

# APPLICATION FOR POSTPONEMENT OF THE MINIMUM EMISSION STANDARDS (MES) COMPLIANCE TIMEFRAMES FOR ESKOM'S TUTUKA COAL-FIRED POWER STATION

# ISSUES AND RESPONSE REPORT VERSION 1

**Appendix G to the Public Participation Process Report** 

DATE OF COMPILATION: SEPTEMBER 2018

# PREPARED BY:

Naledzi Environmental Consultants (Pty) Ltd (NEC) Postnet Suite # 320, Private Bag X 9307, Polokwane, 0700 145 Thabo Mbeki Street, Fauna Park, Polokwane, 0699

> Tel: 015 296 3988 Fax: 015 296 4021

# **PROJECT INFORMATION**

Title:	Application for postponement of the Minimum Emission Standards (MES) compliance timeframes for Eskom's Tutuka Coal-Fired Power Station.		
Authors:	Marissa Botha		
Reviewer: Desmond Musetsho			
Status of Report: Eskom Project Number:	Version 1		
First Issue:	September 2018		
Applicant for Postponement:	Eskom Holdings SOC Ltd		
Independent Environmental Assessment Practitioner:	Naledzi Environmental Consultants (Pty) Ltd (NEC)		
(Pty) Ltd in support of Eskom Standards (MES) compliance t	ort has been prepared by Naledzi Environmental Consultants a's Application for Postponement of the Minimum Emission imeframes for Tutuka Coal-Fired Power Station, Standerton, Sibande District of the Mpumalanga Province.		
NALEDZI ENVIRONMENTA Approved for Naledzi Environm	AL CONSULTANTS (PTY) LTD: nental Consultants (Pty) Ltd		
Environmental Assessment Prac Desmond Musetsho, <i>Pr.Sci.Nat</i>			
ESKOM HOLDINGS LIMITED	: Environmental Management		
Approved for Eskom Holdings SO	C Ltd by:		
Eskom Environmental Manager Deidre Herbst			

### INTRODUCTION

This Issues and Response Report presents comments received from Interested and Affected Parties (I&APs), stakeholders and organs of state during the public registration period on the Background Information Document from 15 January to 19 February 2018.

The IRR provides a summary of the issues received and offers a response to the issues raised. As indicated, the public is consulted in two phases during the application for postponement of the MES for Eskom's Tutuka Coal-Fired Power Station and thus the IRR consists of versions. These versions include:

- Version 1 IRR appended to the draft application documentation
- Version 2 IRR appended to the finalised application documentation which is submitted to National Air Quality Officer for decision making.

Version 1 of the IRR is appended to the draft Application made available for public review and comment for a period of 30 calendar days from 17 September to 17 October 2018.

## TABLE OF CONTENTS

1.	APPLICATION PROCESS	1
2.	BACKGROUND INFORMATION DOCUMENT and public participation process	9
3.	REASON FOR DELAY IN MEETING THE MES AND POSTPONED TIMEFRAMES	18
4.	OPERATIONS AND DESIGN	22
5.	HEALTH IMPLICATIONS	22
6.	HIGHVELD PRIORITY AREA	25
7.	COMPLIANCE AND COMMISSIONING	28
8.	ATMOSPEHREIC IMPACT ASSESSMENT AND ATMOSPHERIC DISPERSION MODELLING	29
9.	ECONOMICS	34
11.	ALTERNATIVE TECHNOLOGY / RENEWABLE ENERGY	36
12.	EMISSIONS	37
13.	INFORMATION REQUESTS FROM I&APS	39

### LIST OF ACRONYMS

**MES** Minimum Emission Standards

NEM: AQA National Environmental Management: Air Quality Act, 2004 (Act 39 of

2004)

**AQA** Air Quality Act

**NAAQS** National Ambient Air Quality Standards

**AQMP** Air Quality Management Plan

**NEM** National Environmental Management

**NEMA** National Environmental Management Act, 1998 (Act 107 of 1998)

PM Particulate Matter SO<sub>2</sub> Sulphur Dioxide NOx Oxides of nitrogen

AEL Atmospheric Emission License
AIA Atmospheric Impact Assessment
AIR Atmospheric Impact Report
PPP Public Participation Process

PPP Report Public Participation Process Report BID Background Information Document

IRR Issues and Response ReportI&AP Interested and Affected Party

**DEA** Department of Environmental Affairs

NAQO National Air Quality Officer

**NEC** Naledzi Environmental Consultants (Pty) Ltd

Eskom Holding SOC Ltd
CER Eskom Holding SOC Ltd
Centre of Environmental Rights

**gW** groundwork **ELA** Earthlife Africa

**HEJN** Highveld Environmental Justice Network

HPA Highveld Priority AreaESP Electrostatic PrecipitatorsFGD Flue Gas Desulphurisation

**SA** South Africa

Table 1: Issues and Responses recorded from written submissions and public meetings during the 1<sup>st</sup> round of public engagement

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM				
1. AP	1. APPLICATION PROCESS						
1.1	We are aware of Eskom's intention to apply for postponement of the compliance time-frames for the MES governing PM for Tutuka power station, in terms of Section 21 of the NEM: AQA 2004.  Please register the Centre for Environmental Rights, groundWork and the Highveld Environmental Justice Network as interested and affected parties on the project database.	Ruchir Naidoo, the CER on 17 January 2018 via email.	The CER, groundWork and the Highveld Environmental Justice Network are registered on the project database and project information has been sent to the registered parties.				
1.2	Please confirm what postponement/s would be sought (which pollutants and for which periods and what concentrations).		As requested in its previous postponement application, Eskom formally requests that postponement be granted to Tutuka Power Station from complying with the PM and NOx emission limits that come into effect on 1 January 2019 (PM) in terms of the AEL and 1 April 2020 (NOx), respectively, until LNBs and FFPs have been successfully installed and optimised on all units. Additionally, Eskom requests that postponement be granted from complying with a more stringent SO <sub>2</sub> emission limit from 1 April 2020.  Tutuka requests that the following daily average emission limits apply to its operations:				

