

# MINISTER FORESTRY, FISHERIES AND THE ENVIRONMENT REPUBLIC OF SOUTH AFRICA

Reference: LSA 191719

#### APPEAL DECISION

APPEALS AGAINST THE GRANTING OF AN ENVIRONMENTAL AUTHORISATION TO ESKOM HOLDINGS SOC LTD FOR THE PROPOSED RICHARDS BAY COMBINED CYCLE POWER PLANT PROJECT (CCPP) 3000MW, LOCATED IN KWAZULU-NATAL PROVINCE

GroundWork and

Appellants

South Durban Community Environmental Alliance

Eskom Holdings SOC Ltd

Applicant

Department of Environment, Forestry and Fisheries

Competent Authority

Appeal: This is an appeal lodged against the decision of the Acting Chief Director: Integrated Environmental Authorisations of the Department of Environment, Forestry and Fisheries (the Department) to grant an Environmental Authorisation (EA) to Eskom Holdings SOC Ltd (applicant) on 23 December 2019, for the proposed construction of Richards Bay Combined Cycle Power

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Plant (CCPP) 3000 MW and associated infrastructure within the uMhlathuze Local Municipality, in KwaZulu-Natal Province.

#### 1. BACKGROUND AND APPEAL

- 1.1 In August 2017, the applicant lodged an application for an EA with the Department for the proposed construction of CCPP and associated infrastructure at the abovementioned location.
- 1.2 The applicant commissioned Savannah Environmental as an independent environmental assessment practitioner (EAP) to undertake the Environmental Impact Assessment (EIA) process for the abovementioned application.
- 1.3 The applicant submitted a draft Environmental Impact Assessment Report (EIAr) for the development of the Richards Bay Combined Cycle Power Plant (CCPP) 3000 MW and associated infrastructure, to the Department in March 2019, to which the Department provided inputs thereto. The Final EIAr was thereafter submitted to the Department in August 2019.
- 1.4 Upon evaluation of all the relevant information to the abovementioned application, the Department decided to grant an EA to the applicant on 23 December 2019.
- 1.5 On 27 January 2020, the Directorate: Appeals and Legal Review (Appeals Directorate) within the Department received an appeal from the abovementioned appellants against the decision of the Department to grant the abovementioned EA.
- 1.6 On 14 February 2020, the applicant submitted a responding statement in respect of the grounds of appeal.
- 1.7 Comments on the grounds of appeal were thereafter received from the Department on 27 February 2020.
- 1.8 The Appellants appeal is broadly premised on the following grounds:



- 1.8.1 Failure to consider alternatives to the projects;
- 1.8.2 CCPP is not necessary or desirable:
- 1.8.3 Failure to adequately consider climate change impacts of the project:
- 1.8.4 Failure to adequately access and consider cumulative impacts:
- 1.8.5 EA was granted in the absence of material information; and
- 1.8.6 Issuing of the EA contravenes the principles of National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), the Constitution and the Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000) (PAJA).

# Failure to consider alternatives to the projects

- 1.9.1 The appellants submit that section 24(4) (b) (i) of NEMA states that an EIA must include an "investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity". Furthermore, section 24O of NEMA requires that the competent authority consider "where appropriate, any feasible and reasonable alternatives to the activity which is the subject of the application and any feasible and reasonable modifications or changes to the activity that may minimise harm to the environment."
- 1.9.2 The appellants submit that the Environmental Impact Assessment Regulations, 2014, as amended (2014 EIA Regulations) similarly define "alternatives" as "different means of meeting the general purpose and requirements of [an] activity, which may include alternatives to the . . . type of activity to be undertaken" or the "technology to be used in the activity."
- 1.9.3 The appellants contend that the applicant's main motivation for the mid-merit Richards Bay CCPP is to have a generation centre in the KwaZulu-Natal province to reduce transmission losses from power plants supplying the province. The appellants further contend that the applicant wants to move away from coal-power generation to gas in order to reduce its carbon footprint, overall water use, and to diversify the energy mix within the country.

