

26 July 2016

## BAYAKHA INVESTMENT PARTNERS INVESTMENT UPDATE

### ESKOM'S DECISION NOT TO SIGN FURTHER PPA'S RATTLES IPP MARKET

If you've been paying attention to the SA energy sector over the last week, you will have undoubtedly noticed the various news headlines indicating Eskom's reticence in relation to the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). These headlines have justifiably raised concerns amongst the energy investment community given Eskom's role as the national utility and sole buyer of on-grid power.

This client bulletin deals specifically with this matter, laying out a set of related issues that are critical to the construction of an informed understanding of the implications of Eskom's position, namely:

1. The History and Status of the Programme
2. Eskom's Position
3. The Bayakha Investment Partners ("Bayakha") View

We must state upfront that we appreciate Eskom's prudence regarding its balance sheet and the overall management of energy supply.

It is also worth emphasising that Bayakha's renewable energy fund, has from inception targeted the financing and where possible, re-financing of projects from Bid Window 1 to 4.5. Investors would have noted this in the section of BIP's presentation dealing with portfolio construction.

Therefore, given that Eskom's request to engage pertains to projects from Bid Window 5 onwards, the fund would not be adversely affected by a decision to delay or do away with new renewable energy projects feeding the national grid. Nevertheless, we believe it is our responsibility to ensure that our investors are equipped to understand the contextual issues governing the investment into Bayakha's Renewable Energy Fund.

#### **The History and Status of the Programme**

The government's IRP 2010 set a target of 17 800 MW (equivalent to 42%) of new electricity generation capacity to be derived from renewable energy, largely solar (PV & CSP) and wind.

Thereafter, in August 2011, a Ministerial Determination provided for the procurement of 3 725 MW of renewables generation capacity from IPPs. The Department of Energy then initiated the

Independent Power Producer (IPP) Procurement Programme to procure power from renewable energy sources through private power companies in a series of bidding rounds, also referred to as 'Bid Windows' (BW).

Another Ministerial Determination in December 2012, determined that a further 3 200 MW of renewables generation capacity was to be procured from IPPs. Below is a summary of the respective determinations per renewable energy technology.

**Figure 1: Ministerial Determinations**

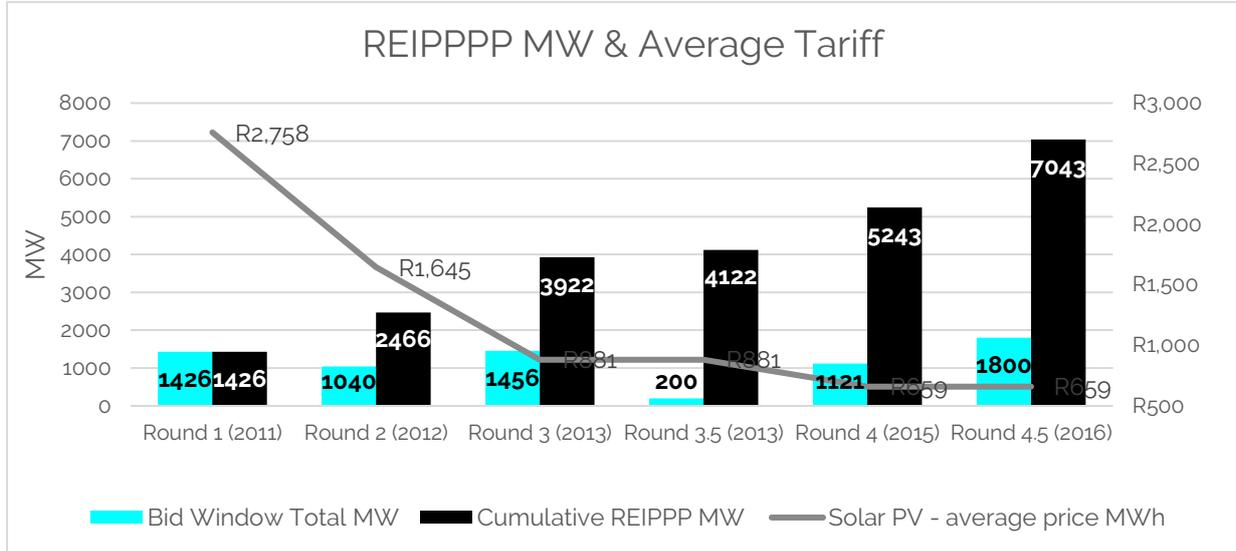
Technology	1 <sup>st</sup> Determination (MW)	2 <sup>nd</sup> Determination (MW)	3 <sup>rd</sup> Determination (MW)
Onshore Wind	1850	1470	3000
Concentrated Solar Power	200	400	600
Solar Photovoltaic	1450	1075	2200
Biomass	13	48	150
Biogas	13	48	50
Landfill gas	25		40
Small Hydro	75	60	60
Small IPP Programme	100	100	200
<b>Total</b>	<b>3725</b>	<b>3200</b>	<b>6300</b>

Source: Department of Energy

What is now in question is the complete implementation of the 3<sup>rd</sup> Ministerial Determination, insofar as it includes the acceptance of new projects for state review in what would be the 5<sup>th</sup> bidding window.