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONS	E GIVEN I	BY PROJECT	TEAM
			Table: Requested emission limits for Tutuk Power Station			or Tutuka
				Maximum release rate		
			PM SO <sub>2</sub>	Limit value (mg/Nm³)	Date to be achieved by	Average period
				300 OR	1 January 2019 – 31	Daily OR
				200	March 2027	Monthly
				50	From 1 April 2027 onwards	Daily
				3500	1 April 2020 - 31 March 2025	Daily
				3500	From 1 April 2025 – onwards	Daily
				1200	1 April 2020-31 March 2026	Daily
				750	From 1 April 2026 onwards	Daily

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
			Eskom has initiated a programme to apply for postponement for most of its coal fired power stations, for a variety of pollutant types, in respect of the 2020 MES. A first round of public meetings has just come to a conclusion and the CER and all interested and affected parties will be notified of further engagements.
1.3	Can CER submit comments on the BID on 19 February 2018?	Michelle Koyama, the CER via telephone on 16 February 2018	CER can submit comments on the BID on 19 February 2018.
1.4	In relation to Eskom's previous applications to postpone compliance with the MES, we submitted extensive comments and objections 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. 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.	Michelle Koyama (CER), Life after Coal and Highveld Environmental Justice Forum on 19 February 2018 via emailed letter	Section 6 of the MES makes provision for postponement of the compliance timeframe. It is in line with this provision that Eskom is submitting an application for postponement and following the required application process.  Based on the said Naledzi disagrees with the assertion that rolling postponements are illegal and will continue with the application process.
1.5	Even assuming that NAAQS in the HPA were in compliance (which they are not), in the absence of evidence that:  - granting of Eskom's applications will not result in NAAQS being exceeded;  - there will not be any health, environmental, or other risks if the applications are granted; and  - Eskom has made all efforts to ensure compliance	Michelle Koyama, Life after Coal and Highveld Environmental Justice Forum on 19 February 2018 via emailed letter	These questions have been answered in section 6 of the Atmospheric Impact Report (AIR) compiled as part of the application. Included in the AIR, is an assessment of the implications for ambient air quality of the emissions for which postponement is being applied. It should be noted, however, that the assessment is based on the use of the National Ambient Air Quality Standards (NAAQS) as indicative of whether ambient air quality is tolerable or intolerable. The modelling has shown that ambient air quality

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	with its previous postponement and fully explained why it could not achieve this.  It is submitted that the application should not succeed.		concentrations resulting from Tutuka's operations predicted using a dispersion model are seen to comply with the NAAQS for SO <sub>2</sub> , NO <sub>2</sub> and PM <sub>10</sub> concentrations other than for a small area, where there is predicted non-compliance with the daily and the hourly SO <sub>2</sub> standard, which is 9 km to the east of the power station in an sparsely inhabited area.  The status of Eskom's effort in respect of compliance to the present postponement is explained in detail in the motivation document. Tutuka Power Station has been in general compliance with the limits granted to the station as part of the NAQO's decision for the last postponement application. Eskom has confirmed the reasons for the delay in the installation of the technology to reduce PM and NOx emissions to new plant standard levels are related to procurement and approval processes. Nonetheless, Eskom is still fully committed to bringing Tutuka Power Station into compliance with the new plant standards for NOx and PM.
1.6	There were recent strikes regarding some of the Tutuka Power Station projects. A meeting should also be arranged in Sakhile.	Sizwe Dlamini at Standerton Public Meeting on 29 January 2018	A meeting has been scheduled for Thuthukani, next to Tutuka Power Station, for 30 January 2018, to allow I&APs opportunity to obtain more information regarding the application. Thuthukani is the nearest village to the power station. Unfortunately it is not possible to schedule public meetings in every community around the power station. Relevant speaker's

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
			offices and ward councillors have been engaged to select specific locations for public meetings.
1.7	How do we comment on the documentation provided at the library, if there is no one to guide us through the information?	Sizwe Dlamini at Standerton Public Meeting on 29 January 2018	The purpose of the public meetings during the 1 <sup>st</sup> and 2 <sup>nd</sup> round of public engagement serves to provide clarity on the documentation and results of the Atmospheric Impact Assessment. The project team is available at the public meetings to answer any questions and give clarity on any documents out for public review. The telephonic details provided may also be used in the event of queries.
1.8	The 1 <sup>st</sup> application for MES postponement was not communicated to the community. We are not happy about this.	Sipho Ngwenya at the Thuthukani Public Meeting on 30 January 2018	During the 2014 application there was widespread advertising of the process and this was in line with prescribed legislative requirements (newspaper notices were published and public meetings were held). Through this current process public meetings are hosted beyond areas used during the 2014 process, e.g. public meeting in Thutukani.
1.9	The AFM Lefikeng Church is a very suitable venue for public meetings as appose to the New Denmark Hall.	Sipho Ngwenya at the Thukhukani Public Meeting on 30 January 2018	Thank you for the feedback, we will note this. The next public meeting as part of the 2 <sup>nd</sup> round of public engagement would then also be held at the AFM Lefikeng Church in Thuthukani.
1.10	Thank you for all the explanations of the application and the process. It means that Eskom has received all its licenses legally and not through underhanded tactics. I would like to thank Eskom for bringing the information to us.	Sipho Ngwenya at the Thuthukani Public Meeting on 30 January 2018	Thank you, the comment is noted.
1.11	The District Air Quality Officer and DEA should be present and form part of the process to explain the process	Sipho Ngwenya at the Thuthukani Public Meeting on	Naledzi Environmental Consultants (Pty) Ltd is an independent professional environmental

