



# Centre for Environmental Rights

Advancing Environmental Rights in South Africa

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Our ref: CER 56.1 /RH/MMK  
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Dear Ms Botha

## **SUBMISSIONS ON THE BACKGROUND INFORMATION DOCUMENT (BID) FOR Eskom's SECOND POSTPONEMENT APPLICATION IN RESPECT OF THE 2015 MINIMUM EMISSION STANDARDS (MES) FOR TUTUKA POWER STATION**

1. We address you as the Life After Coal campaign, a joint campaign by the Centre for Environmental Rights (CER)<sup>1</sup>, groundWork (gW)<sup>2</sup>, and Earthlife Africa Johannesburg (ELA),<sup>3</sup> that aims to: discourage investment in new coal-fired power stations and mines, to accelerate the retirement of South Africa's existing coal infrastructure, and to encourage and enable a just transition to renewable energy systems for the people. We also address you on behalf of the Highveld Environmental Justice Alliance Network (HEJN).<sup>4</sup>
2. We are instructed to comment on the Background Information Document (BID) in respect of Tutuka's Minimum Emission Standard (MES) postponement application, dated January 2018 and received on 17 January 2018. Eskom states that this postponement application is not a new application, but that "*it is a rolling application that*

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<sup>1</sup> The CER is a non-profit environmental rights law clinic that helps communities defend their Constitutional right to a healthy environment. Its lawyers help communities and civil society organisations in South Africa realise their Constitutional right to a healthy environment by advocating and litigating for transparency, accountability and environmental justice. See more information at <http://cer.org.za/>.

<sup>2</sup> groundWork is a non-profit environmental justice campaigning organisation working primarily in South Africa, in the areas of Climate & Energy Justice, Coal, Environmental Health, Global Green and Healthy Hospitals, Waste and Environmental Education.

<sup>3</sup> Earthlife Africa is a non-profit organisation that seeks to encourage and support individuals, businesses and industries to reduce pollution, minimise waste and protect natural resources. See more information at: <http://earthlife.org.za/description/>.

<sup>4</sup> HEJN is a community organisation aimed at raising awareness on key health and environmental issues within the Highveld region and improving the quality of life of vulnerable people living in the Highveld.

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*Eskom would continue to apply for until able to retrofit the power station to comply with the MES*<sup>5</sup> (our emphasis).

3. Kindly take note that, in relation to Eskom's previous applications to postpone compliance with the MES, we submitted extensive comments and objections<sup>6</sup> pertaining to the legal requirements of such applications, why those applications do not comply with those legal requirements, and why so-called "rolling postponements" are equivalent to illegal exemptions. We reiterate the objections raised in those submissions in relation to the present submission. Upfront, we state that Eskom should not be permitted to apply for any postponements of MES compliance as it has not met the prescribed conditions for a postponement application.
4. The structure of the current comments is as follows:
  - 4.1. summary of the legislative requirements for MES postponement applications;
  - 4.2. 2018 Tutuka MES postponement application BID;
  - 4.3. incomplete information provided in the BID;
  - 4.4. insufficient explanation for the delay in meeting MES;
  - 4.5. health concerns and deficiencies in the proposed Atmospheric Impact Report (AIR) and Atmospheric Dispersion Modelling (ADM);
  - 4.6. inappropriate approach to proposed air quality modelling;
  - 4.7. impermissibility of rolling postponements and exemptions from MES compliance;
  - 4.8. request for information; and
  - 4.9. conclusion.

#### **Summary of the Legislative Requirement for MES postponement applications**

5. Section 24 of the Constitution of the Republic of South Africa, 1996 ("the Constitution") guarantees everyone the right to an environment not harmful to health or well-being, and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that: prevent pollution and ecological degradation; promote conservation; and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development. As the Constitution is the supreme law, any law or conduct inconsistent with it is invalid, and the obligations imposed by it must be fulfilled.<sup>7</sup> All law and conduct must be measured against the right to an environment that is not harmful to health or wellbeing. It is to give effect to the constitutional environmental right that environmental legislation - including air quality legislation - was enacted.
6. The overarching environmental legislation which gives effect to s24 of the Constitution is the National Environmental Management Act (NEMA),<sup>8</sup> and the National Environmental Management (NEM) Principles in NEMA's s2, which must be adhered to by any organ of state in all decision-making and when exercising its functions. Some of these binding directive principles are as follows:
  - 6.1. the environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage;<sup>9</sup>
  - 6.2. a risk-averse and cautious approach must applied, which takes into account the limits of current knowledge about the consequences of decisions and actions;<sup>10</sup> ("precautionary principle")

<sup>5</sup> Draft Minutes of the Standerton Public Meeting held on 28 January 2018.

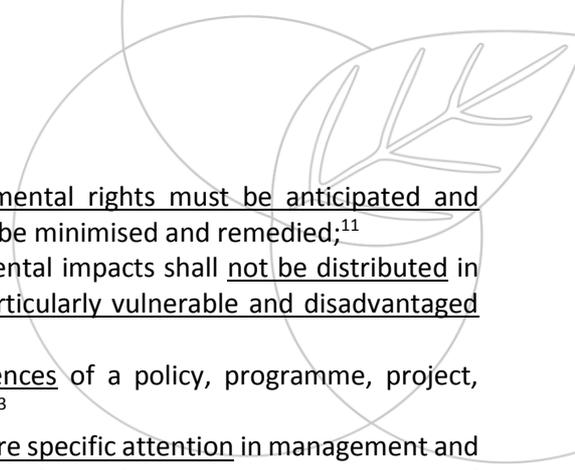
<sup>6</sup>[https://cer.org.za/wp-content/uploads/2014/02/CER-submissions-on-Eskom-postponement-applications\\_12-Feb-2014\\_final1.pdf](https://cer.org.za/wp-content/uploads/2014/02/CER-submissions-on-Eskom-postponement-applications_12-Feb-2014_final1.pdf); [https://cer.org.za/wp-content/uploads/2014/02/Annexure-3 CER-submissions Eskom-BID 19-July-20131.pdf](https://cer.org.za/wp-content/uploads/2014/02/Annexure-3_CER-submissions_Eskom-BID_19-July-20131.pdf); <https://cer.org.za/wp-content/uploads/2016/07/170224-Life-After-Coal-Campaign-submissions.pdf>.

<sup>7</sup> Section 2 of the Constitution.

<sup>8</sup> Section 2(1) of NEMA.

<sup>9</sup> Section 2(4)(n).

<sup>10</sup> Section 2(4)(a)(vii).

