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**GOVERNMENT NOTICE**

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**DEPARTMENT OF ENERGY****No. R. 119****24 February 2010**

## **Regulatory Rules for Power Purchase Cost Recovery**

In terms of regulation 10 of GN R. 721 GG No. 32378 of 5 August 2009 (Electricity Regulation Act No.4 of 2006: Electricity Regulations on New Generation Capacity), the National Energy Regulator of South Africa has prepared Rules which will affect the recovery of power purchase cost falling under this act. The document, "Regulatory Rules for Power Purchase Cost Recovery" which contains these Rules is hereby promulgated. Electronic copies of the document may be downloaded from [www.nersa.org.za](http://www.nersa.org.za)

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RULES MADE BY THE NATIONAL ENERGY REGULATOR OF SOUTH AFRICA (NERSA) IN TERMS OF THE ELECTRICITY REGULATION ACT, 2006 (Act No. 4 of 2006)

**EXPLANATORY MEMORANDUM**

The provisions of regulation 10 of GN R.721 GG No. 32378 of 5 August 2009 (Electricity Regulation Act No. 4 of 2006: Electricity Regulations on New Generation Capacity) authorise the Energy Regulator to prepare and pass rules not inconsistent with these regulations for purposes of cost recovery by the system operator and the buyer which shall clearly and transparently set forth:

1. The factors that should be considered in assessing –
  - a) The affordability of the proposed IPP;
  - b) The allocation of financial, technical and operational risk between the buyer and the IPP; and
  - c) The anticipated value for money to be achieved by the IPP
2. The process to be followed by the buyer in seeking the approval of costs incurred under the power purchase agreement;
3. The process to be followed in assessing the principle of efficient risk transfer in the power purchase agreement and the mitigation mechanism in relation to the off-taker; and
4. All such matters as are necessary to give effect to these regulations

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### Objectives

The Regulator is directed by objectives under the Act to:

- a) achieve the efficient, effective, sustainable and orderly development and operation of electricity supply infrastructure in South Africa;
- b) ensure that the interests and needs of present and future electricity customers and end users are safeguarded and met, having regard to the governance, efficiency, effectiveness and long-term sustainability of the electricity supply industry within the broader context of economic energy regulation in the Republic;
- c) facilitate investment in the electricity supply industry;
- d) facilitate universal access to electricity;
- e) promote the use of diverse energy sources and energy efficiency;
- f) promote competitiveness and customer and end user choice; and
- g) facilitate a fair balance between the interests of customers and end users, licensees, investors in the electricity supply industry and the public.

All of these matters would appear to be relevant to making rules for assessing and determining the conditions under which power purchase costs will be recovered by a licensee.

A set of objectives encapsulating these objects of the Act is re-articulated for the purposes of these rules. The objectives to be met by these rules are to:

- a) give regulatory certainty to customers in terms of impact on tariffs;
- b) ensure availability of electricity to consumers on an efficient and cost effective basis;
- c) ensure the financial viability of the sector and attract investments by private sector producers inclusive of their supporting lenders in terms of financial viability on long term contract arrangements and surety of their investment;

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- d) promote transparency, consistency and predictability in regulatory approaches and minimise perceptions of regulatory risks; and
- e) promote competition, efficiency in operations and improvement in quality of supply.

## RULES

### 1 Definitions

In these rules any word or expression to which a meaning has been assigned in the regulations shall have the meaning so assigned unless the context indicates otherwise

**“Act”** means Electricity Regulations Act, 2006 (Act No. 4 of 2006);

**“Ancillary services costs”** means the cost of services that are necessary for the reliable and secure operation of the electrical system, including the transmission of electrical energy from generators to distributors and other customers;

**“Buyer”** means any person or entity or entity designated by the Minister of

Energy in terms of section 34(1)(4) and (d) of the Act and authorised under a licence, this includes any person or entity running a procurement process in respect of the IPP bid programme or entering into a power purchase agreement;

