SAIPPA SUBMISSION: NERSA CONSULTATION PAPER 1 - Ministerial Determination for 2000MW

Section		Question	Answer
3. 2 000 NEW GENERATION CAPACITY TO BE PROCURED FROM A RANGE OF ENERGY SOURCE TECHNOLOGIES In the short-term, the supply and demand side interventions will have to be deployed to minimise the risk of load shedding and/or extensive usage of diesel peaking plants. The short-term gap in this regard is estimated to be in the ranges of 2 000MW to 3 000MW. This shortfall is primary driven by Eskom fleet poor performance. The performance has deteriorated even lower than the assumptions made in the IRP 2019, with the Eskom's Energy Availability Factor (EAF) sitting at 70% for FY 2019 and Year to Date (YTD) sitting at 68%, this shortfall is most likely to increase. Therefore, such interventions will assist with creating reserve capacity needed to complement Eskom's declining performance and reduce the utilisation of diesel generators.	i.	Is 2 000MW sufficient to ensure uninterrupted supply of electricity in the short and medium-term?	The quantum of the shortfall has been made using unrealistic assumptions in the Eskom recovery plan that the EAF of the fleet will be at 75% by December 2020. Eskom's planned maintenance is around 5000MW and unplanned maintenance is anywhere between 7000 and 13000MW at any given time. A number of between 3000 and 7000MW has already been estimated by the CSIR and a number of well-informed commentators. The allocation in the IRP2019 is estimated to be 2000MW, but the actual allocation is linked to "…the extent of the capacity and energy gap". NERSA therefore need to find a way with DMRE to increase this figure, without delaying the start of the procurement for the initial 2000MW, to urgently address the actual shortfall. A possible solution to this is to allocate certain capacities to each of Eskom, private off-takers, Municipalities, and traders as buyers.
	ii.	What should be the minimum and maximum plant size that should be allowed to be connected into the Grid?	Since this allocation in the last column of Table 5 of IRP2019 is directed at IPPs, the plant sizing should be set by the developer. Utility scale plants should rather be accommodated in the balance of the IRP2019 allocations.
	iii.	Provide your opinion on the socio-economic aspects of procuring energy from a range of energy source technologies (i.e. in terms of the number of jobs each technology can develop)?	South Africa has unique challenges regarding access to affordable electricity by the poor and has massive challenges regarding job creation and industrialisation. Electricity is an enabler of the economy. It is therefore important to bring enough reliable, affordable, sustainable electricity into the mix to support the growth of the economy. Speed is of the essence in this case. Job creation will flow in the broader economy when electricity for growth is available. While jobs in the power generation industry are

Section	Question	Answer
		important, ensuring sufficient electricity supply for ALL SECTORS of the economy will make a much larger contribution towards eradicating poverty and inequality. Therefore, for this urgent deficit required, job creation should be encouraged but not obligated.
	iv. What do you think should be the dominant energy source of technology in this allocation?	The Least-Cost model has resulted in an IRP2019 that has a broad mix of technologies. There is no need to consider a dominant technology. Consideration needs however to be given to complimentary technologies. Due to the variable generation of wind and solar at any given time, these technologies have to be complimented by a back-up technology to yield near-base load capabilities. This could be gas or storage.
	v. If the energy source is technology Solar PV and/or Wind Generation, should storage be included to cater for peak periods? If so, what should be the storage capacity?	SAIPPA assumes this Determination enables bilateral PPA's as well as trading of power between generators and private off-takers, therefore storage in combination with generation should be allowed for under this allocation, but not prescribed. Technical considerations should be part of this decision. If the system model shows that distributed storage at the point of generation is preferred, then the answer could be yes, include it in the generation package – as long as this does not cause contractual complexity and time delays. If the models shows that storage is best located at some other places in the network, than a separate RFP for storage as a stand-alone would be preferred.
	vi. Do you think coal-fired generation technology should form part of this allocation?	Yes, if it leads to Least-Cost, while meeting the legal, environmental and other requirements.
	vii. Should this range of energy source technologies be dispatchable?	Not possible for RE technologies. It could be suggested as an option with an alternative tariff. Alternatively, the system balancing requirements should be contracted separately to keep contractual arrangements simple enough to ensure timely implementation.
	viii. Do you think the time allowed for this build allocation will assist in alleviating load shedding?	Yes, but current policy and regulatory delays are counter-productive in reducing load shedding in the shortest possible time. Provision should be made to incentivise early COD through an adjusted tariff