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- 6.3. negative impacts on the environment and on people's environmental rights must be anticipated and prevented, and where they cannot be altogether prevented, must be minimised and remedied;<sup>11</sup>
  - 6.4. environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons;<sup>12</sup>
  - 6.5. responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its lifecycle; <sup>13</sup>
  - 6.6. sensitive, vulnerable, highly dynamic or stressed ecosystems...require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure;<sup>14</sup>
  - 6.7. the cost of remedying the pollution, environmental degradation and consequent adverse health effects and of preventing controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment;<sup>15</sup>
  - 6.8. pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;<sup>16</sup>
  - 6.9. use and exploitation of non-renewable natural resources must be responsible and equitable, and take into account the consequences of the depletion of the resource;<sup>17</sup> and
  - 6.10. the participation of all interested and affected parties in environmental governance must be promoted.<sup>18</sup>
7. In the context of giving effect to s24 of the Constitution and embodying the NEM Principles, the National Environmental Management: Air Quality Act<sup>19</sup> (AQA) was promulgated and came into effect in 2005. The AQA aims to ensure that air pollution is not harmful to human health or well-being, and to enhance the quality of air in South Africa.<sup>20</sup> The AQA provides that its interpretation and application must be guided by the NEM Principles and accordingly, the National Air Quality Officer (NAQO) and Eskom (an organ of state) must adhere to the NEM Principles and legal provisions of the AQA in its decision-making and exercise of its function.
  8. Eskom is also bound by, for example, the Framework for Air Quality Management ("the Framework"), Air Quality Management Plans (AQMPs), and the MES. The Framework (which was first established in 2007) aims to achieve the objectives of the AQA and provides various norms and standards to control emissions, manage and monitor air quality, and provide mechanisms, systems, and procedures to attain compliance with the National Ambient Air Quality Standards (NAAQS).<sup>21</sup> Eskom must limit its emissions to help ensure NAAQS compliance.
  9. In order to control atmospheric emissions, the Minister published a list of activities which have or may have significant detrimental effect on the environment and health, as well as associated MES, in terms of s21 of the AQA ("the List of Activities").<sup>22</sup>
  10. The List of Activities were set in a multi-stakeholder process over several years, in which Eskom was an active participant. The List of Activities came into force in 1 April 2010 and prescribe MES for particular activities, including those for combustion installations such as Eskom's coal-fired power stations, for particulate matter

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<sup>11</sup> Section 2(4)(a)(viii).

<sup>12</sup> Section 2(4)(c).

<sup>13</sup> Section 2(4)(e).

<sup>14</sup> Section 2(4)(r).

<sup>15</sup> Section 2(4)(p).

<sup>16</sup> Section 2(4)(a)(ii).

<sup>17</sup> Section 2(4)(a)(v).

<sup>18</sup> Section 2(4)(f).

<sup>19</sup> Act 39 of 2004.

<sup>20</sup> Section 2 of the AQA.

<sup>21</sup> Section 7(1) of the AQA.

<sup>22</sup> List of Activities which result in atmospheric emissions which have or may have a significant detrimental effect on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage.

(PM), sulphur dioxide (SO<sub>2</sub>), and oxides of nitrogen (NO<sub>x</sub>) for both new and existing plants. Existing plants, like all of Eskom's stations, had to comply with more lenient standards by 1 April 2015 – a transitioning period – so that they could adhere to stricter new plant standards by April 2020. In essence, since the List of Activities was published on 31 March 2010, older plants (although this includes Medupi and Kusile, which are still under construction) were given a transitioning lead period of 5 years to come into compliance with a more lenient 2015 standard, and to come into compliance with a stricter standard by 2020. Eskom was therefore well aware of this provision at least from April 2010, and was aware from several years before that that the MES would come into force.

11. As indicated in a press statement published by the Department of Environmental Affairs (DEA) on 4 December 2014:

*“It is important to note that the development of the Section 21 Notice constituted an elaborate consultation and participation processes in terms of Section 56 and 57 of the AQA. All affected stakeholders (including Eskom) were part of these processes and they made contributions regarding limits that are achievable with the view of upholding the constitutional right of all people in the country to an environment that is not harmful to health and well-being.*

....

*An extensive consultation process was followed in setting these emission standards over a 5 year period. This process:*

- *continuously engaged with all stakeholders around the identification of listed activities and their associated minimum emission standards; and*
- *reviewed current national and international work related to the identification of activities and their related minimum emission standards.*

*Eskom participated directly in this process, and standards seek to balance the economic, social and environmental imperatives.”<sup>23</sup>*

12. South African MES are very weak, compared even to other developing countries. For instance, as reflected in the table below, our SO<sub>2</sub> existing plant MES are 17.5 times weaker than those in China, Germany and the European Union, nearly 6 times weaker than India's, almost 5 times weaker than Indonesia's, and almost double as lax as Thailand's. The existing plant PM MES are more than 3 times weaker than China's, and 5 times weaker than in Germany and the EU.<sup>24</sup> Our new plant MES also do not compare favourably to other jurisdictions, as the table below demonstrates:

'Existing Plant' ratios: SA/ country			'New Plant' ratios: SA/ country		
	SO2	PM		SO2	PM
SA/ China	17.5	3.3	SA/ China	14.3	5.0
SA/ Germany	17.5	5.0	SA/ Germany	3.3	5.0
SA/ India	5.8	1.0	SA/ India	5.0	1.7
SA/ Indonesia	4.7	0.7	SA/ Indonesia	0.7	0.5
SA/ Thailand	1.7	0.6	SA/ Thailand	1.0	0.6
SA/ EU IED	17.5	5.0	SA/ EU IED	3.3	5.0

13. Whilst AQA deals with exemptions in general,<sup>25</sup> there is no provision that allows for exemption from MES compliance (this is confirmed in the press statement above and the Minister advised Eskom and Sasol that their initial requests to be exempt from the MES were illegal). Paragraphs 11-13 of the List of Activities, read together with paragraph 5.4.3.3 of the Framework, however, provides for applications for possible extension of compliance time frames. According to the Framework, such application is only possible if “ambient air quality

<sup>23</sup> [https://www.environment.gov.za/mediarelease/atmospheric\\_emissionlicense\\_krielpowerstation](https://www.environment.gov.za/mediarelease/atmospheric_emissionlicense_krielpowerstation).

<sup>24</sup> <http://www.iea-coal.org.uk/documents/83882/9684/Emission-standards-and-control-of-PM2.5-from-coal-fired-power-plant,-CCC/267>. Analysis of selected countries' emission standards table.

<sup>25</sup> Section 59 of AQA.

*standards in the area are in compliance, and will remain in compliance even if the postponement is granted".* For this reason alone, the postponement application must be denied, because, as explained in paragraph 16 below, Tutuka is located in the Highveld Priority Area (HPA) which was designated because ambient air quality in the area is in non-compliance with NAAQS.

14. If NAAQS are in compliance, postponement applications may be considered by the National Air Quality Officer (NAQO) , in concurrence with the licensing authority, if the following conditions are met:
  - 14.1. an atmospheric impact assessment is submitted, which is compiled in accordance with the regulations prescribing the format of Atmospheric Impact Reports (AIR) in terms of section 30 of AQA by a person registered as a professional engineer or as a professional natural scientist in the appropriate category;
  - 14.2. there is a concluded public participation process in terms of NEMA's Environmental Impact Assessment Regulations;
  - 14.3. the application is submitted to the NAQO at least 1 year before the specified compliance date;
  - 14.4. there is a detailed justification and reasons for the application; and
  - 14.5. if the applicant can demonstrate that the industry's current and proposed air emissions are not causing, and will not cause any adverse impacts on the surrounding environment.
15. Further, the NAQO, in concurrence with the licensing authority, may review any postponement granted, should ambient air quality conditions in the affected area of the plant not conform to NAAQS, and on good grounds, withdraw a postponement, having considered representations from the affected plant and affected communities.<sup>26</sup>
16. As you are aware, due to the significantly-polluted air in the Highveld where Tutuka (and 11 other Eskom plants) are located, the area was declared as the HPA in 2007. The declaration of a priority area is possible in terms of section 18 of AQA, if the Minister believes that NAAQS are being or may be exceeded in the area, or any other situation exists which is causing, or may cause, a significant negative impact on air quality in the area, and this requires specific air quality management action to remedy the situation.<sup>27</sup> A priority area's declaration can only be withdrawn if the area is in compliance with NAAQS for more than 2 years.<sup>28</sup> Section 19 sets out the requirements for an AQMP, which must: (a) be aimed at co-ordinating air quality management in the area; (b) address issues related to air quality in the area; and (c) provide for the implementation of the plan by a committee representing relevant role-players.<sup>29</sup>
17. The HPA AQMP has been in place since 2012 and its primary objective is to bring the air quality in the Highveld in line with all NAAQS. By 2020, it aims to reduce industrial emissions in order to achieve compliance with NAAQS and dust fallout limit values.<sup>30</sup>
18. Unfortunately, more than 10 years since the declaration, air quality has not improved, and remains non-compliant with the NAAQS, despite the fact that South African standards are weaker than the World Health Organisation (WHO)'s 2005 guidelines. The continued NAAQS non-compliance is reflected in the DEA's own annual State of the Air reports, the reports presented the HPA multi-stakeholder reference group meetings, and the DEA mid-term review of the HPA AQMP. The DEA's 2017 State of the Air report states that "*many South Africans may be breathing air that is harmful to their health and well-being especially in the priority areas*", and a 9 year trend of pollutants indicate that the air quality has not improved.<sup>31</sup> The dire air pollution situation in the

<sup>26</sup> Paragraph 14 of the List of Activities.