- 1.9.4 The appellants furthermore contend that renewable energy options could likely meet all of these requirements. In this regard the appellants submit that improvements in storage technologies have enabled renewable energy to perform a load following function, such as providing mid-merit power. The appellants submit that there is an urgent need to address climate change in South Africa and globally, and South Africa's climate change commitments. In this regard, it is submitted that the applicant's failure to consider such options is a fatal flaw.
- 1.9.5 The appellants go further to submit that a recent study concluded that solar-plus-storage could compete with mid-merit natural gas combined cycle power plants, both technically and financially. The study highlighted that solar-plus-storage "contributes to a company's renewable portfolio standard and state-level energy storage targets," "offers flexible operational configurations," and "allows these facilities to bid heavily into ancillary service markets." Moreover, renewable energy plus storage power plants already provide midmerit power at a competitive price.
- 1.9.6 The appellants submit that in addition to providing mid-merit power, adding renewable energy with storage to South Africa's electricity grid would help the government achieve its greenhouse gas reduction goals, and fulfil its constitutional obligations to protect against human rights impacts from air pollution and climate change, much more so than natural gas and would also enable further development of renewable energy resources.
- 1.9.7 The appellants therefore conclude that the Department's decision to grant the abovementioned EA without considering viable, cost-competitive renewable energy alternatives is inconsistent with NEMA, the 2014 EIA Regulations, and the Constitution.
- 1.9.8 In response to this ground of appeal, the applicant submits that the gas strategy is aligned with the country's strategic imperative, Integrated Resource Plan (IRP), and allocation of reducing the overall carbon footprint. This reduction can be achieved by diversifying the generation mix and increasing the need to build flexible capacity, hence the development of this Gas plant in Richards Bay. In this regard, the applicant submits that a broader consideration of alternatives was undertaken as part of the project impact assessment

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- which included two types of alternatives namely, (i) fundamentally different alternatives to the project; and (ii) incrementally different alternatives to the project.
- 1.9.9 The applicant submits that fundamentally different alternatives are assessed at a strategic level, and as a result project specific EIAs are therefore limited in scope and ability to address fundamentally different alternatives. As part of this project, the EIA considered electricity generating alternatives as part of the Department of Energy's (DoE) IRP 2010-2030 which was available and relevant at the time of the compilation of the EIAr. The consideration of fundamentally different alternatives was informed by the determination in terms of the IRP itself.
- 1.9.10 The applicant submits that the IRP considered natural gas to have significant potential to add to the energy mix. The 2010 version of the IRP envisaged that gas-derived electricity will be through open-cycle gas turbines (OCGT) and combined cycle gas turbines (CCGT), which should generate ~5.7GW and ~1.8GW, respectively. The IRP recognised that gas-fired Combined Cycle Gas Turbines (CCGTs) present the most significant potential for developing the gas market in South Africa as it presents significant potential both for power generation, as well as direct thermal uses. The update of the IRP of 2016 called for a higher allocation of energy generating capacities to Open Cycle Gas Turbine and Combined Cycle Gas Turbine facilities than the IRP 2010. Open Cycle Gas Turbines have been allocated ~13.3GW and Combined Cycle Gas Turbines have been allocated 21.9GW by the year 2050.
- 1.9.11 The applicant submits that on 22 August 2018, the draft IRP 2018 was released for comment which included estimates that 8.1GW of gas / diesel generated energy would be required by the end of 2030. The applicant contends that fundamental energy generation alternatives were assessed and considered within the development of the IRP and the need for the development of gas / diesel generated energy has been defined. Therefore, fundamental alternatives to the proposed project, including that of renewable energy development, were not considered within the EIAr.
- 1.9.12 The applicant goes further to submit that, following the submission of the final EIAr to the Department for decision-making, the IRP (2019) was gazetted on 18 October 2019. This



most recent updated IRP specifically calls for a "just transition" of the energy sector to lower carbon emissions. The energy sector contributes ~80% of the total emissions, of which 50% are from electricity generation and liquid fuel production. The timing of the transition to a low carbon economy must be socially just and sensitive to the potential impact on jobs and local economies.

- 1.9.13 It is submitted that the development of the Richards Bay CCPP provides an opportunity to contribute to a "just transition" of the energy mix through the development of a power station which will enable the generation of electricity through the use of a cleaner fuel resource, with less emissions than coal fired power stations, which can also support the uptake of renewable energy, while the process of decommissioning of coal based technology facilities are undertaken. The appellant must consider that, as detailed in the IRP 2019, the transition of the energy mix must still include the use of non-renewable energy fuel resources. Without allowing the transition of energy technologies and energy fuel resources, the path to a lower carbon economy may be severely constrained as the gaps created from the decommissioning of coal-based technology and power facilities, without catering for the required energy supply through the use of better technology during the transition process, might be too large to overcome.
- 1.9.14 The applicant submits that the appellant does not consider the location of the project in question, as well as the planned land-use of the project site for future development. The project site is located within the Richards Bay Industrial Development Zone (IDZ) Phase 1D, and the specific area has been allocated for the development of a gas facility.
- 1.9.15 In response to this ground of appeal, the Department submits that alternatives for the proposed development i.e. site alternatives and the compulsory no go option were investigated. The mitigation measures recommended in the ElAr adequately minimised harm to the environment.
- 1.9.16 The Department submits that the location of the site for the proposed development considered the fact that the area is zoned for industrial purposes. In addition, this alternative was supported in terms of the IRP approved for the consideration of other sources of generating energy in the country. According to the Department, it is incorrect for