**“Capacity payments”** means payments to be provided under the terms of a power purchase agreement with regard to the fixed cost of power supply and could extend to fixed costs associated with primary energy. Such payments would typically require threshold levels of availability by the generator with price adjustments made if these thresholds are not met;

**“Energy payments”** means payments to be provided under the terms of a power purchase agreement with regard to variable cost of power supply. Such payments would typically be made in reference to energy generated and supplied to the power purchaser;

**“Firmness of supply”** means the level of certainty provided in regard to

supply of capacity and energy under a power purchase agreement. As an example only, large centrally dispatched projects might typically provide (and be paid for) firm supply, whereas smaller projects might self dispatch on an 'as available' basis. While not a general rule, firm supply would more often obtain a greater level of remuneration than non-firm supply;

**"Hedging costs"** means costs related to the purchase and administration of hedging instruments. These costs would typically include direct payments to intermediaries (those that effectively sell hedges) and any contingent liabilities emanating from mark to market accounting rules and/or collateral requirements, and indirect costs of administration of the hedging activity by the purchasing utility.

**"Independent Power Producer (IPP)"** means any undertaking by any person or entity which the government of South Africa does not hold a controlling ownership interest (whether direct or indirect), of new generation capacity at a generation facility following a determination made by the Minister of Energy in terms of section 34(1) of the Act;

**"Independent Power Producer Control Account"** means a regulatory account which accumulates under and over recovery of regulated revenues related to the IPPs during the course of a multi-year price control period.

**"Integrated Resource Planning (IRP)"** means a public national planning process and framework within which the costs and benefits of both demand- and supply-side resources are evaluated to develop the least-total-cost mix of utility power generation resource options, risk adjusted for probability and government policy;

**"Transmission Network benefits"** means benefits obtained at system level in regard to location of new generation facilities whereby the network can be operated more efficiently, providing greater reliability and/or stability and/ or reducing transmission cost of supply and/or reduces electricity losses from what those costs would otherwise have been without the new generation facility;

**"Regulatory Clearing account"** means a regulatory account which accumulates under and over recovery of regulated revenues [except for IPPs related revenues] during the course of a multi-year price control

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period;

**“Stranded contracts”** means contracted energy purchases that over time become more expensive than comparable sources of supply (at that future point in time);

**“Take-or-pay provisions”** means the obligation of the energy buyer to purchase from the independent power producer specified quantities of power in a defined period or otherwise pay for those specified quantities if not taken. These provisions are typically linked to primary energy obligations in the value chain

**“Termination payments”** means the payment by or to the power purchaser for termination of a Power Purchase Agreement. The terms, conditions and consequences of termination would typically be set out in the Power Purchase Agreement;

**“Time of use (TOU) pricing”** means the method of price differentiation with reference to the time of day and/or week and/ or year in which power is supplied. Simple methods might attach separate prices as defined by peak, off-peak and shoulder periods, whereby more complex methods might define numerous TOU periods, and the relative price differentials might also change on a dynamic basis;

**“Vested PPAs”** means power purchase agreements assigned to an off-taker (e.g. buyer, host utility, distribution business, etc) perhaps as a result of Ministerial directive.

## 2 Types of Projects

- 2.1 New generation capacity developed by private producers to be covered by these include (but no limited to):
- (a) small power projects (SPPs) with the minimum capacity of 1MW
  - (b) stand-alone IPPs (greenfield and brownfield facilities); and
  - (c) domestic and cross-border projects'
- 2.2 The power generated from these projects will be sold by a licensee under its licence to generate and trade electricity. As a condition of licence, purchases from IPPs will be regulated and as such prudently incurred costs will be recovered as part of regulated revenue base;

## 3 Principles

### 3.1 Recovery of cost-effective power purchases

3.1.1 In addressing the key objectives set out above, the overarching principle is that power purchases covered under these rules are to be procured by the buyer on a cost-effective basis. This overarching principle is fundamental to each of the objectives, and has been shown in numerous jurisdictions to provide a robust and practical benchmark for assessing the long term benefits to customers of power purchases. Subject to other relevant principles and conditions set out in these rules, this cost-effectiveness benchmark will set the primary hurdle for recovery of power purchase costs by the buyer as part of its regulated revenue allowance.

