

16 September 2022

## **CONCURRENCE WITH THE MINISTERIAL DETERMINATION ON THE PROCUREMENT OF NEW GENERATION CAPACITY OF 1000 MW FROM OTHER DISTRIBUTED GENERATION: CO-GEN, BIOMASS AND LANDFILL**

BUSA is a confederation of business organisations including chambers of commerce and industry, professional associations, corporate associations, and sectoral organisations. It represents South African business on macro-economic and high-level issues that affect it at the national and international levels. BUSA's function is to ensure that business plays a constructive role in the country's economic growth, development, and transformation and to create an environment in which businesses of all sizes and in all sectors can thrive, expand and be competitive.

As a principal representative of business in South Africa, BUSA represents the views of its members in several national structures and bodies, both statutory and non-statutory. BUSA also represents businesses' interests in the National Economic Development and Labour Council (NEDLAC).

BUSA would like to thank NERSA for the opportunity to provide comments on the consultation paper titled concurrence with the Ministerial Determination on the procurement of new generation capacity of 1000 MW from other distributed generations: Cogen, biomass, and landfill.

BUSA hopes that the responses provided in Annexure A will be helpful to NERSA in formulating an opinion on the matters raised in the consultation paper.

BUSA responses will cover a range of issues about the consultation note. Detailed comments and responses are contained in Annexure A:

- Aspects relating to definitions which serve as a good point of departure need to reflect a shared understanding of concepts and terms.
- Background information and a timeline of a series of events that have contributed to the current state of the sentiment concerning co-gen, biomass and landfill are detailed on the basis that it will provide context to the regulator.
- Timeframes allocated to each technology require deep consideration by the regulator.
- What constitutes uninterrupted supply under the 1000MW allocation?
- What is a justifiable price point?
- The role of PPA vs CRM.
- Suitability of the 1000MW from other technologies in NERSA's mandate to ensure the security of supply.
- The appropriateness of a standard offer when market-related prices serve as a better market signal.

BUSA believes that NERSA needs to concur with the ministerial determination and respond to critical points addressed. Concurrence should be given based on the above considerations. BUSA recognises that NERSA is undertaking its mandate and is emboldened by NERSA's sense of urgency to address South Africa's crippling electricity supply crisis.

**Annexure A**

**CONCURRENCE WITH THE MINISTERIAL DETERMINATION ON THE PROCUREMENT OF NEW GENERATION CAPACITY OF 1000 MW FROM OTHER DISTRIBUTED GENERATION: CO-GEN, BIOMASS AND LANDFILL**

Consultation Paper	BUSSA Position
<p><b>1. DEFINITIONS, ABBREVIATIONS AND ACRONYMS</b></p>	
<p>1.1 Definitions</p>	<p>The definition of Cogeneration is wrong. The international understanding of Cogeneration is the combined production of heat and power (CHP) in any process. It is definitely not limited to the industries that are listed in the definition. It was the development of the COFIT by NERSA from 2006 through to 2011 that introduced industrial “wastes” as part of cogeneration. This definition would exclude the wide variety of CHP possibilities in commercial, hospital, shopping centres, and all other industrial processes where elevated temperatures are needed for heating, drying, reactions, crystallization, flash drying etc.</p>
<p>1.2 Abbreviations and Acronyms</p>	
<p><b>2. BACKGROUND</b></p>	<p>The Background that is important to this draft Ministerial Determination includes the following event timeline:</p> <p>*IRP 2010 included a column for “Other” technologies that did not fall into the other columns for “PV”, “Wind” etc. The gazetted IRP2010 included an Appendix that covered the urgent need to procure Cogeneration and “Other” generation technologies. This did not take place.</p> <p>2 Ministerial Determinations followed that are directly relevant to cogeneration: - 800MW, then a second for</p>

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1000MW totalling 1800MW. An RFP was then issued for the procurement of cogeneration power, which was a failure. A bid for a 15 MW plant in KZN that did not reach financial close due to the RFP being unsuitable for the wide variety of cogeneration applications – a classic case of “One size does not fit All”. A BUSA member went to great lengths to explain to the then managers at IPP Procurement Office why the RFP was a failure.

2015 and 2017 – GIZ, the German Development Agency who have been contracted to DMRE in the SAGEN programmes, funded a study and an update to a report issued entitled “Cogeneration Potential in SA”. Through interviews with existing and potential cogenerators, over 6500MW of potential was identified per industry in SA. IRP 2019 – through BUSA’s involvement in the Nedlac processing of what became IRP2019, the “Other” technologies column in Table 5 was made from a combination of “Other (Cogen, Biomass, Landfill)” and “Distributed Generation” and was up from a suggested 200MW/a to the 500 MW/a.

Ministerial Determination for 2000MW Emergency Generation, July 2020 – this followed NERSA’s concurrence and correctly stated “...2000MW .... allocated under “Other” for the years 2019 – 2022 in Table 5 of IRP 2019...”