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the appellant, at this stage (after approval of the IRP), to raise the issue that the proposed development is not suitable and that only solar energy or battery plus the storage, is the best in comparison with the natural gas. The Department again reiterates that alternatives were assessed, including the no go option and site alternatives. In this regard, the Department submits that the 2014 EIA Regulations does not require that all alternatives be assessed for a particular project, as evidenced by the word "may" in the definition of the word "alternatives".

- 1.9.17 The Department further submits that the 2014 EIA Regulations requires that the applicant provide the relevant information that would assist the Department to make an informed decision of the EA application. Therefore, the Department was satisfied that the information submitted in the EIAr was considered adequate and was also of the opinion that the applicant has consulted with the relevant authority which is mandated to provide water for the operation of the plant to obtain approval or confirmation of the availability of water.
- 1.9.18 In evaluating this ground of appeal as well as responses thereto, I have considered Appendix 2 of the 2014 EIA Regulations, which prescribes that the consideration of alternatives including site, activity, technology, as well as the no go option, should be assessed. In this regard, I perused the EIAr submitted to the Department in support of the EA application, with specific reference to page 274-276 in which the applicant sets out the assessment of the site alternatives, technology alternatives, layout alternatives, operation alternatives as well as the "do nothing alternative".
- 1.9.19 In relation to the site on which the proposed development was authorised, the information before me indicates that the project site is located within the Richards Bay IDZ Phase 1D, and the specific area has been allocated for the development of a gas facility. The site has been zoned for IDZ industrial development as part of the planning for the Richards Bay IDZ area. Further to this, IRP 2019 also includes the use of non-renewable energy fuel resources to allow for the development of the renewable energy sector and the associated infrastructure, as well as enable the establishment of energy developments that can fill the gaps in terms of supply, considering the use of renewable energy. Therefore, there is still a



- need for base load energy, and gas-to-power is a cleaner energy option than coal power generation.
- 1.9.20 The erven on which the proposed facility is planned has been earmarked by the uMhlathuze Local Municipality for the development of a gas to power plant. The site was identified as the most appropriate site in consideration of the environmental screening assessment and site selection study undertaken prior to EIA process.
- 1.9.21 In light of the above, I am satisfied with the assessment and consideration of alternatives in respect of the proposed development. This ground of appeal is accordingly dismissed.

# CCPP is not necessary or desirable

- 1.9.22 The appellants submit that regulation 18 of the 2014 EIA Regulations requires a competent authority, in considering an application for EA, to have regard to the need and desirability of the undertaking of the proposed activity. Furthermore, section 2 of Appendix 3 to the 2014 EIA Regulations also states that the objective of the EIA process is to "describe the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the development footprint on the approved site as contemplated in the accepted scoping report".
- 1.9.23 In light of the above, the appellants contend that the CCPP is neither necessary nor desirable, particularly when cleaner energy alternatives can address South Africa's generation capacity needs. The appellant further submits that the recently published 2019 IRP may not support the construction of a new gas power plant. The alleged need and desirability for the proposed CCPP, as set out in the EIAr, are based on the 2018 IRP draft, which provides for 8100 MW of new gas or diesel, while the 2019 IRP allocated only 3000 MW of new gas. Importantly, the 2019 IRP found that additional gas capacity of 3000 MW would not likely justify the development of new gas that "low gas utilization [of 3000 MW] . . . will not likely justify the development of new gas infrastructure and power plants predicated on such sub-optimal volumes of gas." Instead, "[c]onsideration must . . . be given to the conversion of the diesel-powered peakers on the



east coast of South Africa, as this is taken to be the first location for gas importation infrastructure and associated gas to power plants." While we submit that no gas power is necessary to meet the energy needs of the country, the 2019 IRP serves as a strong indication that any proposed reliance on gas should be seriously reconsidered, and lock-in to big gas infrastructure should be avoided.

