

That the South African Government wishes to encourage investment in alternative energy, is evident from the significant policy and regulatory developments in this area. A study undertaken by a top US-based research body lauded South Africa as breaking new ground in clean energy development for the entire African continent. The study ranked South Africa as the ninth-leading destination for clean energy investment, and the fastest-growing green energy market (with a phenomenal one-year growth rate of 20,563%) among the G-20 economies.

The Renewable Energy Independent Power Producers (RE-IPP) Procurement Programme was acknowledged internationally when the programme was awarded the Green Infrastructure Project of the Year Award at the sixth Global Infrastructure Leadership Forum in February 2013.

The model of the renewable energy procurement programme was cause for debate. One possibility was for the programme to be based on a Renewable Energy Feed-In Tariff (REFIT), as envisaged in guidelines and consultation papers issued by the National Energy Regulator of South Africa (NERSA). Another was for the programme to be based on competitive bidding as to the price of electricity under the power purchase agreement (PPA). In constructing its renewable energy procurement programme, the Department of Energy (DOE) opted for a competitive bidding model in which the final evaluation compares price and economic development offerings of bidders.

Legal Framework

The Electricity Regulation Act

The generation and sale of electricity in South Africa is governed by the Electricity Regulation Act, No. 4 of 2006 (the Electricity Act). It provides for the:

- issuing of rules designed to implement Government's electricity policy framework;
- · regulation of prices and tariffs;
- · making of guidelines, rules and codes of conduct after consultation with interested parties;
- · conclusion of PPAs; and
- setting of licensing conditions.

Section 34 of the Electricity Act empowers the Minister of Energy to determine when new generation capacity is needed, the types of energy sources from which it must be generated, and to whom and in what manner the generated electricity may be sold. In the past year, the Minister of Energy has issued determinations indicating the DOE's intention to procure further renewable energy, base-load coal, natural gas and hydro energy as well as cogeneration and natural gas energy under the Medium-Term Risk Mitigation Programme.

The Minister of Energy must also determine the tendering procedure for new generation capacity. This procedure must be fair, equitable, transparent, competitive and cost-effective.

An Electricity Regulation Second Amendment Bill was published for comment on 19 December 2011. Amendments include changes to the role of NERSA, including a licensing function for the construction and operation of generation facilities. At the time of writing, the parliamentary portfolio committee on energy was set to have deliberations on this Bill, however it is unclear as to when these amendments will come into effect.

On 4 May 2011, the Electricity Regulations on New Generation Capacity were promulgated in terms of the Electricity Act. These regulations superseded previous rules published by NERSA relating to a REFIT bid programme and have replaced them with provisions relating to an independent power producer procurement programme (IPPPP).

The Electricity Regulations on the Integrated Resource Plan 2010-30 (IRP2010), promulgated on 6 May 2011 in terms of the Electricity Act, envisage 17 800 MW of new generation capacity being brought on stream from renewable energy sources in the next 20 years. This is expected to be made up of 8 400 MW of wind energy, 8 400 MW of solar photovoltaic power and 1 000 MW of concentrated solar power and power from other renewable sources.

At the time of writing, the South African Government was in the process of finalising its Integrated Energy Plan (IEP) outlining the energy road map for South Africa. The draft Integrated Energy Planning Report was accepted by Cabinet in June 2013 and released in July 2013 ahead of public consultations. During the course of 2014, key stakeholders were engaged with to finalise the IEP, and the IEP Report was due to be submitted to Cabinet at the end of 2014. In addition, following from this, an updated IRP2010 was drafted for public consultation. The Portfolio Committee on Energy has recommended that the Minister of Energy expedite the finalisation of the IEP and the IRP, along with the outstanding legislation referred to above.