3.1.2 In assessing the cost effectiveness of power purchases, factors that will be considered include:

- a) the cost of alternative supply options;
- b) direct cost of power purchase, inclusive of fuel;



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- c) timing (time-of-use differentials and date of commissioning);
- d) network (locational) benefits and costs;
- e) security of supply;
- f) firmness of supply;
- g) laws and regulations as well as environmental considerations;
- h) fuel diversification objectives; and
- i) quantifiable risks

3.1.3 The principle of cost-effectiveness will apply across a range of generation supply solutions including (but not limited to) Small Power Projects, greenfields or brownfields projects and domestic or cross-border projects.

3.1.4 Where found to be cost-effective (and subject to other conditions set out in these rules) power purchase costs would be passed through to customers.

#### **4 Government policy on power procurement**

Government policy related to procurement of power from the private sector will be taken into consideration in regard to the recovery of costs stemming from those power purchase agreements. Other related Government policy (e.g. with regards to renewables, cogenerators, imports, reserve margin, etc) would also be taken into consideration.

#### **5 Power procurement planning**

As provided for by the regulations, this will be done having regard to the need for new generation capacity in the integrated resource plan, the system operator shall undertake a feasibility study to determine whether procurement of the generation capacity should be undertaken by Eskom as part of its services as the national electricity producer, another utility provider or an IPP.

## 6 Balanced risk allocation

Risk allocation and transfer is an essential component of a PPA.

PPAs will be assessed in regard to the principle of efficient risk transfer – whereby the party best able to manage specific risks is allocated those risks. NERSA will assess the transfer of specific risks defined in PPAs to ensure this principle is met.

It is advised that the parties to an agreement should engage with NERSA in regard to key aspects of a PPA at the early stage of project development to ensure that the design of a PPA is in accordance with appropriate principles of risk transfer and parameters are set.

## 7 Application

7.1 These rules are to provide a defined assessment framework for recovery of power purchases by the buyer. The aim in this regard is to provide a framework that is sufficiently robust that it can be applied on a consistent basis across a range of project types.

7.2 In applying the principles set out in rule 3, these rules are to cover the following:

7.2.1 Long-term power purchases entered into by the buyer as of the effective date of the rules, where long-term is defined as three (3) years or more whether procured domestically or cross-border;

7.2.2 All PPAs not yet signed by the parties as at the day of the implementation of the rules applicable;

7.2.3 Joint venture/ partnership projects between Eskom/ buyer and the private producers on condition that the Eskom/ buyer is not a major shareholder; and

7.2.4 Unsolicited bids (the conclusion thereof will be done by NERSA).

## **8 Exclusions from the rules**

### **8.1 Short-term power purchases**

Short-term power purchases (contracted for a term of less than three years) are not explicitly covered in these rules due to practical considerations. It would be overly cumbersome to apply the ex ante review process to the numerous short-term trades carried out by the buyer. The basic principles set out in these rules would provide a good basis for considering the prudence of such costs, and it would be expected that as such, short-term power purchases would be a recoverable cost of service.

For short-term purchases [0-3] years, the buyer would present its capacity, energy requirements and the costs to NERSA and NERSA would review the plans and allow or disallow costs.. Specifically, the Energy Regulator would allow a stated rand amount for the short-term power purchase cost which will be communicated to the buyer

The buyer would present its year-to-date actual for nine- months to NERSA and projections to year end on short-term power purchase costs with reasons for variances. NERSA would then review and make a determination on whether the variance should be allowed as pass-through and the determined figure would then be deposited into the regulatory control account.

### **8.2 Existing contracts**

The status of existing contracts would not be reviewed or altered under the scope of these rules but should the contract be re-negotiated, these rules will apply to that particular PPA

## **9 Authorisation**

These rules set out the process and assessment criteria under which the buyer's power purchase cost recovery will be authorised by the Energy Regulator.