- 1.9.24 The appellants contend that renewable energy may soon become cheaper than gas; moving forward with natural gas at this time opens up the risk that gas-related infrastructure will soon become stranded assets as renewable energy and storage technologies become more cost-competitive. This according to the appellants, further calls into question the need and desirability of the CCPP.
- 1.9.25 In response to this ground of appeal, the applicant submits that Chapter 5 of the ElAr considered the need and desirability of the project as a whole on various levels. The need and desirability also considers the benefits of Gas-to-Power Plants, as an energy resource.
- 1.9.26 The applicant submits that under the direction of DoE, a grouping of government departments and state-owned companies, which includes Eskom, Transnet, the Central Energy Fund (CEF) and the Department, are participating in Workgroup A1: the development of a phased gas pipeline network, which is one of 13 initiatives within the Offshore Oil and Gas focus area of Operation Phakisa. The applicant submits that the Strategic Environmental Assessment (SEA) was undertaken to pre-assess environmentally sensitive areas within gas transmission pipeline corridors to ensure appropriate routing for gas pipelines. The Richards Bay corridor is one of the corridors that were approved by the Operation Phakisa SEA process. Therefore the siting of the plant is aligned with Operation Phakisa.
- 1.9.27 Determination of the need and desirability of the proposed CCPP is expressly supported by the Guideline on Need and Desirability published by the Department (DEA Guideline on Need and Desirability, 2017). The applicant submits that the guideline recognises that the need and desirability for a proposed project is primarily determined with reference to government policy and planning documents which give effect to government's overarching



commitment to promote sustainable development. In this regard, the Guideline states as follows:

"What is needed and desired for a specific area should primarily be strategically and democratically determined beyond the spatial extent of individual EIAs. The strategic context for informing need and desirability may therefore firstly be addressed and determined during the formulation of the sustainable development vision, goals and objectives of Municipal Integrated Development Plans ("IDPs") and Spatial Development Frameworks ("SDFs") during which collaborative and participative processes play an integral part, and are given effect to, in the democratic processes at local government level."

- 1.9.28 The applicant submits that it is therefore considered reasonable to rely on the IRP 2010, as the principle energy planning policy in South Africa, as the departure point for an assessment of a proposed energy project in South Africa.
- 1.9.29 In response to this ground of appeal, the Department submits that they considered the information provided in the final EIAr and the motivation for the need and desirability of the project and was satisfied with the information provided. The Department further submits that the appellants do not consider what needs to be achieved in the area holistically in terms of energy generation and distribution, hence the argument which is based only on solar and battery energy. The Department contends that the arguments made by the appellants are inappropriate considering that they base same on the allegation that natural gas may not be supported in terms of the 2019 IRP. Therefore, the Department disputes the contention that their decision to grant an EA for the proposed development is a fatal flaw.
- 1.9.30 In evaluating this ground of appeal as well as responses thereto, I have taken note of the Need and Desirability as set out in the EIAr submitted to the Department In support of the EA application, with specific reference to page 64-72.
- 1.9.31 I have taken note of 65 of the EIAr which provides the following points for the consideration of the CCPP as a necessity:



- The Richards Bay CCPP will add mid-merit capacity to the South African national grid, which will ensure that the supply demand in the country is met, enabling economic and social growth.
- The facility will assist in the reduction in transmission losses through the development of a power generation facility in close proximity to a supply centre (i.e. Richards Bay).
- The CCPP will provide a flexible back-up generation solution for renewable energy, should renewable energy fuel resources not be available.
- The use of natural gas as an energy resource for the generation of electricity emits approximately half of the carbon that would have been emitted by coal generated electricity of the same capacity. The operation of a CCPP also uses considerably less water than coal-fired power stations. Therefore, the development of the Richards Bay CCPP will reduce Eskom's resource use and carbon footprint (per MegaWatt produced), supporting the South African commitment towards a reduction in carbon emissions.
- Provide support to the Government's energy objective in terms of diversifying the energy mix of South Africa.
- The location of the development within Phase 1D, as described in the response on Ground 1 above also contributes to the desirability of a gas facility in an area already planned for such development.
- 1.9.32 Regarding the appellant's contention that "the 2019 IRP found that additional gas capacity of 3000 MW would not likely justify the development of new gas power plants, I perused the 2019 IRP with specific reference to the development relating to gas. Page 47 of the 2019 IRP states the following:

"Whilst the plan indicates a requirement for 1000 MW in 2023 and 2000 MW in 2027, at a 12% average load factor, this is premised on certain constraints that we have imposed on gas, taking into account the locational issues like ports, environment, transmission etc. This represents low gas utilization, which will not likely justify the development of new gas

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Infrastructure and power plants predicated on such sub-optimal volumes of gas. Consideration must therefore be given to the conversion of the diesel-powered peakers on the east coast of South Africa, as this is taken to be the first location for gas importation infrastructure and the associated gas to power plants. It must be noted that that the unconstrained gas is a 'no regret option' because the power system calls for increased gas volumes when there are no constraints imposed.