<sup>27</sup> Section 18 of the AQA.

<sup>28</sup> Section 18(5) of the AQA.

<sup>29</sup> Section 19(6) of the AQA.

<sup>30</sup> HPA AQMP, pg xvi.

<sup>31</sup> [http://www.airqualitylekgotla.co.za/assets/2017\\_1.3-state-of-air-report-and-naqi.pdf](http://www.airqualitylekgotla.co.za/assets/2017_1.3-state-of-air-report-and-naqi.pdf).

HPA, and its implication on human health and the environmental right is extensively reported in the “Broken Promises” report,<sup>32</sup> which was submitted to the DEA in October 2017.

19. The HPA AQMP also states that power generation, followed by mining haul roads and mines (some of which supply the power generating plants) are by far the largest contributor to air pollution in the Highveld. For instance, in respect of PM<sub>10</sub>, power generation accounts for 12%, and mine haul roads 49% of overall PM in the HPA, whilst household fuel burning is a mere 6%. Further, power generation accounts for 73% of all NO<sub>x</sub> and 82% of SO<sub>x</sub> in the Highveld. In comparison, household fuel burning accounts for a mere 6% of PM<sub>10</sub>, 1% of SO<sub>x</sub> and 1% of NO<sub>x</sub> in relation to overall ambient air pollution in the Highveld. The DEA’s mid-term review of the HPA AQMP,<sup>33</sup> dated December 2015 but made available for comment in February 2016, indicates that: “*industrial sources in total are by far the largest contributor of SO<sub>2</sub> and NO<sub>x</sub> in the HPA, accounting for approximately, 99.57 % of SO<sub>2</sub> and 95.97% of NO<sub>x</sub>, while mining is the largest contributor of PM<sub>10</sub> emissions*”,<sup>34</sup> and “*there has not been a significant decrease in emissions of industrial and mining sources... Nonetheless, industrial sources are still the largest contributors of SO<sub>2</sub> and NO<sub>x</sub> in the HPA with mining being the main contributor of PM<sub>10</sub>*.”<sup>35</sup>
20. The law is clear that only in such cases where the areas in which the facilities are based are in compliance with NAAQS (which the HPA is not), can postponement applications even be considered. In terms of section 1(a)(ii) of Promotion of Administrative Justice Act, 2000 (PAJA), the powers to exercise administrative action are derived from and only extend insofar as the legislation allows. Therefore any granting of postponement application in the HPA would be *ultra vires* the Constitution, AQA and its regulations, the List of Activities, NEMA, and the Framework.
21. Even if it were permissible for Eskom to apply for MES postponement (which, legally, it is not), it cannot be a “rolling postponement”, as that would be tantamount to an exemption, which is illegal. Eskom has not met the required timeframes and limits under the first postponement application, and now applies for a second postponement application, which is in effect, a rolling postponement. We submit that this application should not even be considered as it is not legally permissible.
22. Further, if any additional MES postponement were to be considered (which would be illegal), Eskom would still be required to show that its air emissions are not causing and will not cause any adverse impacts on the surrounding environment. In this regard, the Regulations prescribing the Format of the AIR, 2013 (“the AIR Regulations”), requires that the AIR specify the impact of the activity to the receiving environment - which include health impact and environmental impact components. More specifically, the AIR requires “*analysis of emissions’ impact on human health*” to assess the impact of facility on human health,<sup>36</sup> and consideration of the facility’s impact on the environment (considerations should include soil, water bodies, and commercial agricultural operations), to be shown through the Air Dispersion Modelling (ADM).<sup>37</sup> The ADM should also comply with the Regulations regarding ADM, 2014 (“the ADM Regulations”).
23. There is a wealth of health impact assessment research (dealt with in more detail in paragraphs 35-45 below) - including reports commissioned by Eskom itself – which shows the devastating impacts of Eskom’s stations on human health. It is submitted that this is another reason why this application must be refused.

#### **Tutuka 2018 MES postponement BID**

24. The Tutuka BID states *inter alia* that:

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<sup>32</sup> <https://cer.org.za/news/broken-promises-the-failure-of-south-africas-priority-areas-for-air-pollution-time-for-action>.

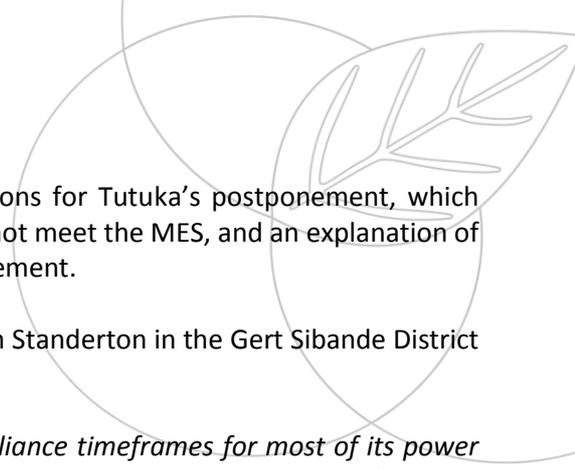
<sup>33</sup> [https://cer.org.za/wp-content/uploads/2016/07/HPA-AQMP-Midterm-review-Draft-Report\\_February-2016.pdf](https://cer.org.za/wp-content/uploads/2016/07/HPA-AQMP-Midterm-review-Draft-Report_February-2016.pdf).

<sup>34</sup> Pg 2.

<sup>35</sup> Pg 85.

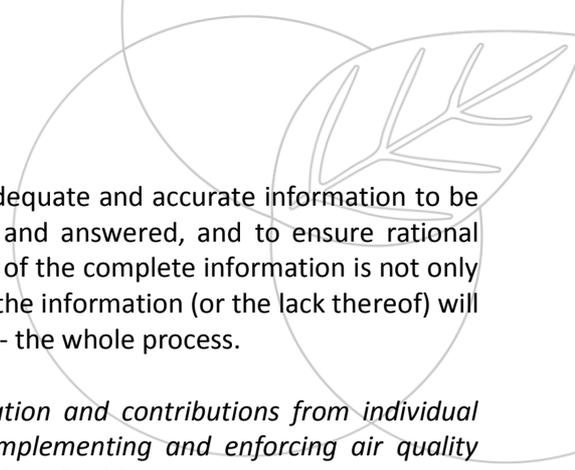
<sup>36</sup> Regulation 5.1 of the AIR Regulations.

<sup>37</sup> Regulation 5.2 of the AIR Regulations.