Request for Qualification and Proposals for New Generation Capacity

The DOE through the Request for Qualifications Proposals (RFP) initially aimed to procure 3 725 MW of electricity to be generated by independent power producers (IPPs) from renewable energy sources. Onshore wind, photovoltaic solar, concentrated solar power (trough and tower), biomass, biogas, landfill gas, small hydro and the Small Projects IPP Procurement Programme are all examples of such renewable energy sources. In December 2012, the DOE set aside a further 3 200 MW of electricity for renewable energy procurement.

In terms of the RFP, wind projects may not exceed a contracted capacity of 140 MW for a single grid connection point. For photovoltaic solar projects, the maximum contracted capacity is 75 MW and for concentrated solar power it is 100 MW.

Under the RE-IPP Procurement Programme bidders are required to bid the price which will be payable by the buyer. This is pursuant to the PPA to be entered into between the buyer and a preferred bidder's project company. In the evaluation phase preferred bidders are selected based on a two-stage determination taking into account inter alia the price bid, which should not exceed the cap allocated for each technology, as well as economic development criteria. Included in economic development are local content requirements that aim to create and retain local manufacturing capacity.

The RFP contemplates a two-stage process for the designation of preferred bidders. The first is a qualification phase in which bidders must meet legal, technical, financial and economic development criteria; and the second, an evaluation phase in which bidders are compared against one another in relation to their price and economic development proposals.

Fifty-three bids were submitted on 4 November 2011 as part of the first bid submission. Twenty-eight of these were designated as preferred bidders during the seventeenth Conference of the Parties of the United Nations Framework Convention on Climate Change (COP 17) hosted in Durban, South Africa, in December 2011. These bids represented a total of 1 415 MW. Successful projects in this phase of the RE-IPP Procurement Programme reached financial close in or around November 2012. As at January 2015, twenty-four of these projects have reached commercial operation.

Seventy-nine bids were submitted on 5 March 2012 as part of the second bid submission. Nineteen of these were designated as preferred bidders, representing a total of 1 044 MW. Successful projects in this phase of the RE-IPP Procurement Programme reached financial close in or around June 2013. As at January 2015, five of these projects have reached commercial operation.

The second bid's financial close broadly coincided with the release of the revised RFP for the third bid with its submission phase in May 2013, and 19 August 2013 set as the submission deadline. The Reissued RFP incorporated lessons learned from the first two rounds and sought to procure 1 473 MW of electricity from IPPs.

Ultimately ninety-three bids were submitted on 19 August 2013 for the third bid submission phase. Seventeen of these were designated as preferred bidders in October 2013, representing a total of 1 456 MW. Fifteen projects reached financial close in December 2014.

On 31 March 2014, the DoE provided for bids to be submitted in a concentrated solar photovoltaic exclusive bid submission phase. During this phase 200 MW was made available, with three bidders making submissions. Two bidders were designated as preferred bidders.

Seventy-seven bids were submitted on 18 August 2014 for the fourth bid submission phase. Prior to this on 26 May 2014, the DOE reissued an updated RFP for this bid phase. The reissued RFP makes provision for:

- · the removal of price caps for onshore wind and solar photovoltaic energies; and
- the introduction of the concept of Returning Compliant Bidders, that is, bidders which rely on a Project Site, Project Layout and Technology which are identical to that contained in Compliant Bids submitted in earlier bid submission phases.

This bid submission phase sought to allocate 1 105 MW to bidders. However, on 16 April 2015, the DOE designated thirteen bidders as preferred bidders, representing a total capacity of 1 121 MW.

The table below summarises the status of the four bid phases of the RFP to date.

Procurement round	Projects bid	Preferred bidders selected	Capacity awarded (MW)	Status
Round 1	53	28	1 416	Projects reached financial close in November 2012
Round 2	79	19	1 044	Projects reached financial close in June 2013
Round 3	93	17	1 456	15 projects reached financial close in December 2014
Round 4	77	13	1 121	The DOE expects projects to reach financial close in December 2015

The DOE further announced on 16 April 2015, that it will by June 2015 issue a Request for Further Proposals for an expedited procurement process of a further 1 800 MW across all technologies, and that such a bid window will be open to, amongst others, all unsuccessful bidders from previous bid windows, who are in a position to resubmit. It is also anticipated that the fifth bid submission window will be released during the second quarter of 2016, which will coincide with a reissued RFP being released.