Decision 7: To support the development of gas infrastructure and in addition to the new gas to power capacity in Table 5, convert existing diesel-fired power plants (Peakers) to gas\*.

1.9.33 The appellant clearly misinterpreted the 2019 IRP which was referring to a lack of justification for new gas infrastructure and power plant for sub-optimal volumes, namely 1000-2000MW. This is a gas facility of 3000MW which will not be considered sub-optimal, and therefore not contrary to the 2019 IRP. In light hereof, I am of the opinion that the need and desirability of the proposed development is consistent with the requirements of the 2014 EIA Regulations. Furthermore, I am satisfied that the need and desirability took into consideration the principles as outlined in section 2 of NEMA which makes provision for the risk-averse approach. As emphasised above, gas-to-power is a much cleaner technology than coal power generation which is the current base load producer. This ground of appeal is therefore dismissed accordingly.

## Failure to adequately consider the climate change impacts of the project

- 1.9.34 The appellants submit that a climate change impact assessment (CCIA) must assess the impacts of the project's greenhouse gas (GHG) emissions, including an assessment of:
  - The Indirect and full life-cycle emissions, these being the GHG emissions arising from extraction; transportation; construction of the plant and decommissioning;
  - Cumulative emissions (i.e. the additive contribution of the project to pre-existing GHG emissions for South Africa);
  - The environmental and social cost of the GHG emissions i.e. the contribution of the project's GHG emissions to South Africa's climate costs and impacts;



- The ways in which the project area will be impacted by climate change and the extent to which the project would aggravate these impacts. In other words, the project's impacts on the area's climate resilience and ability to adapt to a changed climate. Given that this is a long-term and large-scale project, consideration must be given to the ways in which climate change will impact on the area and communities where the project will be based, and how the project's own impacts will affect the area's resilience or vulnerability to the effects of climate change as they intensify; and
- The ways in which the effects of climate change will impact on the project itself, and its ability to operate optimally and efficiently for its full anticipated lifespan.
- 1.9.35 The appellants refer to the judgment in the case of Earthlife Africa Johannesburg v the Minister & Others Case number 65662/16 (2017) SAGPPHC 58 [2017] 2 All SA 519 GP (8 March 2017) (the Thabametsi case), where it was confirmed that a CCIA is a necessary component of an EIA for projects with climate impacts. In this case, the court acknowledged the need for a CCIA much broader than a mere assessment of anticipated emissions. It confirmed the need for a comprehensive assessment, which assesses, inter alia, the impacts of climate change on the project and the ways in which the project might aggravate the impacts of climate change in the area. The court concluded that "without a full assessment of the climate change impact of the project, there was no rational basis for the Chief Director to endorse these baseless assertions".
- 1.9.36 According to the appellants, the following are some of the deficiencies in the CCIA for this project:
  - The CCIA does not consider the full lifecycle emissions of the Project including from methane leakages, the pipeline supplying gas from the port, the plant construction and decommissioning.
  - The CCIA states that only the direct operational emissions from fuel combustion are considered. This is far too narrow to constitute an acceptable assessment of the project's full GHG emissions and climate impacts.