	<p>RMIPPPP RFP – the procurement that then flowed for the Emergency Generation Ministerial Determination was so written as to exclude any of the “Other” technologies. The IPP Procurement office proclaimed the RFP to be “technology agnostic”; however the requirements for instant despatch, the construction time frames and for greenfield plants excluded all thermal technologies other than ‘off-the-shelf’ gas to power. The results are now obvious – no “Other” technologies were bid, and the allocations for “Others” was taken up by Gas, PV and BESS. Clearly very contrary to the IRP plan, and one can speculate as to whether it is contra vires as it does not comply with the gazetted Ministerial Determination.</p> <p>August 2022 Ministerial Determination for 1000MW from “Other” technologies. What is planned, using the Eskom Standard Offer platform, is again fatally flawed for any investment in “Other” technologies, as envisaged in the IRP 2019.</p>
<p><b>3. NEW GENERATION CAPACITY FROM OTHER TECHNOLOGIES</b></p>	<p>3.1 The allocation of 2 years of the IRP 2019 plan to this Ministerial Determination is too limited. Typically, these “Other” technologies will take 2 years to COD from a financial close, so a 4-year allocation would be more appropriate.</p> <p>3.2 SOP will not attract new investment. Its flaws are:</p>

- “Existing Facilities” are by definition in the New Gen Regulations as those facilities operating in 2011. All new installations at facilities that did not have generation are thus excluded.
- A 3-year PPA will not attract new investment.
- Eskom to decide on the tariff to be paid. The Eskom thinking (and as advised to DMRE) is to set the SOP price at Eskom’s non-emergency average, the variable cost of generation. It is understood that this will be lower than even WEPS (Wholesale Electricity Price), Eskom’s previous “Standard Offer” product that was suspended in 2017.
- The tariff is not market-related, reflecting the true avoided cost that Eskom will be offsetting. A further aberration is that IPPs do not enjoy government bale-outs, utility-scale installations and depreciated assets as the Eskom fleet does. Once again, it is not a level playing field, with the customers paying a heavy price for load shedding and OCGTs.
- The SOP will be offered to all generators and not be technology specific as required for “Other” technologies in the IRP.

3.3 Agree

	3.5 iv Existing generators will be able to provide power immediately after the conclusion of a PPA. Others will take up to 24 months after the financial close.
3.4 Stakeholders are requested to provide input on the following aspects, among others	
i. Is the 1000MW determined sufficient to ensure the uninterrupted supply of electricity in the short- and medium-term?	<p>3.4 It is insufficient.</p> <p>This would depend on i) decommissioning of existing coal capacity and ii) capacity added from other technologies. As a standalone, it would have minimal impact.</p> <p>In total, we believe that SA is currently 6,000MW short of the required dispatchable capacity, which will grow rapidly as coal capacity is retired.</p>
ii. What do you think should be the dominant energy source of technology in this allocation?	<p>Should be a mix</p> <ul style="list-style-type: none"> <li>• Coal to be phased out as plants reach the end of life</li> <li>• New capacity primarily in the form of renewables (wind and PV, to provide a balance), supported by battery storage and gas as baseload</li> <li>• Nuclear only if the fiscus can afford it</li> <li>• Those allowed for in the IRP 2019 Table 5 “other” column.</li> </ul>
iii. Should this range of energy source technologies be dispatchable?	There needs to be sufficient baseload. Renewables should be supported by sufficient battery storage capacity to have

	a significant dispatchable capacity. However, not all renewable capacity would need battery storage
iv. What do you think is the most optimal timelines within which this capacity should be made available on the grid, considering the urgency that is required to deal with load-shedding in the country?	As soon as practically possible
<b>4. COST RECOVERY MECHANISM AND THE IMPACT ON TARIFFS</b>	Eskom has proposed cost recovery through the RCA mechanism. This is acceptable. The tariff set is not market-related and will be too low – as explained above.
4.3 Stakeholders are therefore requested to provide input on the following aspects, among others	
i. Should NERSA continue with the current cost recovery mechanism stipulated in section 13 of the current Multi-Year Price Determination Methodology (MYPD) and section 14 of NERSA’s CRM Rules? If not, please propose the most suitable cost recovery mechanism that would ensure that electricity remains affordable.	<ul style="list-style-type: none"> <li>• PPA should provide for a fixed fee/tariff for available energy and an additional fee for energy dispatched over a lengthy period [15 years+], adjusted for inflation</li> <li>• The majority of the risks would therefore be transferred to the IPP, albeit that provision may need to be made for input price shocks</li> <li>• This cost would then be passed on to the consumer as per the existing MYPD but would be predictable on the basis of the PPA</li> </ul>
ii. Provide your thoughts on the costs that will be associated with establishing the new allocated generation capacity in line with the mandate to ensure the long- term sustainability of the electricity supply industry, as well as affordability and equity.	

