



# Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP)

## Financial Evaluation and Payment Mechanism

25 September 2020

...”it (REIPPPP) has already established a flagship public-private partnership model for South Africa, and indeed the rest of Africa, and in the process is helping alleviate Eskom’s current power crisis while also reducing greenhouse gas emissions.”

- Enabling Renewable Energy in South Africa: Assessing the REIPPPP, WWF, August 2014



# Presentation Outline

1. Financial Evaluation.
2. Key aspects that impact the Financial Evaluation and Evaluation Price.
3. How will the Evaluation Price be calculated?
4. Benchmarking and option to run a BAFO.
5. Tariff Structure Components.
6. The cost of Fuel as part of Component C.
7. Payment Mechanism (Schedule 9 of PPA)
8. Minimum Load Commitment Payments (Schedule 9 Appendix D)



# Financial Evaluation

- Each financial criterion has a pass threshold. Bidders must pass all 3 (three) threshold requirements in order to pass the Financial Qualification Criteria
- The 3 criterion are:
  - Evaluation price compliance test
    - Fully and partially indexed capital charge rates
    - Weighted Evaluation Price (WEP) including Bidder's cost for grid connection and Carbon Tax
  - Financial standing and robustness of the funding proposal
    - Letters of commitment from each Member and ultimate equity providers
    - Letters of support from each Debt provider
    - Demonstration of capacity and experience in funding these type of projects
    - Terms sheets, board resolutions and mitigation plans
  - Robustness of the Financial Model
    - FM to clearly provide details of cost elements both during construction and operations
    - Completed Appendix 4F attached to FM
    - Audit opinion by independent registered model auditor



# Key aspects that impact the Financial Evaluation and Evaluation Price

## Issue

- Bidder grid connection cost
- Carbon Tax
- Indexation for charge rates
- Forex Adjustment at FC
- Interest Rate adjustment at FC
- Term of PPA
- Fuel cost
- Start Up cost
- Mandatory Ancillary Services
- Capacity vs Energy Charge Rates

## RFP

- Included in EP
- Included in EP
- Fully Indexed at 4.5% in EP
- Lesser of actual or 50%
- Yes
- 20 years
- Pass through based on indices
- Included in EP
- Bid as part of EP
- EP = average between 100% and 70% load factor



# How will the Evaluation Price be calculated?

- How will the Weighted Evaluation Price (WEP) be calculated?
  - Electricity Tariff (ET):
    - Average of the net present value of Component A, B, C, D, SU and CT Payments at 100% load factor and 70% load factor
  - Ancillary Services Tariff (AST)
    - Average of the net present value of Instantaneous Reserve and Regulating Reserve at 100% load factor and 70% load factor
  - $WEP = ET \times 95\% + AST \times 5\%$



# Benchmarking and option to run a BAFO

- The Evaluation Price must demonstrate **Value for Money to the Buyer and Government**
- Bidders must ensure transparent competition in its supply chain
- The Bidder must ensure that the costs and rates embedded in its Evaluation Price are competitive
  - In this regard, the Department will assess the costs and rates, among others, provided in the Bidder's submission Appendix 4F (Evaluation Price Inputs) of Volume 4 (Financial Requirements) Part 2 (Financial Appendices) against published local and international benchmark costs and rates, other Bid Responses, as well as any other relevant data available to the Department from, among other things, previous IPP Procurement Programmes
- Based on the outcome of the benchmarking the Department may request the Bidder to undertake a BAFO
  - The Bidders will be under no obligation to revise their Bid Responses, and should any Bidder choose not to submit a BAFO, then the original results will stand in relation to such Bidder
  - Any BAFO Bid Response will be evaluated afresh in accordance with the relevant Evaluation Criteria or such other criteria as may be determined by the Department, in its sole discretion, at the relevant time



# Tariff Structure Components

- Component A means the component of the Net Dependable Capacity and Achieved Capacity Payments which is calculated in accordance with clause 3.3.1 of Schedule 9
  - The Seller may only recover the capital related costs (taxes, debt service and equity returns) of a Dispatchable Facility through the Capital Cost Recovery Charge Rate (CCR)
  - The Seller may recover 50% (fifty percent) of the capital related costs (taxes, debt service and equity returns) of Non-Dispatchable Facility through the Non-Dispatchable Capital Cost Recovery Charge Rate (NCCR)
  - The Base Capital Payment is subject to deductions for non availability
  - Any capital costs associated with providing the mandatory ancillary services must be included in Component A



# Tariff Structure Components (cont'd)

- Component B means the component of the Net Dependable Capacity and Achieved Capacity Payments which is calculated in accordance with clause 3.3.2 of Schedule 9
  - The Seller may only recover the fixed O&M costs of a Dispatchable Facility through the Fixed O&M Cost Recovery Charge Rate (FOMR)
  - The Seller may recover 50% (fifty percent) of the fixed O&M costs of Non-Dispatchable Facility through the Non-Dispatchable Fixed O&M Cost Recovery Charge Rate (NFOMR)
  - The Base Fixed O & M Payment is subject to deductions for non availability
  - Any fixed O&M costs associated with providing the mandatory ancillary services must be included in Component B