In conjunction with the IPP, the Small Projects Programme, which aims to procure renewable energy from small scale independent power producers, has been developed. A bid submission window is currently underway, with 50 MW of the 200 MW set aside for the Small Projects Programme. It is anticipated that projects will be between 1 and 5 MW in size. Twenty-nine bids have been received totaling 139 MW and the DOE is set to announce the preferred bidders during April 2015.

The Independent System and Market Operator Establishment Bill

A process is currently underway to bring legislation establishing an independent system and market operator into effect. This would have the function of buying, planning for, dispatching and aggregating electricity. Currently, Eskom fulfills all of these functions.

The Independent System and Market Operator (ISMO) Establishment Bill was published on 13 May 2011 for comment by 13 June 2011. Public hearings for the Bill took place on 15 and 16 May 2012. The Bill has since been debated and referred back to the Portfolio Committee on Energy for further consideration. It is as yet unclear when this legislation will come into effect.

Other Regulatory Requirements Relating to Renewable Energy Projects in South Africa

In addition to procurement legislation and regulations, investors in renewable energy need to comply with company, environmental, land and exchange control legislation and regulations, among others.

Project financing or corporate finance

The RFP allows for debt funding to be denominated in a currency other than South African Rand. It does, however, require that the financial model of the project expresses funding sources in South African Rand. The governing law of all of the necessary financing and security agreements must be South African law.

There is therefore potential for foreign banks to enter into the financing of renewable energy projects in South Africa under the RE-IPP Procurement Programme if the above requirements are met. It should be noted though, that only banks which are licensed to conduct the business of banking in South Africa under the Banks Act, No. 94 of 1990, or licensed short-term insurers as contemplated in the Short-term Insurance Act, No. 53 of 1998, can provide a bid guarantee which is required from each bidder in terms of the RFP. Indeed, all of the large South African banks have been very active in participating in the RE-IPP Procurement Programme.

Projects have embarked on sourcing debt funding through alternative finance, including the raising of debt capital at the listed bond market. Since bond market investors typically avoid assuming construction risk, such funding is expected to be used predominantly for purposes of refinancing the project after the commercial operation date has been reached.

Corporate structure

The RFP does not prescribe a particular corporate structure for renewable energy projects and bidders are free to structure their projects as they see fit.

Bidders and investors have experienced several practical challenges in corporate structuring that have arisen due to timing implications. These issues arise predominantly in obtaining tax clearances and in acquiring shelf companies to be converted into special purpose vehicles for the various roles in the project structure. The majority of these issues can be avoided if the parties are mindful of the limitations and act timeously.

In terms of the RFP, the sole object and purpose of the project company must be undertaking the bidder's project. This includes entering into and fulfilling the purposes of various non-negotiable agreements (including PPA, the Implementation Agreement, the Direct Agreement and the Connection Agreements).

The project company must be a ring-fenced company in terms of the Companies Act, No. 71 of 2008; and under these terms its object and purpose cannot be amended.

Under the RFP, the project company is also obliged to comply with certain ownership obligations, including that 30% of the shareholding in the project company must be held by 'Black People' and 5% by 'Local Communities', that is, communities surround the site on which the renewable energy project will be located.

Exchange control regulations

International private investors may freely invest in South Africa, provided there is documentary evidence proving that such transactions are concluded at arm's length, at fair market-related prices, and are financed in an approved manner.

In respect of financing, the investment must be through the introduction of foreign currency or South African Rand from a non-resident account. All securities owned by non-residents, or in which non-residents have an interest, are endorsed as non-resident.

This endorsement ensures that only the proceeds of the sale or redemption of the securities belonging to non-residents are transferred abroad or credited to a non-resident account, as these alone are regarded as being freely remittable. It is further noted that the distribution of dividends, profits or income to non-resident shareholders are remittable in proportion to their respective percentage of shareholding.