<p>iii. Provide your thoughts on the impact of adding the additional capacity of 1000MW in relation to NERSA's mandate to ensure the long-term sustainability of the electricity supply industry as well as affordability and equity.</p>	<ul style="list-style-type: none"> <li>• Security of supply: Would support/augment procurement from other sources. In itself, not a major contributor</li> <li>• Affordability: Likely to be significantly more expensive than coal but cheaper than OCGT capacity. [On balance, likely to add marginally to the overall cost per KWh]</li> <li>• Equity: Underpinned by the terms of PPAs whereby IPP will earn income on all available capacity, whether it is dispatched</li> </ul>
<p><b>5. PROCUREMENT PROCESS UNDER ESKOM'S STANDARD OFFER PROGRAM</b></p>	<p>Comments are provided above. However – an SOP process is necessary to mop up excess IPP generation that cannot find another home. It, however, must:</p> <ul style="list-style-type: none"> <li>• be at a market-related price</li> <li>• not take up the allocation in the IRP2019 to “Other” technologies that need long-term, financially sound PPAs as has been provided to all other technologies in DMRE’s IPP procurement since 2011.</li> <li>• It is therefore recommended that the DMRE Minister removes any reference to the IRP, so allowing a new Ministerial Determination for “Other” technologies to go ahead through the IPP Procurement Office. This is to be with an investment grade RFP that is suited to the broad range of “Other” technologies that could potentially</li> </ul>

	bid. Importantly, the IPP Procurement Office needs to demonstrate that lessons from the still-born procurement of the past have been acted upon.
5.3 Stakeholders are requested to provide input on the following aspects, among others	
i. Provide your thoughts on Eskom as a chosen buyer of the new generation capacity in light of the unbundling that is presently taking place.	<ul style="list-style-type: none"> <li>• Appropriate in a world where Eskom is separated</li> <li>• Not appropriate for Eskom Generation to have visibility on the PPA, as it is conflicted</li> </ul>
ii. Should it only be Eskom who is the Buyer of this electricity or should other Licenced Electricity Distributors (i.e. municipalities or private distributors) also be allowed to buy through bilateral agreements?	Could be made available to any distributor or customer (via wheeling arrangements)
iii. Provide your thoughts on IPPs as the chosen builders of the new generation capacity.	<p>Appropriate for two reasons:</p> <ul style="list-style-type: none"> <li>• Likely to be more efficient than SOEs</li> <li>• Construction costs not funded by the fiscus</li> </ul> <p>The criticism of higher costs due to the profit motive is unfounded. Whilst the profit motive is valid, this has been proven to be offset by efficiency gains that result in a lower total cost.</p> <p>NERSA needs to consider the dispatch schedule and the pricing methodology to ensure that IPPs do not assume undue risk – as this would add to overall costs</p>
iv. Provide your thoughts on the method chosen for the procurement of new generation capacity and the chosen contract period.	The procurement process seems fair, provided that Eskom Generation has no visibility.

	A contract period of 3 years is way too short, as this will not attract investment. PPAs should generally be for periods in excess of 15 years but could arguably be shorter for co-gen capacity as the investment should be less than new capacity.
v. Provide what you consider to be the risks associated with the new generation capacity technology.	
vi. Provide your opinion on the security of supply impact in light of the additional capacity.	Would support/augment procurement from other sources, in itself, not a major contributor.
<b>6. CONCURRENCE PROCESS TO THE MINISTERIAL DETERMINATIONS WITH INDICATIVE TIMELINES</b>	<p>NERSA's questions posed do not deal with the broader issues associated with the execution of the IRP plan by DMRE and Eskom. A higher level of input from the public is required, which teases out the deep-seated problems in the industry. A suggestion for additional questions that should be posed by NERSA are:</p> <ul style="list-style-type: none"> <li>• Is NERSA fulfilling its role, overseeing the “..orderly development of the industry..” What improvements are suggested?</li> <li>• Is this Ministerial Determination aligned with the IRP requirements?</li> <li>• Has the execution and procurement of NERSA concurred to Ministerial Determinations been successful?</li> <li>• Should DMRE publish a comprehensive plan for the execution of the IRP plan, including when and what Ministerial Determinations are to be published and when the procurement milestones will be achieved?</li> </ul>

- Finally, a comment about the validity of Ministerial Determinations. The current DMRE DG was asked a year or so ago about the 1 800MW of cogeneration that was Determined and concurred to within IRP2010. Nothing has been procured. His reply was that all Determinations from a previous IRP fall away on the gazetting of a new IRP. This seems to make sense as one wants the new plan to replace the old. However, with the knowledge that a new IRP is being modelled (refer Saul Musker, 13/9/2022), do all these recent Ministerial Determinations that have not been procured yet, similarly fall away?