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- 24.1. The purpose of the BID is to present an overview of the reasons for Tutuka's postponement, which includes a description of the MES, why Eskom claims that it cannot meet the MES, and an explanation of the application and public participation process for the postponement.
  - 24.2. Tutuka is a 3600MW coal-fired power station located 25km from Standerton in the Gert Sibande District of the Mpumalanga province, and commissioned in 1991.
  - 24.3. *"In 2014, Eskom applied for 5-year postponements of the compliance timeframes for most of its power stations in respect of PM, SO<sub>2</sub> and NO<sub>x</sub>...in Tutuka's postponement application, Eskom anticipated starting to retrofit the power station with emissions abatement equipment, unit by unit, starting in 2019 and ending in 2024. Consequently, the DEA granted postponement of the 2015 PM emission limit only until the date on which the retrofitting was planned to have started on the first unit, despite that compliance with the new plant standard would only be reached fully after the completion of the installation of the abatement technology on all six units."*
  - 24.4. Due to "various constraints", Eskom states that "it is not possible for most of Eskom's power stations, including Tutuka, to comply with the standards within the given timeframes; hence it is necessary to apply for another postponement of the compliance timeframes".
  - 24.5. The BID indicates that an Atmospheric Impact Assessment will be provided and that "Atmospheric dispersion modelling [ADM] will be used to predict the ambient air quality implications of not complying with the applicable limit values prescribed in the MES until abatement technology is installed/ upgraded for specific pollutants. ... In addition, only emissions from Tutuka will be modelled and not from other sources. A background concentration, i.e. the ambient concentrations of pollution excluding the contribution from Tutuka, will be determined so that the cumulative effects can be estimated."
  - 24.6. According to the BID, "it is very important to note that a key assumption underpinning the preparation of the AIR is that the NAAQS is adequately protective of human health and environment. The AIR is not intended to conduct detailed health or environmental risk assessments, but only to ascertain how the NAAQS will be affected by the proposed delay in meeting the MES. In addition, only emissions from Tutuka will be modelled and not from other sources. A background concentration, i.e the ambient concentrations of pollution excluding the contribution from Tutuka will be determined so that the cumulative effects can be estimated."
  25. As discussed below, the BID is problematic in several respects, including:
    - 25.1. inaccurate and/or incomplete information is provided, which undermines the public participation processes, and ultimately, the decision-makers' ability to reach a rational, informed conclusion;
    - 25.2. inadequate and/or inaccurate explanation is provided in respect of Eskom's delay in meeting its obligations, which it claims necessitates the current postponement application;
    - 25.3. there are deficiencies in the proposed approach for conducting an AIR, including omitting any discussion on assessing the health impacts from a postponement; and
    - 25.4. there is an inappropriate approach to the proposed air quality modelling.

#### **Incomplete and inaccurate information provided in the BID and public participation process**

26. The BID does not contain the necessary information required for reasonable public participation. The BID appears to intentionally withhold information and, in so doing, misleads its audience in relation to compliance with the legal requirements and public participation process. For this reason alone, the BID should be rejected and an accurate, informative, complete BID provided for comment.

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27. Interested and affected parties (I&APs), require (and are entitled to) adequate and accurate information to be provided so that the relevant questions and concerns can be raised and answered, and to ensure rational decision-making on the postponement at the final stage. The portrayal of the complete information is not only important at a later stage but at the initial BID stage, which is crucial as the information (or the lack thereof) will be pertinent to I&APs' understanding of – and decision to participate in - the whole process.
28. Paragraph 5.9.1.1 of the Framework provides that *“(a)ctive participation and contributions from individual citizens and citizen groups is of utmost importance in developing, implementing and enforcing air quality management decisions within the context of the AQA. The potential benefits of public participation are numerous. If well-planned and managed, public participation can bring new and important knowledge to the table, mediate between conflicting perspectives early in the process and facilitate more efficient air quality governance. Equally important, public participation in air quality management plays a vital role in strengthening and deepening democracy in South Africa and in giving effect to the constitutional right to an environment which is conducive to health and well-being”* (our emphasis).
29. The information missing from and/or not adequately provided in the BID is set out below :
- 29.1. As explained in paragraph 13 above, the regulatory framework does not permit postponement applications to be made in areas which are out of compliance with NAAQS. The BID, in paragraph 8, only relies on the legislative requirements in the List of Activities, and neglects to set out the provisions in the Framework.
- 29.2. The BID does not mention that Tutuka is in the HPA, an area which is regularly out of compliance with NAAQS. This is a glaring omission. It also does not indicate that, according to the Framework, applications for postponements of MES compliance may not be made where NAAQS are out of compliance. This is likely because Eskom would not be able to submit a postponement application for Tutuka because it is located in an area where NAAQS are out of compliance. As indicated above, I&APs should be made aware from the outset what the postponement requirements are, what the air quality in the HPA is like, that there is non-compliance with AAQS in the area, and what the health impacts of such non-compliance are.
- 29.3. The BID does not set out the actual MES and timeframes, but only the Tutuka relaxed limits in its atmospheric emission licence (AEL), which are far weaker than 2015 MES standards and which it obtained through the 2014 postponement application. By simply providing the relaxed Tutuka AEL limits, without comparison with the legally-required MES, the BID fails to provide a complete picture of the state of Tutuka's legal compliance. For example, instead of complying with 50mg/Nm<sup>3</sup> by 1 April 2020, Eskom now seeks to do so only by 2024. Its current licensed emission limit for Tutuka is already exceptionally lenient - 3.5 times the 2015 MES; and from 2019, will be double the 2015 MES standard. It is clear that Eskom has not taken sufficient steps in the interim to ensure compliance with the postponed limits. This information should be provided to I&APs.
- 29.4. Further, the reference to 2013 MES amendments creates the incorrect impression that Eskom only knew in 2013 of its compliance limits and timeframes. This is also misleading since the MES in respect of coal-fired power stations have not changed since 2010. As indicated above, the process of putting together the List of Activities commenced in about 2004 and over an approximate 5 year period, a multi-stakeholder process was convened to determine appropriate MES for the listed activities. Eskom was integral to this process. This is supported by the DEA's press statement referred to above. It should, therefore be made clear in the BID as well as in the public participation process that Eskom knew of the compliance limits and timeframes as far back as 2004, giving it some fourteen years' advance warning that it would need to come into compliance with MES.

29.5. It should also be made clear that the transitioning period is already provided for older plants from 2010-2015, and from 2015-2020, so that in 2020, all plants could be brought in line with the 2020 standards. The current Tutuka “relaxed standards” as per the BID, AEL and List of Activities are as follows:

POLLUTANT	SA REQUIREMENT FOR OLD PLANTS	MES FOR	Tutuka’s current “relaxed” Limit (mg/Nm3)	Tutuka’s current timeframe for compliance	“relaxed” achieving
PM	100 by 1 April 2015		350	1 April 2015 – 31 December 2018	
	50 by 1 April 2020		200	1 January 2019 – 31 December 2019	
			100	1 January 2020 – 31 December 2020	
SO <sub>2</sub>	3500 by 1 April 2015				
	500 by 1 April 2020		3400	1 April 2020 - 31 December 2025	
NOx	1100 by 1 April 2015		1200	1 April 2015 – 31 March 2020	
	750 by 1 April 2020				

29.6. Importantly – and inexplicably, the BID does not state the pollutant and the timeframe applied for in the current postponement application. Upon our enquiry by email, Ms Botha advised that Eskom intends applying for the postponement in respect for PM only. However, this still seems to be an incomplete picture, since it appears from the Standerton public participation presentation of 29 January 2018, that Tutuka requested the postponement in respect of the following (MES are inserted for comparison purposes):