### 9.1 Process of authorisation

- (a) On application from the system operator, the Energy Regulator will undertake an assessment of a PPA in question. The system operator will be expected to provide all relevant information and commercial agreements documentation to the Energy Regulator as requested.
- (b) Having regard for the assessment criteria set out in rule 9.2, the Energy Regulator will make its decision regarding authorisation of power purchase cost recovery between the buyer and the IPP within 90 days of receiving an application and all relevant information.
- (c) If authorised by the Energy Regulator, costs incurred will be allowed as a pass-through for the duration of the PPA subject to:
  - i. the definition of recoverable costs as defined in rule 11;
  - ii. the process for review of cost variances as set out in rule 16; and
  - iii in accordance with the IPP cost pass through rules.

### 9.2 Assessment criteria

NERSA, upon receipt of an application for power purchase cost recovery, will assess a PPA having regard for principles in rule 3 of these rules. It is advisable for parties to a PPA to involve NERSA from the beginning stages of the negotiation so parameters of a PPA can be provided if needed at early stages of the process. NERSA is not party to a PPA but may facilitate the conclusion thereof.

## 10 Exclusions to the authorisation process

### 10.1 Vested PPAs

- (a) Under provisions of the Act the Minister, in consultation with the Energy Regulator, may prescribe provisions for power purchase and vest these by way of assignment of a PPA to Eskom as off-taker. PPAs vested with Eskom as a result of

Ministerial directive would automatically be deemed as authorised for the purposes of these rules, and not subject to the process of authorisation set out for non-vested PPAs set out in rule 9.1;

- (b) By way of example, such projects might be initiated by the Minister having regard to additional policy aims and not fit squarely within the defined assessment criteria set out in these rules for cost recovery. In this case, the assessment criteria applied to non-vested PPAs would not be applied. As an authorised PPA, cost would be passed through (subject to the other conditions set out in these rules); and
- (c) In terms of the Act, the Minister, in consultation with NERSA, may determine that new generation capacity is needed to ensure the security of supply. In such events, NERSA is bound by that determination to issue a generation licence and is authorised to facilitate the conclusion of an agreement between a seller and purchaser of the power.

NERSA shall allow the costs of such PPA as a full pass-through.

## 11 Recoverable costs

Where authorised by NERSA, power purchase costs will be recovered by the buyer as part of its regulated annual revenue allowance, with cost variances subject to provisions for review as set out in rule 16. Recoverable costs include:

**11.1 Power purchase payments** made to the seller including, without limitation, any fixed capacity payments, variable energy payments, and other payments as set out in a PPA inclusive of the indexation of such payments as prescribed by a PPA.

**11.2 Black start and ancillary services payments** made to the private producer if purchased outside of (or in addition to) the terms and conditions of a PPA.

**11.3 Hedging costs**

These include prudently incurred costs by the buyer and/or an IPP in taking out hedging positions to mitigate, or in obtaining insurance or otherwise indemnifying itself and/or themselves against the risks allocated to the buyer and/or seller under a PPA including, without limitation, the costs of hedging its and/or their exposure in respect of commodity and foreign exchange risks linked to the price of fuel and/or foreign exchange risks linked to the repayment of debt.

**11.4 Administration of PPAs including professional services**

These include contract management services required to develop, manage, monitor and account for its payment and financial obligations under a PPA.

**11.5 Market integration / industry restructuring costs**

These are costs that may result from the transition to a wholesale market and integration of the IPP in the market, or costs resulting from industry restructuring.

**11.6 Termination costs**

These are costs to the buyer associated with a seller's termination.

**11.7 Stranded contracts**

These may be due to change in market structure, change in electricity demand, or change in the relative cost of power supply.

**11.8 Other Costs**

Any other costs not covered on the list which are prudently /efficiently incurred will be allowed by the Energy Regulator as PPA costs and they will be passed through.