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- Gas-fired generation, in particular, has significant upstream GHG emissions, as the extraction and transportation of gas to generation plants, inter alia, result in substantial emissions.
- The CCIA confirms the significant global warming potential of methane (a primary component of natural gas) and acknowledges that "any leaks of natural gas prior to combustion could result in increased carbon emissions without any electricity generation". Methane (CH4) leakage from extraction, transport, and storage of natural gas (particularly from pipelines and well heads) is often considerable, thus hindering any perceived advantage in terms of GHG emission reductions, when gas is properly compared to other electricity sources, including coal. Yet the CCIA contains no assessment of the risks and probability of such leaks occurring or the potential impacts thereof.
- 1.9.37 The appellants submit that the CCIA looks at technology option costs but it does not assess or even mention the external social cost of the project's GHG emissions. It is submitted that section 2 NEMA principle that the 'polluter' must 'pay' for damage and/or environmental degradation, requires that the costs of the GHG emissions be quantified, as well as the provisions of section 28 of NEMA, which places a duty on anyone who "causes, has caused or may cause significant pollution or degradation of the environment ... to minimise and rectify such pollution or degradation of the environment," with measures including remedying the harm caused.
- 1.9.38 The appellants submit that in calculating the external costs of the CCPP's GHG emissions would, in all likelihood show that, if the plant had to absorb the external costs of its GHG emissions, it would not be financially feasible to operate. The appellants contend that it would also mean that consumers would ultimately have to pay much higher costs for gas-based electricity in South Africa.
- 1.9.39 The appellants are of the opinion that the CCIA has not assessed how predicted climate change effects on the environment and society will be aggravated by the project's impacts.
- 1.9.40 The appellants submit that the CCIA has not sought to assess how the project would impact upon the area's evident vulnerability to climate change and the necessary local



climate adaptation and resilience of the surrounding environment and communities. The CCIA makes mention of reduced rainfall and increased temperatures for the area but fails to assess or even consider how the project would exacerbate the surrounding environment and communities' vulnerability and exposure to these impacts.

- 1.9.41 The appellants further submit that the CCIA's conclusion that the high climate impacts could be justified is arbitrary and incorrect for the following reasons:
  - There are no adequate mitigation measures to substantially and effectively mitigate the full scope of the project's high GHG emissions and climate impacts.
  - It is highly unlikely that CCS would be feasible, and certainly not cost effective. Not only is CCS currently not proven to be workable in any locations in South Africa, but also on a global scale, there is no evidence that it is a reliable mitigation measure "[Carbon dioxide removal] deployed at scale is unproven, and reliance on such technology is a major risk in the ability to limit warming to 1.5°C". The CCIA's reliance on CCS as a mitigation measure is speculative at best.
  - Any achievable reductions from fuel-switching would still not be sufficient or substantial (particularly if lifecycle emissions from biomass i.e. land clearing, are taken into account).
- 1.9.42 The appellants contend that given South Africa's extreme vulnerability to the impacts of climate change, as confirmed in its own climate change response policy, arguably any decision to lock the country into more harmful GHG emissions particularly for a project that is not needed, would be in direct contravention of the state's Constitutional obligations to protect the rights of the people of South Africa, and the duty of care embodied in section 28 of NEMA.
- 1.9.43 In response to this ground of appeal, the applicant submits that the CCIA undertaken for the Richards Bay CCPP project was undertaken in-line with the requirements of the 2014 EIA Regulations. In terms of the calculation of external costs in terms of the GHG emissions associated with the project, the appellants neglect to acknowledge that no nationally approved or widely adopted standard exists to calculate the said externality

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costs associated with GHGs. The applicant submits that the carbon footprints presented in this assessment was guided by the ISO/SANS 14064-1 standard.

- 1.9.44 Further to the above, the applicant submits that the GHG Protocol's Corporate Accounting and Reporting Standard was also used in addition to the SANS 14064-1 standard as a guide in the calculation of the carbon footprint. The appellants seeks to discard and discredit the information provided in the CCIA Report without any alternative formalised measures or guidelines, to test the information against. The applicant submits that there is an obvious lack of formalised guidelines for the undertaking of a CCIA on a national level within South Africa and therefore the ground of appeal in terms of the requirements of such an impact assessment is based on assumptions and opinions rather than formalised and accepted standards. The applicant is of the opinion that the appellant has not considered, as part of this ground of appeal, the domestic nature of NEMA and the lack of clear and accepted CCIA, as well as the fact that climate change is a complex global issue which entails international standards and not only the domestic considerations and the South African Environment and context, as outlined in NEMA.
- 1.9.45 The applicant submits that the need for undertaking the CCIA, as per the ruling of the Thabametsi Case, was complied with as it is acknowledged that the development of the Richards Bay CCPP project will result in climate change impacts and that appropriate mitigation measures need to be implemented.
- 1.9.46 As part of the assessment, the limitations as per requirements of the 2014 EIA Regulations indicates that there was limited information available to calculate the GHGs associated with the construction of the project. However, as stated in the report, this limitation has been for the most part addressed as the majority of the total GHG emissions calculated for the lifecycle of a CCGT can be attributed to the plant's direct combustion emissions during operation. The applicant submits that they do support renewables but there cannot be a one-sided argument against gas.
- 1.9.47 The applicant further submits that the construction emissions are typically very low and are not considered to affect the impact rating of the climate change impact in terms of a

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change in the significance rating. The appellants also raise concern in this ground of appeal that the CCIA does not consider methane leakages, the pipeline supplying gas from the port and the plant construction and decommissioning phases. However, the LNG terminal infrastructure at the port and the gas supply pipeline to the boundary fence of the project supplying the gas to the plant do not form part of the scope of this assessment as this project focuses only on the footprint activities up to Eskom's boundary fence on Phase 1D of the IDZ.