Section		Question	Answer
			that is economically advantageous to the supply system and the economy.
	ix.	Provide your thoughts on the cost that will be associated with the new allocated generation capacity in line with a mandate to ensure long term sustainability of electricity supply industry as well as affordability?	Generation for own use or sold through bilateral PPA's or to multiple private off-takers via trading platforms will be at no cost to the state and would need no sovereign guarantees. The risks and costs will be for the parties on a willing buyer/willing seller basis. Such capacity will provide security of supply for many retail, manufacturing, industrial and mining customers, with potential supply for associated communities. As this power will be procured by the private sector outside of a state run procurement process, tariffs should be negotiated between parties. Let the risk be carried by the project developers. They need to make their own decisions about sustainability. Solutions should include an element of "least-regret", in that they will still offer a valuable solution beyond the urgent requirements.
4. PROCUREMENT PROCESS UNDER THE IPP PROCUREMENT PROGRAMME The electricity produced from new generation capacity shall be procured through one or more tendering procedures which are fair, equitable, transparent, competitive and cost-effective and shall constitute Independent Power Producer (IPP) procurement programmes as contemplated in the Regulations. The procurer shall in the appropriate procurement documentation specify any qualification and evaluation criteria applicable to this IPP programme.	i.	Provide your thoughts on Eskom as a chosen buyer of the new generation capacity?	It is SAIPPA's understanding that this allocation is intended specifically or exclusively for procurement between IPPs, trading platforms and private off-takers. Whatever capacity of this allocation is given for self-generation for own use or distributed generation for trading and wheeling, Eskom will not be the buyer, nor DMRE the procurer. This category of generation within the IRP2019 should allow for licenses to be issued when private off-takers, or traders wish to buy electricity, as well as in situations of "Own Use". Designating Eskom to be the only purchaser of this electricity precludes all these other options, forcing would-be generators to seek Ministerial Deviations from the IRP2019. This is extremely counter-productive.
	ii.	Must it only be Eskom who is the Buyer of this electricity or other	In the case of the last column of Table 5 of IRP-2019 it is SAIPPA's view that the total allocation of this column must be for bilateral and

Section	Question	Answer
The buyer shall not itself conduct a procurement process under this determination. The procurement programmes shall target connection to the Grid for the new generation capacity as soon as reasonably possible in line with the timetable set out in Table 1. Deviations from the timetable set out in Table 1 will be permitted to the extent necessary taking into account all relevant factors including prevailing energy security risks, the time required for efficient procurement and the required construction timelines for such new generation capacity facility. The designated buyer is Eskom Holding SOC Limited and the procurer is the Department of Mineral Resources and Energy (DMRE). The role of the procurer will be to conduct the procurement programmes, including preparing any requests for proposals and/or related and associated documentation, negotiating the power purchase agreements, facilitating the conclusion of the other projects agreements, and facilitating the satisfaction of any conditions precedent to financial close which are within its control.	Licenced Electricity Distributors (i.e. Municipalities or Private Distributor) must also be allowed to buy?	multilateral power trade between IPPs, trading platforms and private off-takers. Municipal and State procurement of power should be handled by the IPP Office as procurer.
	iii. Do you think the trader should also be allowed to buy this new capacity?	As above – making Eskom the <u>only</u> buyer would not be conducive to a speedy process and would not assist in opening the market up. Private entities or traders should be allowed to be buyers. Yes – this should be allowed as such entities are important elements in matching generators and loads.
	iv. Do you think it fair for Eskom to be restricted as the buyer instead of providing an option for it to be part of the build allocation?	In principle, an <u>unbundled</u> Generation division of the current Eskom should participate equally. However, this restructuring is delayed, and Eskom do not have the balance sheet nor the current capacity to handle more projects. The major issue remains that for as long as there is no ITSMO, Eskom will continue to have responsibility for dispatching generators, and so they will always favour their own generators. This “Player and Referee” has long been a thorn in the side of IPPs.
	v. Provide your thoughts on IPPs as the chosen builders of the new generation capacity?	This is ideal. It will place no burden on the state for financing and risk taking, it will enhance the diversity of the generation mix and it will lead to the most rapid end to load shedding.
	vi. Provide your thoughts on the method of procurement chosen for the procurement of new generation capacity?	Designating DMRE as the procurer will exclude any procurement by those who need to procure their own power, namely private loads, traders and for own use. Only where Eskom or Municipalities (or rather a future ITSMO) need to the buyer should DMRE be the procurer.
	vii. Provide what you consider to be the risks associated with the new capacity?	Slow response by all decision makers and executors in this process will lead to on-going load shedding. The other risks are taken by financiers, project developers and generators themselves, so these represent no risk to public funds. Diversity in project ownership will reduce the risk of any one entity failing.

Section	Question	Answer
	viii. Provide your opinion on the security of supply impact in general as well as in light of the additional capacity?	Security of supply will improve as the national generation capacity will be enhanced. System operations will have to ensure that there are the necessary investments in peaking plants and/or storage.
	ix. Must the NERSA concur with this ministerial determination as per the prescripts of section 34 of the Act?	Yes. Additional capacity should however be included in an additional urgent determination, where the buyer is any combination of Municipalities, private off-takers, or traders.

Section	Question	Answer