Pollutant	SA REQUIREMENT FOR OLD PLANTS	MES FOR	Limit Requested (mg/Nm3)	Timeframe Requested
PM	100 by 1 April 2015		350	time of application until 31 March 2024
	50 by 1 April 2020		50	from 1 April 2024
SO <sub>2</sub>	3500 by 1 April 2015		3400	time of application until decommissioning
	500 by 1 April 2020			
NOx	1100 by 1 April 2015		1200	time of application until 31 March 2025
	750 by 1 April 2020		750	from 1 April 2025

29.7. As can be seen from the above, in addition to postponement in respect of PM (which was not indicated in the BID but was subsequently indicated by Ms Botha in an email), it appears that Eskom is possibly applying for exemption from the 2020 SO<sub>2</sub>, standards as well as postponement of compliance with the 2020 NO<sub>x</sub> standards. As the BID forms the foundation for all subsequent processes and public participation, it is important that accurate and complete information be submitted. As it stands, the BID does not contain material information such as: the standards (2015 or 2020) and pollutants for which Eskom seeks the postponement application, and the timeframes sought. The BID therefore is deficient and should be rejected as it does not contain the material and necessary information required for a postponement application.

29.8. The BID also does not indicate the air quality models which will be used as per the ADM Regulations. It merely mentions that it will use a “puff model”. The ADM Regulation lists 5 types of air quality models - including CALPUFF and SCIPUFF - which may be used. The 5 models are designed for different applications and assessment, and choosing the correct or relevant type is essential. In order to assess the suitability of the chosen air quality model and the modelling approach to be used, the BID (and the public participation process) should set out the key criteria to be used to select the model, and the modelling approach to be used (as set out in paragraphs 35-47.8), with a detailed justification for its choices. This would enable any concerns to be addressed before any modelling is conducted.

29.9. The BID also does not indicate that there are an inadequate number of ambient air quality monitoring stations and/or data from the monitoring around Tutuka, which may also have an impact on any AIR which Eskom proposes to undertake. In the previous 2014 postponement application, DEA requested further information in order to make its decision, one of which included explanation as to why limited data were supplied to undertake the health and environmental impact study.<sup>38</sup> Eskom indicated that *“unfortunately, there is very limited information available on ambient particulate concentrations in the vicinity of Tutuka Power Station. The availability of PM<sub>10</sub> data from the Grootdraai Dam monitoring station is poor, and so ambient PM concentrations recorded near Majuba Power station were used in the Atmospheric Impact Report submitted in support of Eskom’s postponement application. PM<sub>10</sub> concentrations are definitely lower to the south-east of the Highveld, further from industrial, power generation and other activities, but there nevertheless is non-compliance with ambient PM<sub>10</sub> standards in some years...”* This is problematic since any health and environmental impact from PM<sub>2.5</sub> will largely be ignored. Since SO<sub>2</sub> and NO<sub>x</sub> are precursors to secondary PM<sub>2.5</sub> formation and secondary PM<sub>2.5</sub> contributes to total ambient PM<sub>2.5</sub>, the AIR should report on the impacts of the postponement application with respect to PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>.

30. The public participation conducted suffers from the same style of misinformation and/or omission as the BID. For instance, the public participation conducted on behalf of Eskom on 28 January 2018 simply ignores or omits most recent studies around the world pertaining to the negative impact of air pollution on health, discussed in paragraphs 35-45 below. Instead of indicating the impact of Tutuka on the surrounding communities (which was requested by attendees), Eskom’s presentation focuses primarily on other sources of pollution which impact their health. For instance in the presentation, *“Eskom acknowledges that its activities have an impact on ambient air quality, BUT ambient air quality is influenced by many different sources of pollution. We breathe in air pollution from many different sources. Health effects depend a lot on how close a person is to the source, rather than on how big the source of pollution is. So even though a cigarette makes less smoke than a power station, cigarette smoke causes much more harm than power station pollution because it is directly inhaled by a person into the lungs. Even the smoke that is inhaled when burning coal for cooking and heating causes harm. Air Quality offsets could reduce exposure to air pollution and positively impact on the health of community members affected by Eskom’s emissions. Eskom is in the process of rolling this out”*. Eskom then provides a diagram of a 2008 Medical Research Council data for disability-adjusted life years’ (DALY) risk factors. According to this diagram, urban pollution is ranked last on the list (ranked 17<sup>th</sup> out of 17), accounting for 0.3% of risks. In comparison, unsafe sex and sexually transmitted illness are ranked first on the list, accounting for 31.5% of the risks. Alcohol and smoking are ranked 3<sup>rd</sup> and 4<sup>th</sup> on the ranking respectively. This is misleading, since the data based on this study is from 2000, more than 18 years ago, and even in that study, it states that *“[t]his study found that in South Africa the public health impacts of urban air pollution has been under recognised. As the South African economy continues to develop and the urban populations grow, it is essential to implement strategies to control air pollution...”*<sup>39</sup> It also misleading as it blatantly ignores the current available data (including Eskom’s own health studies) pertaining to health impacts arising out of Eskom’s own power stations (see paragraph 35-45 below). The misinformation and/or omission should be disallowed from any public participation process. We are reminded of Eskom’s first BID for its postponement applications, which claimed, untruthfully (as Eskom was well aware), that *“power station emissions do not harm human health”*.<sup>40</sup>

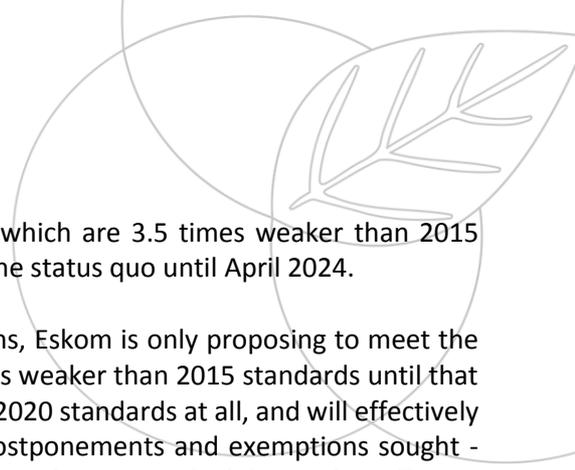
### **Insufficient explanation for Eskom’s delay in meeting the MES and postponed timeframes**

31. In the BID, Eskom provides no reasonable explanation as to why it has waited 8 years since the List of Activities came into force, or 3 years from when the 2015 postponement application was granted, to begin the abatement equipment installation. In respect of PM, even though Eskom’s current relaxed limits is 3.5 times weaker than the MES it was required to meet in 2015, it seeks to retain this extremely lenient standard until 2024. The List of Activities envisaged that old plants would conduct the necessary retrofitting from 2010 to ensure that they could meet the existing plant MES of 100 mg/Nm<sup>3</sup> by 2015 and the new plant MES of 50 mg/Nm<sup>3</sup> by 2020.

<sup>38</sup> Eskom’s letter to DEA, dated 17 July 2014.

<sup>39</sup> <http://www.mrc.ac.za/bod/crasumrpt.pdf>.

<sup>40</sup> [https://cer.org.za/wp-content/uploads/2014/08/1\\_-Eskom-BID-11-June-2013.pdf](https://cer.org.za/wp-content/uploads/2014/08/1_-Eskom-BID-11-June-2013.pdf).