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	and impacts at public meetings. The Department of Health must also be involved.  We are suffering here in Thuthukani. Also Naledzi is being paid to conduct the work. Why would they tell the truth?	30 January 2018	consulting company. They present an independent result / findings of the public participation process and Atmospheric Impact Assessment. Naledzi is a separate party. Eskom is the developer and, by law, is obligated to provide Naledzi with all the information they require to complete the non-biased assessment. The 3 <sup>rd</sup> party is the decision making authority to which the results of the independent studies are submitted. It would be premature to involve the DEA in the application process public meetings. They are the decision making authority; all the public participation process results, and issues recorded at public meetings would be submitted to DEA for decision making. DEA was also consulted as part of the Application Process, to make them aware, and they have also been invited to attend these public meetings  Naledzi has no role to decide whether the application should be approved or not. They only submit and present the results of the application process and assessment to DEA for decision making. It is the role of DEA to make the decision whether to approve the application or dismiss it.
1.12	Whilst AQA deals with exemptions in general, there is no provision that allows for exemption from MES compliance (this is confirmed in the press statement by the Minister who also advised Eskom and Sasol that their Initial requests to be exempt from the MES were illegal).	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	Previous investigations undertaken for Eskom's 2014 postponement application have revealed that much of the Highveld Priority is in fact in compliance with the NAAQS for at least SO <sub>2</sub> and NOx and it seems highly probable that the non-

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	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 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, 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.		compliance with the PM <sub>10</sub> stems mostly from low elevation sources such as domestic fuel use, rather than from the elevated emissions from the power station stacks. That notwithstanding, the prevailing air quality in the area will be assessed in detail and described in the AIR, together with an assessment of the implications of the postponement application emissions for ambient air quality.
1.13	The 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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	Please see 1.12 above.
1.14	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 was is misleading and/or inaccurate it should be rejected. Although we	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	There is no regulatory obligation for a Background Information Document (BID) nor a prescription as to what it should and should not contain. The BID was prepared to provide no more than high-level information on the planned postponement and to describe how people could participate in that process.  The postponement process is detailed in the documents that are made available for comment in round two of the public consultation process.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
1.15	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.	Mishalla IV.	
1.15	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/Nm3 until 31 March 2020, and 350 mg/Nm from 1 April 2020) and revoking the extension timeframe for compliance granted to meet the 2020 MES for SO2 (currently extended until 2025) and to meet the 2015 NOx MES (currently extended until April 2020).  We will request that the new plant standards for PM <sub>10</sub> , SO2, and NOx be met immediately upon 1 April 2020.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	This is noted. It should be recognised, however, that even were Eskom to immediately commence with the installation of abatement equipment it would take at least 5 years for the abatement equipment to be installed across all six generating units. Further if Eskom were required to comply with the standards it may require the closure of the full station until compliance can be achieved with significant risk to national electricity supply and grid stability, with a knock-on effect on the country's economy.
1.16	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	Please see 1.12 above.
1.17	Even if it were permissible for Eskom to apply for	Michelle Koyama, Life after	Please see 1.4 above.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
2. BA	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.  **CKGROUND INFORMATION DOCUMENT AND PUBLICATION DOCUMENT	Coal and Highveld Environmental Justice Network  BLIC PARTICIPATION PROCE	SS
2.1	The BID is problematic in several respects, including:  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;  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;  There are deficiencies in the proposed approach for conducting an AIR, including omitting any discussion on assessing the health impacts from a postponement; and  There is an inappropriate approach to the proposed air quality modelling.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	According to section 24.1 of the submission of the CER, the purpose of the BID is to present: 1) an overview of the reasons for Tutuka's postponement, 2) which includes a description of the MES, 3) why Eskom claims that it cannot meet the MES, and 4) an explanation of the application and public participation process for the postponement.  Naledzi is content that the BID provided sufficient information to bring the postponement application to the attention of the public and that each of these points have been addressed as is outlined below:  1) The BID outlines that Tutuka needs to install relevant abatement technology to bring the station into compliance with the MES. This then infers that the station is currently unable to comply with the MES due to its technological design. It is also outlined that Eskom is

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
			requesting postponement from the MES until such time as the relevant technology has been installed on all 6 units, as had been motivated in the 2014 postponement application. The <i>detailed</i> reasons that motivate the postponement application are included in the postponement application documents are made available to the public through the second round of public engagement.
			2) The concept of the MES as well as the station's current emission limits are described in detail in the BID.
			3) Stating "why" Eskom cannot comply with the MES is, in essence, the same as giving reasons for the postponement application. The BID outlines that Tutuka needs time to install relevant abatement technology to bring the station into compliance with the MES. This then infers that the station is currently unable to comply with the MES due to its technological design. It is also outlined that Eskom is requesting postponement from the MES until such time as the relevant
			technology has been installed on all 6 units. The detailed reasons that motivate the postponement application are included in the postponement application document which is available to the public for review and comment during the second round of public engagements. This is the document that is legally required to outline detailed reasons for the postponement

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
2.2	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	application. 4) The public participation process is outlined in sufficient detail in the BID (Section 10).  Therefore Naledzi is of the submission that adequate information was provided in the BID, to create awareness and trigger participation with respect to the postponement applications.  The information that is highlighted here as being deficient is included in the documentation that is now available in the public domain.  The health impact in terms of compliance to the ambient standards is addressed in the Atmospheric Impact Report which will be made available in September 2018  See comment above. Naledzi feels that the BID was informative enough for the reader to understand that Tutuka is unable to meet the more stringent emission limits specified in its AEL, and that is requires a postponement of the new and existing plant standards until relevant abatement technology is installed on all of its units (for PM and NOx), or until the station is decommissioned (for SO <sub>2</sub> ). This is the crux of the postponement application. More detailed reasons for the application are included in the "motivation document "as made available for public review in September 2018.  Section 10 of the BID contains the necessary