- 1.9.48 The applicant submits that the appellant neglects to acknowledge the recommendations made in the CCIA report which calls for continuous monitoring and maintenance of the infrastructure that stores and transports natural gas to prevent any possible leakages.
- 1.9.49 The applicant submits that, from a cumulative emissions perspective, the appellants refer to the need for the consideration of the additive contribution of the project to pre-existing GHG emissions for South Africa. There is evidence that the introduction of generation capacity with high load following capability, such as gas, enables the increased utilisation of intermittent renewable energy such as wind and solar on a predominantly coal fired grid. This, the applicant submits, implies a reduction in coal-fired power generation as part of the generation mix. The emissions saved by these alternative renewable energy sources, as well as the reduction in coal-fired power generation, will offset the emissions of the Richards Bay CCPP project. Additionally, the CCIA report does, to a certain extent, consider the additive contribution by stating that depending on the mode of operation, the national emissions from the project would account for 1.1% of the emissions in 2050, as based on the upper limit of the Peak Plateau to Decline (PPD) trajectory.
- 1.9.50 Environmental and social costs associated with the development of the Richards Bay CCPP project were indirectly considered, in terms of the following points:
  - The potential positive impact that this plant could have on the displacement of coal fired power with renewable energy due to the high load following capability of the plant and consequent renewable energy uptake. This point also forms part of the process of "just transition" as part of the energy mix moving away from the use of coal as a fuel resource for electricity generation; and



- With the development of the Richards Bay CCPP, the well-known negative
  environmental impacts of coal fired power generation could be significantly
  reduced in terms of GHG emissions of the South African grid and therefore
  contribute positively to the environmental and social cost of power generation in
  South Africa.
- 1.9.51 Accordingly, the applicant submits that the project therefore provides a platform for a positive impact on global climate change through the provision of opportunities for "just transition" in terms of the country's energy mix through enabling increased use of renewable energy as part of the national grid. This transition, according to the applicant, forms part of the IRP 2019.
- 1.9.52 The applicant submits that the Richards Bay CCPP project has the potential to facilitate greater penetration of renewable energy on the national grid due to the project's high load following capabilities. The applicant submits that as a result thereof, the overall emissions from the supply of electricity via the grid would be reduced. These impacts would support South Africa's NDC commitments and positively impact global climate change.
- 1.9.53 The applicant states that the assessment focuses on exploring the GHG emissions and consequent climate change impacts of the respective alternative combustion technologies and mitigation options available to the project developer and highlights the benefits thereof. The applicant submits that the appellant makes reference to section 2 of NEMA which relates to the 'polluter must pay' for damage and/or environmental degradation which requires that the costs of the GHG emissions be quantified. However, due to the nature of climate change, the emissions of this project will contribute to global emissions. NEMA is designed for the consideration and assessment of local impacts. As such, the application of NEMA to a global concept such as climate change is challenging given its domestic design specific to the local context of South Africa. The appellant submits that should the plant become operational, polluter pay mechanisms, such as carbon tax, will ensure the appropriate application of and adherence to the principle of section 2 of NEMA. The applicant submits that the appellant does not consider the location of the project within the Richards Bay IDZ for which a separate set of development criteria were considered

and had to be met. Balancing economic development with environmental enhancement and social upliftment is of paramount importance to the Richards Bay IDZ and was addressed during the IDZ's development and therefore falls outside of the scope of assessment for this particular project. The applicant submits that the development phase of the IDZ considered the various land uses which may be approved in the IDZ and the impacts that such developments will have on the area and communities. Therefore, although these aspects were not addressed in the CCIA for the CCPP, they were addressed during the development of the Richards Bay IDZ.