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32. Instead, Eskom has not met the extremely lenient standards for PM (which are 3.5 times weaker than 2015 standards and 7 times weaker than 2020 standards), and aims to keep the status quo until April 2024.
33. Similarly, and presumably through additional postponement applications, Eskom is only proposing to meet the 2020 standards for NO<sub>x</sub> from 2025, and aims to keep a standard which is weaker than 2015 standards until that date. In terms of SO<sub>2</sub>, it appears that Eskom never intends meeting SO<sub>2</sub> 2020 standards at all, and will effectively be asking for an illegal exemption. This situation – including future postponements and exemptions sought - should be made clear in the BID, together with any explanation as to why Eskom not only did not take sufficient steps since the MES were set in 2010 to ensure that it can comply with the MES, but why it did not take sufficient steps to comply with the postponed MES. We place on record that, should Eskom be seeking, in this BID process, additional postponements also for SO<sub>2</sub> and NO<sub>x</sub> (which is not what was relayed to us in the email correspondence referred to above) we reserve our rights to make additional comments on an accurate, updated BID.
34. Eskom’s reason for the delay is at best, incomplete and vague, and at worst, misleading and inaccurate. The BID states that *“ESKOM anticipated starting to retrofit the power station with emissions abatement equipment, unit by unit, starting in 2019 and ending 2024. Consequently, the DEA granted postponement of the 2015 PM emission limit only until the date on which the retrofitting was planned to have started on the first unit, despite that compliance with the new plant standards would only be reached fully after the completion of the installation of the abatement technology on all six units”*.
- 34.1. We reiterate that it is not clear why - when Eskom was integral to the public participation in determining the MES from as far back as 2004, and had certainty on the MES at the latest when the List of Activities was published in 2010 - it will only start retrofitting Tutuka 9 years from publication of the List of Activities.
- 34.2. It is also not clear why, after Eskom’s postponement application was granted and it was given a transitioning period until 2019 to cut its PM emission by just over a third (i.e. from the relaxed 2015 standard of 350 mg/Nm<sup>3</sup> to 200 mg/Nm<sup>3</sup> by 2019 - which is still twice the 2020 standard), it will still only commence its retrofitting programme in 2019.
- 34.3. Further, if Eskom were of the view that the PM retrofit finalisation date of 2024 should have been the compliance date, and not 2019, it is not clear why this was not brought to DEA’s attention in 2014 when postponement application was granted. As far as we are aware, Eskom did not appeal the DEA’s postponement decision.
- 34.4. It should be stressed that it is not for Eskom to dictate when and how they wish to comply with the law, and when to begin retrofitting. In 2015, Eskom obtained a period of postponement of compliance with the MES, to allow it more time to come into compliance. Since it has failed to do so, it must give a detailed explanation as to why it has delayed in commencing the retrofitting process and will only do so from 2019, what issues or challenges were experienced during the retrofit programme, and what actions were taken – and when - to remedy the delay.
- 34.5. According to Eskom’s Atmospheric Emission Management Plan dated May 2015, Tutuka received an environmental authorisation for a fabric filter (FF) retrofit on 24 March 2014. However, it is indicated that the *“implementation date is subject to the project plan which is being developed, and will be communicated in due course. The low NO<sub>x</sub> burner project is also in the planning phase and implementation dates will be communicated with once finalised”*. According to Eskom’s Environmental Management Strategy 2014/15 – 2017/18, dated 2014, Tutuka’s FF retrofit was scheduled to commence in “2018/2019”, and the low-NO<sub>x</sub> burner (LNB) in “2019/2020”. It is pertinent to point out that this plan did not change even after DEA granted the 2014 postponement application, which required Tutuka’s to reduce PM emissions to comply with 200 mg/Nm<sup>3</sup> by 2019. The minutes of the submission to the Eskom board dated 26 August 2016 indicate that FF retrofits were to begin after the DEA’s 2014 postponed timeframes during 2019/2020. According to the

board minutes of February 2017, FF retrofits were delayed until July 2019. No explanation is provided for this, which, we argue, amounts to wilful disregard of the DEA's decision.

34.6. We submit that this postponement application should not be considered, not only because it is legally impermissible as explained above, but also because Eskom has failed to provide reasons for not meeting the timeframes granted in the previous 2014 postponement application.

### **Health concerns and deficiencies in the proposed Atmospheric Impact Report (AIR) and Atmospheric Dispersion Modelling (ADM)**

35. As indicated in paragraph 24.6, the BID indicates that, whilst the AIR will be conducted, it *"is not intended to conduct a detailed health or environmental risk assessment"*. It also assumes that the NAAQS are adequately protective of health and the environment.
36. To conduct an AIR without a detailed health and environmental risk assessment is unlawful. The Constitution recognises the inter-linked nature of environment and health, and accordingly, guarantees everyone the right to an environment not harmful to health or well-being, and to have the environment protected. Similarly, as indicated in paragraphs 5-9 above, the NEM Principles repeatedly mention adverse health impacts and vulnerable communities. As mentioned in the foregoing paragraphs, the AIR Regulations requires that AIRs consider the impact of the activity to the receiving environment - which includes both a health and an environmental component. Regulation 5.1 of the AIR Regulations requires the "analysis of emissions' impact on human health" to assess the impact of the facility on human health through ADM. This means that AIR and ADM should consider health impacts.
37. As indicated in paragraphs 18-19 above, the HPA AQMP is intended to result in the improvement of air quality. The AQMP also recognises that power generation is the primary driver for hospital admissions in Mpumalanga, with a 51% contribution,<sup>41</sup> and it highlighted various significant mortality rates, health concerns (such as cancer, lung diseases, respiratory and cardiovascular hospital admissions, chronic bronchitis and premature mortality), as well as restricted activity days in the Highveld area.<sup>42</sup> These health issues were attributed to pollution exposure, such as PM<sub>10</sub>, NO<sub>x</sub>, and SO<sub>2</sub>, and SO<sub>2</sub> emissions was identified to be associated with coal combustion.<sup>43</sup> Power generation accounted for 73% of overall NO<sub>x</sub> emission per year, and 82% of the total SO<sub>2</sub> emission per year.<sup>44</sup>
38. Although NAAQS were set in order to quantify allowable emissions that would limit impacts on health and well-being, we reiterate that SA NAAQS are significantly weaker even than the WHO's 2005 guidelines. The WHO has determined that there is no safe level of PM exposure.<sup>45</sup>
39. There are numerous health studies conducted world-wide (including Eskom's own studies),<sup>46</sup> that indicate that there are serious health impacts from air pollution. The 2018 Lancet Commission on Pollution and Health<sup>47</sup> found that, in 2015, air pollution was responsible for 6.4 million deaths – 2.8 million from household air pollution and 4.2 million from ambient air pollution.
40. Whilst one NEM Principle states (see paragraph 6.4 above) that environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any

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<sup>41</sup> HPA AQMP, pg 72.

<sup>42</sup> HPA AQMP, pg 72-75.

<sup>43</sup> HPA AQMP, pg 97.

<sup>44</sup> HPA AQMP, pg x.

<sup>45</sup> WHO Air Quality guidelines, 2005 at 7, 9; WHO guidelines for Air Quality at s4 & s6.

<sup>46</sup> See "Eskom health studies" at <https://cer.org.za/programmes/pollution-climate-change/key-information>.

<sup>47</sup> [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)32345-0/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32345-0/fulltext)

person, particularly vulnerable and disadvantaged persons, the Lancet report also indicates that 92% of pollution-related disease occurs in low and middle-income countries and the deaths there are greater than 1 in 4.