The most recent bidding window to date was window 4.5 for which bids were submitted in the final quarter of 2015. It is worth noting that renewable energy prices per kilowatt hour have declined significantly since the first 2 bidding windows and have since dipped below grid parity, meaning that the procurement of power from renewable energy projects awarded licenses since bid round 3 is in fact profitable for Eskom as they sell the power for a value higher than the purchase price. The graph below indicates the declining price of renewable energy from Bid Window 1 to 4.5.

**Figure 2: REIPPP MW allocation and average price;**



Source: Department of Energy, Bayakha Investment Partners

### Eskom's Position: A Summary

The concern in the market was initiated through a leaked letter from Eskom Chairman, Dr. Ben Ngubane, to Energy Minister Tina Joemat-Petterson. In this letter, Eskom requested to engage the Energy Department on how to proceed with the country's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). This, according to Eskom, is in light of current power supply/demand conditions and Eskom's balance sheet concerns.

In the letter, Eskom notifies the Minister of its board decision not to sign further Power Purchase Agreements (PPAs), after the current review of projects under consideration from the expedited bidding round (4.5) of REIPPPP is finalised.

Eskom highlights the following issues as critical discussion points:

1. An updated Integrated Resource Plan (IRP) to reflect current energy needs of the country – IRP 2010 is outdated.
2. Balance sheet concerns: Eskom is compelled by the Power Purchase Agreement to buy electricity from IPPs at prices determined by the REIPPPP bidding process. Eskom has argued that renewable energy prices are expensive.
3. Excess electricity supply at present:

- o Eskom's energy availability factor (EAF) has improved from 69.6% to 78.9% due to a successful maintenance programme, resulting in 3775MW of additional power from Eskom's own power plants.
  - o PPAs to the value of 4 122 MW have already been awarded through REIPPPP from Rounds 1-4. Of this total value, 2145MW of electricity are already being supplied to the national grid, predominantly from Round 1 & 2 projects. Projects from later rounds will connect to the grid after concluding construction.
4. Renewable Energy (excluding CSP technology) is not available during peak times whereas baseload power would be. As a result, a diversified, clean *baseload* energy mix is needed i.e. nuclear and/or gas to power is needed.

#### **Bayakha Investment Partners' (Bayakha) View:**

Bayakha investors are not affected by these events. The outcome of current discussions between Eskom and the DOE will not have an impact on Bayakha's Renewable Energy Fund for the following reasons:

1. Eskom has confirmed that they seek engagement on post BW 4.5 power purchase agreements only.
  - Bayakha's portfolio is based on projects from BW 1-4.5, specifically because the returns meet investor requirements.
2. All existing projects from rounds 1-4.5 are protected by 2 key contracts, the PPA and Implementation Agreement (IA), as follows:
  - Eskom is contractually obliged to buy ALL energy produced by the Facility for 20 years, escalated by CPI, from commencement of operations date.
  - This contractual obligation is further backed by National Treasury, which guarantee to pay in the event that the Buyer (Eskom) cannot pay.

Investors are reminded to refer back to our LP presentation on portfolio construction targets and transaction pipeline.

Thus, Bayakha is not immediately affected by Eskom's current views, we take their perspective seriously in relation to the prospects for Bayakha's future energy investments. In particular, we wish to make Bayakha's position in relation to Eskom's arguments clear:

1. Whilst we agree that the current prices Eskom is paying for BW1 and BW2 may be high (as seen in Figure 2 above), bid tariffs from BW 3 – BW 4.5 are considerably cheaper and below grid-parity.
2. We think it is prudent for Eskom to seek engagement on its balance sheet given the contingent liabilities created by REIPPPP. This is standard good financial management practice.
3. We agree that the IRP2010 policy document should be updated to reflect the country's current supply/demand dynamics and energy mix requirements.

In conclusion, it is our view that robust debate regarding the country's energy mix is a worthwhile process. It is through robust and transparent policy-making processes that the private sector gains a more conclusive view on how to allocate its funds. We therefore support such a process, with the hope that it will produce more certain market conditions for future Bayakha products.

Sincerely,

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