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
			information required for the public to understand the public participation process that Eskom will follow for the postponement process. It also makes an explicit invitation to all interested and affected parties to register and to ask questions and to provide comments in the BID and the process involved for Tutuka's postponement application.
2.3	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	While the declaration of the Highveld as a Priority Area is recognised, it is again argued that there are areas within the priority area where there is full compliance with the NAAQS. Also as previously described, the AIR contains an assessment of the current air quality status and the implications of the emissions that are the subject of the postponement application, for ambient air quality.
2.4	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 noncompliance with AAQS in the area, and what the health impacts of such non-compliance are.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	Please see 2.3 above. The fact that Tutuka is in the HPA is now explicitly described in the AIR.
2.5	The BID does not set out the actual MES and	Michelle Koyama, Life after	The details highlighted here as deficient in the

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	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 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.	Coal and Highveld Environmental Justice Network	BID are explicitly outlined in the AIR, as well as in the motivation document which is now available for public review. There is no legislation that guides the content of the BID. The BID was released with the intention to bring the background and intention of Eskom's postponement to the attention of the public. Though the emission reduction plan, as outlined in Eskom's previous postponement application has been delayed, it is still Tutuka's full intention to install technology on all of its units, in order to bring the entire station into compliance with the new plant standards for PM and NOx.
2.6	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	The reference to the 2013 Amendments is because those are the regulations that currently prevail and so the idea that this was done to create the 'incorrect impression' is refuted. In addition, whilst Eskom did participate in the process of developing the MES regulations, the organisation is of the submission it repeatedly highlighted the tremendous cost and technical difficulties in complying with the proposed MES. These submissions were largely disregarded in the MES finally published.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
2.7	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	ntil 31 March 2024 ntil decommissioning	The time required for retrofitting Eskom's entire fleet of power stations, will require much longer than the 5 year transition period. Eskom is of the submission it repeatedly highlighted these limitations during the process of developing the MES but has been disregarded by the authorities. The organisation specified that it communicated openly in the previous postponement application in terms of realistic timelines to come into full compliance with PM limits.  It is acknowledged that there was a mistake in the BID regarding the emissions for which Eskom was applying postponement for. The correct representation of what Eskom is applying for is presented in the documentation that is now in the public domain. We apologise for this oversight. It should be noted, however, that the assessment included in the AIR is for SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>10</sub> and PM <sub>2.5</sub> .

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
2.8	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 should be rejected as it does not contain the material and necessary information required for a postponement application.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	Again we remind the CER that the requirement for a BID is not defined in the regulatory process. The BID actually seeks to invite participation in the process rather than necessarily provide a detailed description of the application. The information sought by the CER is all contained in the documents that are now in the public domain for review.
2.9	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, with a detailed justification for its choices. This would enable any concerns to be addressed before any modelling is conducted.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	We confirm that the dispersion modelling done is fully compliant with the ADM regulations. The model used is the Calpuff model and this information is provided in detail in the documentation now in the public domain and available for review and comment.
2.10	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	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	We are not sure as to the criteria used by the CER to conclude as to 'an inadequate number of monitoring stations'. More monitoring stations would always be helpful in verifying the model

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	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. Eskom indicated that "unfortunately, there is very limited information available on ambient particulate concentrations in the vicinity of Tutuka Power Station. The availability of PM10 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. PM10 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 NOx 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 NOx.		accuracy but there is at least one dedicated monitoring station. We have not used the Majuba Monitoring Station for this application but agree that the PM <sub>10</sub> data is not at the level that it could be. There is a detailed account in the AIR of the problems experienced at the Grootdraai dam station and what has been done to deal with the missing data.
2.11	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. Instead of indicating the impact of Tutuka on the surrounding communities (which was requested by attendees), Eskom's presentation	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	The contents of the BID are as indicated not legally defined. The AIR has been completed in compliance with the relevant DEA guidelines.  In South Africa currently, the legal definition of whether ambient air quality is tolerable or not tolerable is the National Ambient Air Quality Standards and that is the basis of the assessment

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	focuses primarily on other sources of pollution which		offered in Eskom's impact in the Air Quality
	impact their health. For instance in the presentation,		Impact Report.
	"Eskom acknowledges that its activities have an impact on		
	ambient air quality, BUT ambient air quality is influenced		The reference made by CER, with respect to
	by many different sources of pollution. We breathe in air		other risks of impact, hold in determining the
	pollution from many different sources. Health effects		best practicable environmental option, as it
	depend a lot on how close a person is to the source, rather		advises national planning to implement
	than on how big the source of pollution is. So even though		integrated air quality management. Thus, the
	a cigarette makes less smoke than a power station,		most critical interventions to manage ambient air
	cigarette smoke causes much more harm than power		quality impacts may not be retrofitting the power
	station pollution because it is directly inhaled by a		stations, but to implement mitigation measures
	person into the lungs. Even the smoke that is inhaled		related to the other sources. This is in line with
	when burning coal for cooking and heating causes harm.		the principles of offsets projects.
	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 17th 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		
	3rd and 4th 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		