**12. No double counting of costs**

The buyer shall not be entitled to recover, through its allowed

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revenues, costs which it has already recovered through the application of these rules.

**13 Recovery of costs**

Recoverable costs of power purchases will be factored into the buyer's forecast revenue requirement using values forecast at the time of submission of the buyer's revenue application;

**14 Pass through of costs**

For authorised power purchases, net recoverable costs will be passed through to customers via an adjustment of the buyer's revenue allowance (albeit subject to review by NERSA as set out in rule 17 below). This will require a reconciliation of accounts comparing forecast recoverable costs to actuals;

**15 IPP Control Account**

15.1 The IPP control account will be kept by the buyer recording the sum of all under- and over-recoveries of recoverable power purchase costs in each financial year. This balancing account will accumulate each year's under- or over-recovery in a given period of time i.e three years, including interest as calculated with reference to the Prime Rate;

15.2 A trigger will be set so that if the quantum of the IPP control account exceeds, in absolute value, +/- 2% of the buyer's revenue allowance for the most recent year, the balance account will be drawn down by way of adjustment to the next year's regulated revenue allowance. In respect of any indexed portions of PPA tariff payments, as required by the prevailing circumstances, which have fallen outside of the projected revenue requirement, the buyer may request a more frequent recovery of such indexed payments from NERSA.

15.3 In exceptional circumstances (e.g. such as a buyer buying out a PPA) once-off recoverable costs may need to be smoothed over a period as determined by NERSA at the time to prevent price

shocks to consumers. This smoothing of cost recovery would not apply to more normal workings of a PPA including variable fuel costs or energy purchases.;

15.4 Regardless of the quantum of the IPP control account at the end of a three year control period, the full amount will be drawn down as an off-set (plus or minus) against the revenue allowance set for the next period.

15.5 For the avoidance of doubt, the use of the trigger mechanism is to limit administrative costs of this recovery mechanism. Any balances remaining at the end of the three year control period will be reconciled by way of adjustment to the following three year control period's revenue allowance;

## **16 Review process**

16.1 The buyer may initiate an application to draw down the IPP control account subject to the provisions set out in rule 15;

16.2 The application to draw down the balancing account will include the following:

16.2.1 Demonstration that the 2% trigger will be exceeded;

16.2.2 A reconciliation statement containing annual forecast power purchase costs and actuals for each recoverable cost component as set out in rule 11, and the reasons for cost variances;

16.3 Where actuals are not yet available for the most recent year, mid-term projections will be used in their place. In this case, any deviations from these projections and the final actual amount will be added to the balancing account going forward and reconciled as would otherwise be the case;

16.4 The buyer will arrange for an independent audit of the reconciliation



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statement to be provided to NERSA;

16.5 NERSA will want to assure itself that variations in costs have not been due to inefficient dispatch by the System Operator. In assessing the efficiency of dispatch, the Energy Regulator will also have regard to relevant conditions of supply and dispatch as set out in a PPA (such as 'must run' or 'take-or-pay' provisions) which would have been considered as part of the Energy Regulator's initial authorization;

## 17 Duration

17.1 An authorisation for power purchase cost recovery should remain valid for the duration of the relevant PPA. Investors will need to be confident in the buyer's ability to make payments into the future, and the buyer will need an appropriate level of regulatory certainty in regard to its recovery of power purchase costs.

17.2 For the avoidance of doubt, the review process set out in rule 16 is limited to reconciling cost variances and draw-down of the power purchase account balance, and is not a retrospective review of the general authorisation or the basis on which cost effectiveness was established.

## 18 Transfer

The protections offered by these rules will transfer to the relevant licensee in the case of a restructuring and/or transfer of rights and obligations of a PPA.

## 19 Appeal process

As set out in the National Energy Regulator Act, 2004 (Act No. 40 of 2004) any person may institute proceedings in the High Court for the judicial review of an administrative action by the Energy Regulator in accordance with the Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000).

## **20 Effective date**

These rules are effective from the date of approval.