41. In South Africa, Dr Mike Holland (who has conducted similar studies for the European Union, World Bank, amongst others) completed a study in 2017,<sup>48</sup> which assessed the harm to health from Eskom's coal-fired power stations. The research found that Eskom stations, through PM<sub>2.5</sub> emissions alone, results in more than 2,200 equivalent attributable deaths every year, and causes thousands of cases of bronchitis and asthma in adults and children annually. These impacts cost South Africa more than R30 billion annually, through premature deaths, hospital admissions, and lost working days. Out of all Eskom plants, Tutuka power station is responsible annually for 192 equivalent attributable deaths, over 1000 cases of bronchitis in children and adults, 204 hospital admissions, 340 963 restricted activity days, and 85 533 lost working days. Economic loss as a result of Tutuka's power station through premature deaths, hospital admission and lost working days is R2.4 billion per year.<sup>49</sup>
42. When Eskom's original postponement applications were opposed, a health impact assessment found that PM<sub>2.5</sub> exposure from Eskom's coal-fired power plants was the cause of approximately 2,200 to 2,700 premature deaths annually, and this includes 200 deaths of young children. The economic cost to society was estimated at approximately R30 billion per year.<sup>50</sup>
43. According to a report by E Cairncross, in 2015, Tutuka had the highest PM<sub>10</sub> emission per gigawatt hour of energy sent out, out of 12 Eskom coal-fired power stations.<sup>51</sup>
44. The lack of improvement of the air quality in the HPA in 10 years, and the negative health impacts on communities as a result of air pollution in HPA are extensively outlined in the *Broken Promises* Report, released in October 2017.<sup>52</sup> The recommendations made in the report include that no more MES postponements should be granted or AELs issued in priority areas, until such time as the air quality improves so that there is consistent compliance with NAAQS.
45. There is no doubt that health and environmental issues cannot be separated, and that detailed health and environmental consideration is required by legislation to be part of the AIR. It is therefore inappropriate and legally impermissible to proceed with an AIR and ADM without an extensive health and environmental impact assessment. Any attempt to do so will be vigorously opposed.

#### **Inappropriate approach to proposed air quality modelling**

46. The proposed method to account for the cumulative impacts is extremely problematic. DEA cannot consider each of these postponement applications in isolation, and must properly and accurately assess each impact, as well as the cumulative impact of all the postponement applications which are being – and will be - brought separately. In this regard, we point out that Eskom still intends to apply for a significant number of postponements for most of its stations. We submit that this information must be made available to the DEA and I&APs to provide a more accurate reflection of the impact of such postponements in the already highly-polluted HPA.
47. The air quality modelling approach suggested in the BID is not acceptable, for the following reasons:

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<sup>48</sup> Holland, M (2007) Health Impacts of Coal Fired generation in South Africa <http://cer.org.za/wp-content/uploads/2017/04/Annexure-Health-impacts-of-coal-fired-generation-in-South-Africa-310317.pdf>

<sup>49</sup> <https://cer.org.za/programmes/pollution-climate-change/publications/broken-promises-the-failure-of-the-highveld-priority-area>.

<sup>50</sup> <https://cer.org.za/wp-content/uploads/2014/02/Annexure-5 Health-impacts-of-Eskom-applications-2014- final.pdf>.

<sup>51</sup> Cairncross, EK (2017) Assessment of Eskom Coal Fired Power Stations <https://cer.org.za/wp-content/uploads/2016/07/AEL-Compliance-Assessment-of-Eskom-CFPSs-final-19-May-2017 final.pdf>.

<sup>52</sup> [https://cer.org.za/wp-content/uploads/2017/09/Broken-Promises-full-report\\_final.pdf](https://cer.org.za/wp-content/uploads/2017/09/Broken-Promises-full-report_final.pdf) and

- 47.1. The BID proposes to model “*only emissions from Tutuka will be modelled and not from other sources. A background concentration, i.e. the ambient concentrations of pollution excluding the contribution from Tutuka, will be determined so that the cumulative effects can be estimated.*” We note that there are major emission sources, mainly other Eskom coal-fired power plants (Majuba, Camden, Matla, Kendal, Hendrina, Duhva, and Komati), and the Sasol Synfuels plant, within a 100km radius of Tutuka., and numerous coal mining operations associated with these operation. The arbitrary *a priori* decision only to include Tutuka emissions in the modelling is unacceptable and not in accordance with international best practice. Similarly, the proposal to assess cumulative effects only relative to an undetermined “background concentration” is unacceptable. We reserve our rights to respond in detail to any scoping documents that may follow.
- 47.2. Tutuka is a large coal-fired power station which emits very significant quantities of SO<sub>2</sub> and NO<sub>x</sub>, in addition to PM. The SO<sub>2</sub> and NO<sub>x</sub> are transformed through chemical and physical processes in the atmosphere, to secondary fine particulate matter (secondary PM<sub>2.5</sub>), contributing significantly to total ambient PM<sub>2.5</sub>. The model selected to assess Tutuka’s air quality impact must therefore be capable of modelling both dispersion and chemical transformation (photochemical) processes, and should include the modelling of SO<sub>2</sub> and NO<sub>x</sub> emissions.
- 47.3. The modelling should also include, but not be limited to, PM<sub>2.5</sub> emissions, with PM<sub>2.5</sub> stack emission estimated as a fraction (using internationally-accepted default values) of PM<sub>10</sub> stack emissions.
- 47.4. Tutuka’s tall stacks with the magnitude of stack emissions imply that its emissions will be transported over long distances, potentially several hundred kilometres, with concomitant impacts. The modelling domain should therefore be sufficiently large to ensure a proper and full assessment of these impacts.
- 47.5. Rather than the ill-defined “*predicted ambient concentrations will be assessed in combination with reviews of ambient air quality monitoring data*”, modelled outputs (ambient concentrations) should be rigorously validated against ambient monitored data, and calibrated in accordance with best practice, if necessary, so that modelled outputs may be used with confidence. As stated above, Eskom in its previous postponement application maintained that health and environmental impacts of PM<sub>2.5</sub> could not be assessed due to ambient air quality monitoring data from the monitoring stations closest to Tutuka being inaccurate or missing. If this is still the case, it is an unacceptable justification for not assessing the impacts of PM<sub>2.5</sub>.
- 47.6. In the interests of accuracy, model runs for the purpose of validating the modelling should include emission rates based on measured daily average emission rates, as reported in reports under the AEL and the MES, for the most recently-available reporting year.
- 47.7. Model outputs should include, for each pollutant modelled, and, as appropriate for comparison with the NAAQS, 10 minute, hourly, daily (99% percentile values), and annual average concentration isopleths (lines of equal concentration) drawn at different levels, including at the WHO guideline values.
- 47.8. The impacts of the requested emission rates should be based on a modelling scenario at the emission rates requested in the postponement application, assuming that the plant is operating at its design maximum capacity or the maximum permitted throughput specified in its AEL, throughout the year. We point out that the United States Environmental Protection Agency guideline<sup>53</sup> makes this mandatory. It also requires that other “nearby” sources should be assumed to be emitting at these maximum rates.