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
3. RI	pollution" 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. 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".	STPONED TIMEFRAMES	
3.1	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/Nm³ by 2015 and the new plant MES of 50 mg/Nm³ by 2020.  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.	Michelle Koyama, Life after Coal, Highveld Environmental Justice Network on 19 February 2018 via emailed letter	Eskom's reasons for applying for the postponement are addressed in the Motivation document released for public review. The retrofit programme incurred delays as a result of investment, procurement, budget confirmation and commercial delays.
3.2	Through additional postponement applications, Eskom is only proposing to meet the 2020 standards for NOx 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	Michelle Koyama, Life after Coal, Highveld Environmental Justice Network on 19 February 2018 via emailed letter	There will not be an updated BID. The documentation now available in the public domain for review details the full application.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
3.3	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 NOx (which is not what was relayed to us in the email correspondence) we reserve our rights to make additional comments on an accurate, updated BID.  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	Michelle Koyama, Life after Coal, Highveld Environmental Justice Network on 19 February	Again it is strongly emphasised that the BID served principally to invite participation in the process. The reasons for the delay in retrofitting
	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".	2018 via emailed letter	the power station are provided in the AIR and the application itself, both of which are available for public review.
3.4	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.	Michelle Koyama, Life after Coal, Highveld Environmental Justice Network on 19 February 2018 via emailed letter	Eskom has repeatedly highlighted that it would simply not be possible to meet the MES and the compliance timeframes for its fleet of coal-fired power stations. The costs and logistical challenges for implementing the retrofits needed for compliance render the compliance timeframes impossible to meet.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
3.5	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/Nm3 to 200 mg/Nm3 by 2019 - which is still twice the 2020 standard), it will still only commence its retrofitting programme in 2019.	Michelle Koyama, Life after Coal, Highveld Environmental Justice Network on 19 February 2018 via emailed letter	The reasons for the time frames are explained in the motivation document now available viz. The retrofit programme incurred delays as a result of investment, procurement, budget confirmation and commercial delays.
3.6	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.	Michelle Koyama, Life after Coal, Highveld Environmental Justice Network on 19 February 2018 via emailed letter	In Tutuka's postponement application in 2014, it was made clear that the station would only be able to comply with the new plant emission limit for PM once all units were retrofitted. Delays outlined above have shifted the full compliance date out, as outlined in detail in the motivation document now circulated for public review.
3.7	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.	Michelle Koyama, Life after Coal, Highveld Environmental Justice Network on 19 February 2018 via emailed letter	Eskom is required to submit a postponement application which meets the regulated requirements which Naledzi believes Eskom has done with the motivation, atmospheric impact report and public participation reports now available.  The reasons for the present time frames are explained in the motivation document now available viz. The retrofit programme incurred delays as a result of investment, procurement, budget confirmation and commercial delays.
3.8	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	Michelle Koyama, Life after Coal, Highveld Environmental Justice Network on 19 February 2018 via emailed letter	It has been highlighted by Eskom that the retrofit programme incurred delays as a result of investment, procurement, budget confirmation and commercial delays.  Eskom contends that it did not wilfully disregard

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	due course. The low NOx 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-NOx 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 200mg/Nm3 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.		DEA's decisions but experienced delays in project implementation as described above.
3.9	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	With the challenges faced by Eskom in completing the implementation of the Emissions Retrofit Plan, Eskom is using the legal provisions as allowed for in the MES documentation. In support of its application, all requirements for this application will be provided. Eskom believes it has met the legal requirements for a postponement application including providing reasons for the delays viz. the retrofit programme incurred delays as a result of investment, procurement, budget confirmation and commercial delays.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
4. OI	PERATIONS AND DESIGN		
4.1	What is the lifespan of Tutuka Power Station?	Johannes van der Wath at Standerton Public Meeting on 29 January 2018	Tutuka is expected to still be in service up to at least 2041 based on a 50 year life.
4.2	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	This is correct. This is why Tutuka has been targeted for FFP installations, as it is one of Eskom's highest PM emitting stations. Once FFPs have been installed on each unit. The station will be in full compliance with the new plant standards.
5. HI	EALTH IMPLICATIONS		
5.1	What are the effects of emissions from the power station on people?	Sizwe Dlamini at Standerton Public Meeting on 29 January 2018	There are two separate air qualities being referred to; firstly the ambient air quality at ground level, and secondly, the air quality of emissions emitted at the stack of the power station.
			The ambient air quality is the quality of air breathed by people at ground level. This application for postponement is subject to an Atmospheric Impact Assessment. The assessment will ascertain how ambient standards will be affected by the power station emissions. The assessment will only focus on the ambient standards and will outline health implications of exposure to pollutants emitted by Eskom's stations, but also whether or not the air on the ground around the station is safe to breathe.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
5.2	What are the impacts on the Thuthukani community?	Sizwe Dlamini at Standerton Public Meeting on 29 January 2018	In the AIR/AIA, Eskom will supply Naledzi with actual emissions data that would be emitting from the power station stack. The Air Quality Specialist would use the data to model a scenario to indicate what the concentration of the emissions at ambient level where people breathe air, such as at Thuthukani, would be, based on the actual emissions emitted at the stack. It would also determine the effects of this application on the communities surrounding the power station.  The NAAQS specify what levels of concentrations are acceptable for humans and also indicate what limits may not be exceeded. If the model proves that the ambient air quality limit is not exceeded then the emissions would be acceptable, yet if the ambient limits are exceeded it would need to be determined how Eskom should further abate it.
5.3	The wind blows ash towards Thuthukani. This is not acceptable. There are long queues at the local clinic for Tuberculosis. Are these cases related to the Tutuka emissions? The people of Thuthukani are sick as a result as a result of the emissions.	Sipho Ngwenya at the Thuthukani Public Meeting on 30 January 2018	Tuberculosis and other respiratory diseases have many causes including smoking. The emissions impacting on Thuthukani from Tutuka are assessed as being predominately within the legally acceptable limits in terms of RSA law; see the Atmospheric Impact Report for full details.
5.4	Is the community of Thuthukani outside the buffer?	Oupa Molho at the Thuthukani Public Meeting on 30 January 2018	There is no buffer zone representing an area of risk around the power station.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
5.5	There is a wealth of health impact assessment research 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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via emailed letter	Eskom is constantly implementing interventions that reduce the air quality emissions, but the AIR and Health Impact study will show the impact of these interventions. It should be borne in mind that research undertaken will reflect the results based on the air quality interventions at a time. The emissions impacting on communities and the environment from Tutuka are assessed as being predominately within the legally acceptable limits in terms of RSA law; see the Atmospheric Impact Report for full details.
5.6	There are numerous health studies conducted world-wide (including Eskom's own studies), that indicate that there are serious health impacts from air pollution. The 2018 Lancet Commission on Pollution and Health 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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	South Africa has defined National Ambient Air Quality Standards (NAAQS) which serve to determine tolerable and intolerable air quality. The assessment presented here is based on compliance with those standards.
5.7	Whilst one NEM Principle states 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 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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	This is noted.
5.8	In South Africa, Dr Mike Holland (who has conducted similar studies for the European Union, World Bank, amongst others) completed a study in 2017, which assessed the harm to health from Eskom's coalfired power stations. The research found that Eskom stations, through PM2.5 emissions alone, results in	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	South Africa has defined National Ambient Air Quality Standards (NAAQS) which serve to determine tolerable and intolerable air quality. The assessment presented here is based on compliance with those standards.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
5.9	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.  When Eskom's original postponement applications were opposed, a health impact assessment found that PM2.5 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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	This process will undertake a detailed costbenefit and health impact study to which Eskom will propose interventions to reduce the impacts. Following the production, the report will be made available to all stakeholders for their comments and inputs, and will be submitted to the authorities for decision making. This is noted.
6. HI	GHVELD PRIORITY AREA		
6.1	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. A priority	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via emailed letter	Our assessment of ambient air quality across the Priority Area indicates that the ambient air quality is largely in compliance with the NAAQS, except for PM <sub>10</sub> which appears to derive from ground level sources such as domestic fuel use. Eskom is addressing its impacts on air quality through its air quality implementation plan which reduces emissions at a power station level and also aims to improve