# Tariff Structure Components

## (cont'd)

- Component C means the component of the Commercial Energy Payments which is calculated in accordance with clause 3.4.1 of Schedule 9 for fuel costs
  - The Fuel Charge Rate (FCR) is indexed monthly to the movement in the underlying fuel price
- Component D means the component of the Commercial Energy Payments which is calculated in accordance with clause 3.4.1.1 of Schedule 9 representing the variable O&M
  - The Seller may recover 50% (fifty percent) of the capital and 50% (fifty percent) of the Fixed O&M cost related to the Non-Dispatchable Facility through the Renewable Recovery Charge Rate (RCR).
- Component E means the component of the Ancillary Service Payments which is calculated in accordance with clause 3.5 of Schedule 9 and in response to the Ancillary Services provided in terms of Schedule 14.
  - Ancillary Service Payments is subject to penalties for failure to provide as set out in Schedule 9, as well as acceptable performance requirement in terms of Schedule 14



# Fuel cost as part of Component C?

- The fuel cost will be reimbursed on the basis of a Fuel Charge Rate, Net Heat Rate with adjustment for load factor and ambient conditions and Energy Output of the Dispatchable Facility
  - The Fuel Charge Rate (FCR) at Base Date April 2020 as listed in Table A.1 of Appendix A (Agreed Values for Payment Calculations) shall be adjusted for each contract month, using the formula for the fuel type used by the Facility
  - Appendix 4G, to be issued by Briefing Note by end October 2020, will include the following fuel forecasts that bidders must use in their models and pricing:
    - LPGas
    - Diesel
    - Heavy fuel Oil
    - Liquefied Natural Gas
  - Bidders are to indicate to the Department if additional fuel type are required



# Payment Mechanism (Schedule 9 of PPA)

- The Seller will be compensated for providing **capacity, energy and ancillary services**
- **Post COD:** The total payment in a Billing Period is made up of:
  - Net Dependable Capacity Payment for a dispatchable facility and a Achieved Capacity Payment for non – dispatchable facility (Component A and B) less deductions for unavailability
  - Commercial Energy Payment and variable O&M (Component C and D)
  - Total Start Ups (in excess of 1 start up per day which will be included in Component B)
  - Total Ancillary Services Payment (Component E)
  - Carbon Tax payable
  - Deemed Energy Payment, if applicable
- **Annually:**
  - Compensation for failure to comply with Buyer’s Minimum Dispatch Obligations



# Payment Mechanism (Schedule 9 of PPA) (cont'd)

- Provisional Period: prior to COD to encourage early energy, the total payment in a Billing Period is made up of:
  - Fixed Operational and Maintenance cost (Component B) less deductions for unavailability, pro rata to the proportion of capacity that is available prior to the COD date
  - Commercial Energy Payment and variable O&M (Component C and D)
  - Total Start Ups (in excess of 1 start up per day which will be included in Component B)
  - Carbon Tax payable
- No Payments in respect to the following during the Provisional Period:
  - Component A
  - Ancillary Services
  - Deemed Energy



# Payment Mechanism (Schedule 9 of PPA)

- In the event of Late System availability (grid) post SCOD:
  - The Seller shall be entitled to receive the Net Dependable Capacity Payments based on the most recent Declared Capacity and, if applicable, the payment in terms of Appendix D (Minimum Load Commitment) of Schedule 9 (Calculation of Payments) for the period that the System Unavailability Event continues. (Clause 16.2.4.1. of PPA)
- In the event of System Unavailability Event(s) enduring longer than the Allowed Grid Unavailability Period
  - The Seller shall be entitled to receive Deemed Energy Payments, for the Non-Dispatchable Facility, based on amount of Deemed Energy and the Renewable Recovery Charge Rate



# Payment Mechanism (Schedule 9 of PPA) (cont'd)

- The total ancillary services payment in the Billing Period will be the sum of the **Instantaneous Reserve Payment and the Regulating Reserve payment** consisting of variable cost associated with providing the ancillary services, subject to penalties for no delivery
  - If the Instantaneous Reserve Percentage Performance in a Billing Period is less than the Acceptable Instantaneous Reserve Performance, then the Seller shall not be entitled to, and the Buyer shall not pay, the Instantaneous Reserve Payment
  - If the Regulating Reserve Percentage Performance in a Billing Period is less than the Acceptable Regulating Reserve Performance, then the Seller shall not be entitled to, and the Buyer shall not pay, the Regulating Reserve Payment
  - Penalties will be imposed if the Dispatchable Facility is decertified and/or has its Ancillary Service Certificate withdrawn or the Certificate is outstanding



# Minimum Load Commitment Payments.

- **Minimum Load Commitment**" means the commitment calculated as specified in clause D.1 of Schedule 9 (*Calculation of Payments*) Appendix D (*Minimum Load Commitment*), which shall be the minimum load commitment which the Buyer must achieve in any Contract Year pursuant to clause 6.6 (*Buyer's Minimum Dispatch Obligations*)
- This annual payment compensates the Seller for its take or pay obligations towards its fuel supplier as well as to the potential energy production by the non –dispatchable facility in the event of a failure by the Buyer to comply with its obligation in clause 6.6.1 based on the difference between the Dispatch Instructions and the Minimum Load Commitment
- Any compensation payments to be made by the Buyer to the Seller as described in this Appendix D (*Minimum Load Commitment*) to this Schedule 9 (*Calculation of Payments*) shall be paid after the end of the Contract Year in question in accordance with the provisions of clause 8 (*Invoicing*) of the PPA



# Thank You

September 2020



**mineral resources  
& energy**  
Department:  
Mineral Resources and Energy  
REPUBLIC OF SOUTH AFRICA



**national treasury**  
Department:  
National Treasury  
REPUBLIC OF SOUTH AFRICA



IPP Programme - 10 years of Empowering Change