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<sup>53</sup> Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches To Address Ozone and Fine Particulate Matter; EPA Federal register 40 CFR Part 5, 17 January 2017, available at [https://www3.epa.gov/ttn/scram/guidance/guide/appw\\_17.pdf](https://www3.epa.gov/ttn/scram/guidance/guide/appw_17.pdf)

## Impermissibility of rolling postponements and exemptions

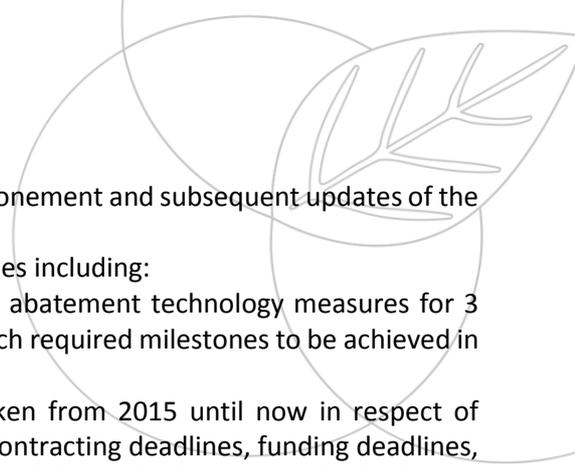
48. The Framework forms part of the AQA. The definition of “this Act” in AQA,<sup>54</sup> includes the Framework. It is clear from the List of Activities that the Framework’s requirements for a postponement must also be met. As set out above, the Framework clearly provides that postponement applications cannot be made where there is non-compliance with the NAAQS. This alone requires that DEA refuse this postponement application. Should it not do so, the NAQO would be acting *ultra vires*, since she is exercising powers outside of what legislation permits.
49. This is Tutuka’s second postponement, after not meeting its timeframes granted in the first postponement application. Eskom in fact, as set out in paragraph 2 above, admits that it seeks a “rolling postponement” until such time as retrofits are completed to bring the plant into compliance with MES. However, Eskom still has provided no evidence that it has taken sufficient steps to ensure compliance with the 2015 MES limits within the prescribed timeframe, when it became apparent to Eskom that it had to do so. Eskom has further abused the leniency provided for when it received the postponement in 2015, and has given no reason why it has not met its timeframes. At the October 2017 Air Quality Lekgotla, the DEA indicated that MES postponement applications have been subject of abuse, and that, as a result, s24 rights in the Constitution has been undermined.<sup>55</sup> The current application is one such example and it should be refused.
50. We reiterate – as is also stated in the DEA press release set out above - that exemptions from MES compliance are illegal. Rolling postponements until eventual decommissioning (such as Eskom seeks for SO<sub>2</sub> 2020 MES for all but 2 of its stations) are illegal as they are equivalent to exemptions.
51. The Eskom board minutes do not give any indication that Eskom has started with the necessary abatement measures to ensure timeous MES compliance at Tutuka. Eskom’s second application to postpone 2015 MES compliance at Tutuka, without showing any meaningful attempt to comply with the previous lenient timeframes is unacceptable and unlawful. It should be refused.

## Request for information

52. As indicated above, public participation is crucial in order for a holistic public participation process with as much information being accessible as possible, in order that there is informed participation and decision-making on the postponement application. Access to relevant information to allow meaningful public participation is also essential in order to give effect to the right to administrative action that is lawful, reasonable and procedurally fair, as provided for in the Promotion of Administrative Justice Act, 2000.
53. We therefore request that Eskom provide the following information to enable us to make meaningful input on this application:
- 53.1.confirmation of the pollutant/s and timeframe/s for compliance that Eskom is intending to apply for in this postponement application;
  - 53.2.details of the ADM chosen, a detailed explanation of why this particular model was chosen, and all assumptions that will be made in the ADM;
  - 53.3.all the data and information to be inserted into the model, including but not limited to: the pollutants considered (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>); the most recent Tutuka daily emission data for PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>x</sub>, over the full calendar year, and in an appropriate electronic format (CSV or Excel);
  - 53.4.monitored hourly average pollutant (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>2</sub>) data for all Eskom’s monitoring stations in the HPA, including monitoring stations’ downtime percentage, as well as the values and protocol which is used in case of downtime and/or missing data (CSV or Excel);
  - 53.5.all meteorological data that may be used in the ADM;

<sup>54</sup> S1(1).

<sup>55</sup> [http://www.airqualitylekgotla.co.za/assets/2017\\_5.5-postponement-of-compliance-timeframes--a-critical-analysis-lessons-learnt-possible-solutions.pdf](http://www.airqualitylekgotla.co.za/assets/2017_5.5-postponement-of-compliance-timeframes--a-critical-analysis-lessons-learnt-possible-solutions.pdf).

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- 53.6. previous compliance roadmaps submitted to DEA in the 2014 postponement and subsequent updates of the compliance roadmaps to date;
- 53.7. the full explanation for the delay in installing abatement technologies including:
- 53.7.1. reasons why it has decided not to commence with the abatement technology measures for 3 years since the DEA postponement decision in 2015, which required milestones to be achieved in respect of PM by 2019;
  - 53.7.2. the detailed MES compliance measures Eskom has taken from 2015 until now in respect of meeting its SO<sub>2</sub>, PM, and NO<sub>x</sub> objectives (including any contracting deadlines, funding deadlines, tenders, etc), and if there was a delay, the nature of the delay and what steps it had taken to solve this issue;
  - 53.7.3. detailed timeframe of what it intends to do from 2019-2024 - with "micro deadlines" which DEA can hold Eskom to account for between 2019- 2024; and
- 53.8. emissions of mercury from Tutuka and the impact thereof.
54. Should Eskom not be willing to make this information (or a part of it) available, kindly provide us with the reasons for this refusal.

## Conclusion

55. As set out above, given that HPA is not in compliance with NAAQS, postponement applications should not be considered. To do so would be in violation of the Constitution, the Framework, and AQA. For this reason alone, DEA must deny Eskom's application, otherwise it would be acting *ultra vires*.
56. Further, no rolling postponements are legally permissible, and these should not be considered. As this application is tantamount to a rolling postponement, it should also be denied for this reason.
57. Even assuming that NAAQS in the HPA were in compliance (which they are not), in the absence of evidence that:
- 57.1. granting of Eskom's applications will not result in NAAQS being exceeded;
  - 57.2. there will not be any health, environmental, or other risks if the applications are granted; and
  - 57.3. Eskom has made all efforts to ensure compliance with its previous postponement and fully explained why it could not achieve this,
- it is submitted that the application should not succeed.
58. The BID is defective, as it does not contain material information (for example, it does not explain: the Framework's postponement requirements, the fact that NAAQS are not in compliance in the HPA, the specific timeframes, pollutants, and standards for the postponement requested, or the health impacts of the postponement) necessary for the subsequent processes, including public participation process. The accuracy of the BID is essential to ensure that I&APs understand what is being sought and why their participation is important. Since various material information was missing from the BID, and the BID contains information that is misleading and/or inaccurate it should be rejected. Although we strongly dispute that Eskom may legally apply for postponement – for the reasons explained above – the process should begin afresh, with the publication of an accurate, informative BID.
59. Should Eskom persist with Tutuka's current unlawful postponement application, and because NAAQS are out of compliance in the HPA, in addition to the current objections, we will have no choice but to request the NAQO to review and withdraw any leniency granted by DEA in its 2015 postponement decision. This would require Eskom's immediate compliance with the 2015 MES standards for PM<sub>10</sub> (100 mg/Nm<sup>3</sup> until 31 March 2020, and 50 mg/Nm<sup>3</sup> from 1 April 2020) and revoking the extension timeframe for compliance granted to meet the 2020 MES for SO<sub>2</sub> (currently extended until 2025) and to meet the 2015 NO<sub>x</sub> MES (currently extended until April 2020). We will request that the new plant standards for PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>x</sub> be met immediately upon 1 April 2020.

60. We look forward to receiving the requested information and to further participation in this process, and would be grateful if you would kindly keep us updated.

Yours sincerely



per:

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