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	area's declaration can only be withdrawn if the area is in compliance with NAAQS for more than 2 years. 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.		air quality on the ground in areas around its power stations (air quality offsets).
	The air quality has not improved over the past 10 years since the declaration, 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. DEA's annual State of the Air reports, state 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. The dire air pollution situation in the HPA and its implication on human health and the environmental right is extensively reported in the "Broken Promises" report, which was submitted to the DEA in October 2017.		
6.2	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 PM10, 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 NOx and 82% of SOx in the Highveld. In	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via emailed letter	These numbers are true in respect of the total mass of emissions but how those manifest in respect of ambient air quality is a direct function of where the emissions occur viz. at ground level or at several hundred meters above ground level as is the case of the Eskom power stations. Monitoring data shows a distinct early morning peak of PM <sub>10</sub> and NO <sub>2</sub> with a mid-afternoon peak of SO <sub>2</sub> . The only plausible explanation of these

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	comparison, household fuel burning accounts for a mere 6% of PM10, 1% of SOx and 1% of NOx in relation to overall ambient air pollution in the Highveld. The DEA's mid-term review of the HPA AQMP, dated December 2015 but made available for comment in February 2016, indicates that: "industrial sources in total are by far the largest contributor of SO2 and NOx in the HPA, accounting for approximately, 99.57 34% of SO2 and 95.97% of NOx, while mining is the largest contributor of PM10 emissions"; and "there has not been a significant decrease in emissions of industrial and mining source. Nonetheless, industrial sources are still the largest contributors of SO2 and NOx in the HPA with mining		patterns is that the PM <sub>10</sub> and NO <sub>2</sub> peaks derived from ground level emissions sources such as domestic fuel use with the plume from the power station only reaching ground level after a considerable period of mixing. Naledzi argues that the highly stable and inversion conditions that so often prevail over the Highveld serve to limit the impact of the power station plumes from reaching ground.  Eskom believes that it is legally permissible to submit a postponement application.
	being the main contributor of PM10.  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.		
	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		

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	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.		
7. CO	OMPLIANCE AND COMMISSIONING		
7.1	Who is going to monitor that the power station will comply with the minimum emission standard levels at the stack and not exceed to maximum limits/upper limits and how?	Johannes van der Wath at Standerton Public Meeting on 29 January 2018	Eskom is required to monitor its stack emissions on a continuous basis. Continuous emission monitors indicate, in real time, whether the station is in compliance with the pollutant specific emission standards or not. Eskom reports a summary of its compliance status to the DEA and the relevant licence authorities on a monthly basis.
7.2	Eskom is also bound by, the Framework for Air Quality Management ("the Framework"), AQMP, 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 NAAQS. Eskom must limit its emissions to help ensure NAAQS compliance.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via emailed letter	Based on the AIR completed, Tutuka's impact on ambient air quality is limited. Eskom argues that compliance efforts would be best served by simultaneously addressing emissions from power stations and offsetting the power stations' emissions through reducing exposure of communities to low level sources. Efforts to reduce domestic fuel use would result in a positive impact on people who are living with the burden of degraded air quality compared with compliance with the MES.
7.3	A list of activities which have or may have significant detrimental effect on the environment and health, as well as associated MES, were published in terms of Section 21	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	While Eskom may not have successfully implemented the required technologies to ensure full compliance with the MES, significant