An Authorised Dealer, as defined in the Exchange Control Manual (as amended), is "in relation to any transaction in respect of foreign exchange, a person authorised by the Treasury to deal in foreign exchange". In general, these are the large banks operating in South Africa.

The approval of an Authorised Dealer or the Financial Surveillance Department of the South African Reserve Bank must be obtained before a loan account between a resident and a non-resident is created.

Some international investors have fallen into the trap of introducing funds for projects without exchange control approval, triggering the need for an exchange control regularisation process. This can and should be avoided.

Environmental requirements

Renewable energy developments are subject to a number of regulatory and permit requirements. The most burdensome of these requirements is obtaining environmental authorisation in terms of Section 24 of the National Environmental Management Act, No. 107 of 1998 (NEMA), the most important and overarching piece of environmental legislation in South Africa. The process of obtaining environmental authorisation, which involves public participation and the submission of detailed reports, is outlined in NEMA's accompanying Environmental Impact Assessment Regulations.

Additional environmental legislation relevant to renewable energy developments include the National Water Act, No. 36 of 1998, the National Environmental Management: Waste Act, No. 59 of 2008, the National Environmental Management Act: Air Quality Act, No. 39 of 2004, and the National Environmental Management: Biodiversity Act, No. 10 of 2004.

Land

Renewable energy developments are further regulated in respect of rezoning, departures, consent uses and subdivisions, by land use planning legislation.

When considering the correct land use structure for a renewable energy project, developers need to take into account:

- the Subdivision of Agricultural Land Act, No. 70 of 1970;
- the requirements which the Department of Agriculture is expected to have in respect of long-term lease agreements for renewable energy projects; and
- the requirement for ministerial consent for surface rights with respect to mineral rights in terms of the Mineral and Petroleum Resources Development Act, No. 28 of 2002.

The time it could take to obtain the necessary approvals must be factored into project timelines from the outset. In addition, certain provincial Government departments, as custodians of land-use planning legislation, have been eager to make legislative changes to allow land to be used for renewable energy developments. The changes are, however, not yet in place. Pending their implementation, renewable energy project developers will face legal uncertainties regarding the correct land use application.

What to look out for in 2015?

The South African Government is expected to commence the procurement of power from cogeneration sources (sugar, bagasse, waste heat, paper and pulp), as well as the establishment of a coal base load independent power producer (Coal IPP) procurement programme. The DOE anticipates releasing the cogeneration requests for proposals in April 2015 and the announcement of the preferred bidders will be in the third quarter of 2015. At the date of publication of this article, 800 MW has been determined for cogeneration. The Coal IPP aims to procure 2 500 MW of electricity from coal-fired power stations with bidders limited to bidding a maximum of 600 MW per project. The first bid window for the Coal IPP was opened in April 2015 and it is anticipated that bid responses will be received during the middle of 2015.

During the 2015 Budget Speech, it was revealed that tax incentives are to be introduced during the course of the year to promote greater levels of energy efficiency in South Africa. Proposed incentives include a temporary increase in the electricity levy to assist with management of the demand for electricity, an increase in the energy-efficiency savings incentive, which will be extended to cogeneration projects, boosting the accelerated depreciation for solar photovoltaic renewable energy. Additionally, the DOE has announced that it and the National Treasury have encouraged development finance institutions and the private sector to develop a Small Projects Funding Mechanism which will operate independently from Government and is intended to provide funding to small, local new developers.

As to the future of the RE-IPP Programme, the DOE intends submitting to NERSA a new determination for an additional 6 300 MW for the IPP. If this is successful, it will ensure that the continuance of the RE-IPP Programme for the indefinite future

Conclusion

Despite the highly regulated environment pertaining to renewable energy projects in South Africa, and uncertainty surrounding certain elements of the regulatory and procurement framework, the country's renewable energy industry has seen an explosion of investment, and is set for further exponential growth.