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	of the AQA ("the List of Activities"). This list was set in a multi-stakeholder process over several years, in which Eskom was an active participant. The list came into effect in 1 April 2010 and prescribes MES for particular activities, including combustion installations—such as Eskom's coal-fired power stations, for PM, SO <sub>2</sub> and 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		interventions have been implemented, which have resulted in observable reduction in emissions. This will be outlined in detail in the documentation that will be released in the next few months as part of Eskom's further postponement applications.
0 47	that that the MES would come into force.		
8. AT	TMOSPEHREIC IMPACT ASSESSMENT AND ATMOS	SPHERIC DISPERSION MODEL	LING
8.1	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.  To conduct an AIR without a detailed health and environmental risk assessment is unlawful. The Constitution recognises the inter-linked nature of	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	Naledzi stands by its approach and reiterate that the requirements of the AIR are articulated as (in the AIR Regulations) a comparison between measured and modelled air quality and the relevant NAAQS. We recognise and accept that the WHO standards have more stringent values than the NAAQS but the WHO standards are not prescribed as the NAAQS for South Africa.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	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, 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.		
8.2	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	They are indeed and it is accepted as such. Again it is the NAAQS that have been promulgated to define what is considered to be tolerable air quality and the AIR regulations ask only for a comparison between the measured and predicted ambient air quality and the NAAQS.
8.3	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	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	It is a legal requirement that any MES postponement application be accompanied by an independently conducted atmospheric impact assessment, which includes air dispersion modelling. This modelling exercise has been conducted in line with the relevant regulations and the report that is now being made available to the public for review, is in line with the format outlined in these regulations. The atmospheric impact assessment outlines whether Tutuka's emissions influence the compliance status of

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	the impact of facility on human health, 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). The ADM should also comply with the Regulations regarding ADM, 2014 ("the ADM Regulations").		ambient air quality with the NAAQS on the ground.
8.4	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. 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.  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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	It is noted that an AIR should include focus on impacts on human health and the environment. The AIR that has been written to accompany Tutuka Power Station's postponement application has assessed ambient air quality against the current existing NAAQS to ascertain human health impacts. Additionally, a thorough cost benefit analysis is being conducted as part of Eskom's greater postponement application process, which will, in detail, assess human health in relation to exposure to Eskom's emissions. The availability of this assessment will be announced as part of the greater postponement application process, and all interested and affected parties are asked to provide comments into this.
8.5	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	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	The best representation of cumulative effects is in the ambient air quality data from the monitoring stations because whatever is in the air is measured. The discrepancy between what is modelled and what is measured is attributed to other sources that combine cumulatively to result in the ambient concentration actually measured.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	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.		In addition Eskom is not applying to increase its emission simply to keep them as they are currently so again the physically measured air quality serves as the best definition possible of the cumulative effect.
8.6	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 prior 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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	See 8.5 above
8.7	Tutuka is a large coal-fired power station which emits very significant quantities of SO2 and NOx, in addition to PM. The SO2 and NOx are transformed through chemical and physical processes in the atmosphere, to secondary fine particulate matter (secondary PM2.5), contributing significantly to total ambient PM2.5. 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 SO2 and NOx emissions.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	Accepted as such and confirmed that the model chosen has a chemical transformation function.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
8.8	The modelling should also include, but not be limited to, $PM_{2.5}$ emissions, with $PM_{2.5}$ stack emission estimated as a fraction (using internationally-accepted default values) of $PM_{10}$ stack emissions.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	Confirmed that this has been done.
8.9	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	This is true. Past experience has shown that a 60 x 60 km domain is the optimum balance between the distance that could be travelled by the pollution and the near field ground level concentrations.
8.10	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> .	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	The data on PM <sub>2.5</sub> concentrations at Grootdraai is still limited. The modelling does however; include predictions of PM <sub>2.5</sub> including that arising from chemical transformation. It is indeed a pity that the predicted PM <sub>2.5</sub> concentrations cannot be verified against monitored data in this instance but the conversion modelling method is nonetheless consistent with good practice.
8.11	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	Naledzi does not believe that this is necessary and instead uses an average emission factor for the entire year.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
8.12	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	This has been done as detailed in the comments
8.13	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 makes this mandatory. It also requires that other "nearby" sources should be assumed to be emitting at these maximum rates.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network	This is indeed what has been done excluding the emissions from other sources.
9. EC	CONOMICS		
9.1	Based on the lifespan of Tutuka Power Station, is it worthwhile to spend the money on retrofitting?	Johannes van der Wath at Standerton Public Meeting on 29 January 2018	Tutuka is expected to be still in service up to at least 2041, the power station will still be in service for so long, it must still comply with all the legislative requirements such as the 2013 MES. Retrofitting is, hence, a step towards complying with these standards. Hence the power station still has a good 23 years of service left which warrants the investment of abatement technology for particulate matter and NOx. SOx is a different aspect.
9.2	Will there be any jobs when Eskom installs the abatement technology at Tutuka?	Thokozani Ngobeni at the Thuthukani Public Meeting on 30 January 2018	There will be no new development at the Tutuka power station. Eskom will only install specialist technology. Please know that there should be no

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
			expectation of jobs.
10. IM	IPERMISSIBILITY OF POSTPONEMENT APPLICATI	ONS AND EXEMPTIONS	
10.1	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via emailed letter	See 1.4 above.
10.2	The Framework forms part of the AQA. The definition of "this Act" in AQA, 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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via emailed letter	See 1.12 above
10.3	This is Tutuka's second postponement, after not meeting its timeframes granted in the first postponement application. Eskom in fact, 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	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via emailed letter	Tutuka Power Station is still committed to reducing its PM and NOx emissions to levels that comply with new plant emission standards, Delays in the retrofit process can be attributed to procurement and procedural delays.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	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, Section 24 rights in the Constitution has been undermined. The current application is one such example and it should be refused.		
10.4	Exemptions from MES compliance are illegal. Rolling postponements until eventual decommissioning (such as Eskom seeks for SO2 2020 MES for all but 2 of its stations) are illegal as they are equivalent to exemptions.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via emailed letter	See 1.4 above
10.5	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.	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via emailed letter	It is a lengthy process to install abatement technologies at existing power station. Reasons for the delay of the installation of the technology at Tutuka are outlined in detail in the motivation document circulated for public comment.
11. ALTERNATIVE TECHNOLOGY / RENEWABLE ENERGY			
11.1	Does Tutuka Power Station comply with green energy?	Sizwe Dlamini at Standerton Public Meeting on 29 January 2018	The generation of electricity from coal is not considered a green energy.
11.2	We address you as the Life After Coal Campaign, a joint campaign by CER, gW and ELA Johannesburg. The campaign's aim is to discourage investment in new coal-fired power stations and mines to accelerate retirement of	Michelle Koyama, Life after Coal and Highveld Environmental Justice Network on 19 February 2018 via	We welcome your participation and thank you for the questions raised and comments offered.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	SA'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 HEJN.	emailed letter	
12. EN	MISSIONS		
12.1	How far does the air pollution travel / spread from Tutuka Power Station? Is Sakhile affected?	Sizwe Dlamini at Standerton Public Meeting on 29 January 2018	The way in which emissions from power station stacks (chimneys) impact on ground level is a function of wind velocity (speed and direction) and atmospheric stability. In general terms emissions from power stations are prevented from coming to ground by atmospheric stability, and are brought to ground by turbulent conditions which promote mixing in the atmosphere. The emissions from the stacks may come to ground in relatively close proximity to the source (several hundred meters) with concentrations generally (but not always) decreasing with distance from the source. As a rough estimate the highest ground level concentrations occur somewhere between 1 and 5 km from the power station. The best way of understanding these impacts is by looking at the spatial representation of the ground level concentrations and then equating the different concentrations to different possible effects and it is this that will be presented in the AIRs that will be made available in the next round.
12.2	Sulphur dioxide is a major emission in the Standerton area. How does Eskom control its sulphur dioxide emissions?	Johannes van der Wath at Standerton Public Meeting on 29 January 2018	Tutuka has not exceeded the existing plant SOx limit. As of 28 January 2018 Eskom was operating at 185mg/m <sup>3</sup> . SO <sub>2</sub> control technology
	CHIISSIOHS!	27 January 2010	operating at rosing/in. SO2 control technology

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
			is very expensive, requires a lot of water and creates a waste stream. Kusile and Medupi Power Stations are new stations, Kusile is commissioned with FGD installed, Medupi will retrofit FGD from 2023/4. The Eskom postponement application for most of its plants which has been initiated will assess the pro's and cons of installing FGD on existing Eskom power stations.
12.3	According to a report by E Cairncross, in 2015, Tutuka had the highest PM <sub>10</sub> emission per gigawatt hour of energy 51sent out, out of 12 Eskom coal-fired power stations.	Michelle Koyama. Life after Coal, Highveld Environmental Justice Network on 19 February 2018 via emailed letter	That is correct
12.4	There is no control of the sulphur dioxide emissions. Our children are born into this air pollution.	Sipho Ngwenya at the Thuthukani Public Meeting on 30 January 2018	12.2 has provided a response on technology to control sulphur dioxide emissions. The AIR will also assess if ambient air quality standards are exceeded in populated areas due to Tutuka power station's emissions.
12.5	Eskom's monitoring stations are too far from Tutuka power station. Grootdraai monitoring station is 11km away. Thuthukani is next to the power station. How accurate is the monitoring data then?	Sipho Ngwenya at the Thuthukani Public Meeting on 30 January 2018	Eskom has been monitoring ambient air quality for the past 30 years. This data provides information which will support the dispersion modelling which forms part of the AIR. Mathematical dispersion models will be used to determine the concentration of emissions at ambient level. The model will be able to determine the air quality in the area as a result of emissions from Tutuka.

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM		
13. IN	13. INFORMATION REQUESTS FROM I&APS				
13.1	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.  We therefore request that Eskom provide the following information to enable us to make meaningful input on this application:  • confirmation of the pollutant/s and timeframe/s for compliance that Eskom is intending to apply for in this postponement application;  • 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;  • all 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> , NOx);  • most recent Tutuka daily emission data for PM <sub>10</sub> , SO <sub>2</sub> , and NOx, over the full calendar year, and in an appropriate electronic format (CSV or Excel);  • monitored hourly average pollutant (PM <sub>10</sub> , PM <sub>2.5</sub> ,	Michelle Koyama. Life after Coal, Highveld Environmental Justice Network on 19 February 2018 via emailed letter	Naledzi believes it has provided the information necessary for the public and decision makers to make an informed input into and decision in respect of Eskom's MES application for Tutuka.  If the CER and other parties wish additional information they are welcome to submit a formal PAIA request which will be evaluated in terms of that legislation and responded to accordingly.		

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
NUMBER	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);  • all meteorological data that may be used in the ADM;  • previous compliance roadmaps submitted to DEA in the 2014 postponement and subsequent updates of the compliance roadmaps to date;  • the full explanation for the delay in installing abatement technologies including:  - 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;  - the detailed MES compliance measures Eskom has taken from 2015 until now in respect of meeting it's SO <sub>2</sub> , PM, and NOX 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;  - 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  - emissions of mercury from Tutuka and the	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
I	impact thereof		

NUMBER	ISSUE RAISED	BY WHOM AND WHEN	RESPONSE GIVEN BY PROJECT TEAM
	Should Eskom not be willing to make this information (or a part of it) available, kindly provide us with the reasons for this refusal.		