- 1.9.54 The applicant submits that the CCIA report states that the mitigation options presented for the project are not listed within the scoping design documents for the project and that they are mitigation options that could be considered for future inclusion within the generation facility. The applicant submits that it must be noted that the switch of fuel to biogas would be feasible provided that the gas meets the required quality standards. The applicant's response to the argument of the appellant that mitigation measures proposed as part of the CCIA are not considered to be feasible or sufficient to mitigate the high GHG emissions, is that in the case of the CCPP, these measures are generally accepted as the most appropriate mitigation options within the context of the IRP requirements.
- 1.9.55 The applicant submits that the mitigation measures mentioned have been drawn from the Power Generation Technology Data for Integrated Resource Plan of South Africa of August 2015, which was considered prior to the publication of the IPCC 1.5°C report. The CCIA report states that the identified mitigation options can be considered in the future for the project. It is also the discretion of the specialist to identify mitigation options as per the specialist report guidelines. Furthermore, no clear CCIA guidelines have been developed to date, and the mitigation options were identified within this context.
- 1.9.56 The applicant submits that although renewable energy options would result in less emission in comparison to the CCPP, the IRP constitutes the energy road map for the country, including the envisaged energy mix. The applicant submits that to achieve the objectives and energy mix required by the IRP, CCPP technology options must be considered and implemented. The applicant further states that the report recognises the

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importance of renewable energy and the fact that the CCPP plant will create a foundation to increase the uptake of renewable energy in the country. In this regard, the applicant submits that the specialist is obligated to consider energy technologies and alternatives within the context of the IRP requirements. The applicant contends that the Richards Bay CCPP project has the potential to facilitate greater penetration of renewable energy on the national grid and as a result this project could work towards providing net social benefits as opposed to a social cost.

- 1.9.57 In response to this ground of appeal, the Department submits that the appellant had an opportunity to point out the alleged shortcomings of the CCIA report during the two 30 day public comment periods on the first draft EIAr and the revised EIAr. During the public participation period, the appellants commented on the draft EIAr which included the CCIA. The Department submits that the appellants provided comments on the report and none of these alleged shortcomings were raised. In the absence of any information that is contrary to the CCIA, the Department considered only the information provided for decision making.
- 1.9.58 The Department submits that they noted that the assessment was qualitative and based on specialists' knowledge. It is submitted that the 2014 EIA Regulations do not provide clarity on criteria to identify and assess cumulative impacts. The Department submits that the CCIA took into consideration the GHG Protocol's Corporate Accounting and Reporting Standard which was also used in addition to the SANS 14064-1 standard as a guide in the calculation of the carbon footprint. The Department submits that the CCIA was considered and in the absence of any credible information that contradicts the findings and the conclusions of this report, was found to be sufficient.
- 1.9.59 The Department further submits that the EIA process and all the resultant documents were for the EA application for construction of the CCPP, only. The assessment of impacts as a result of transportation and extraction of gas will be the subject of a separate application that will be required for the extraction and transportation of the gas.
- 1.9.60 In evaluating this ground of appeal, as well as responses thereto, I am well aware of the judgment in respect of Thabametsi case where the court held that "Without a full

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assessment of the climate change Impact of the project, there was no rational basis for the Chief Director to endorse these baseless assertions".

- 1.9.61 However, the court pointed out that "In upholding the environmental authorisation, the Chief Director relied exclusively on the statement in the EIR that the climate change impacts of the project were relatively small and low. These assertions were not supported by any evidence in the EIR". In my view, this is not the case in the present matter. The information before me indicates that a CCIA was conducted as part of the EIA process for the proposed Richards Bay CCPP. According to the Department, the appellants have taken part in the EIA process from the draft stage until the final EIAr. The Department submits that the appellants provided comments throughout the project but did not raise any of the above contentions during application phase.
- 1.9.62 As correctly pointed out by the applicant, "the need for undertaking the CCIA, as per the ruling of the Thabametsi Case, was complied with as it is acknowledged that the development of the Richards Bay CCPP project will result in climate change impacts and that appropriate mitigation measures need to be implemented". The CCIA undertaken for the Richards Bay CCPP project was undertaken in-line with the requirements of the 2014 EIA Regulations. The CCIA took into consideration the GHG Protocol's Corporate Accounting and Reporting Standard and the SANS 14064-1 standard, as a guide in the calculation of the carbon footprint. In my view, there is merit in the submission by the Department that in the absence of any credible information that contradicts the findings and the conclusions of CCIA, the report was considered to be sufficient.
- 1.9.63 Notwithstanding the fact that there are no published norms and standards on a criteria to conduct a CCIA, I have considered the specialist climate change assessment for the proposed Richards Bay CCPP and associated infrastructure. This study indicates that "the outcome of the analysis illustrates that the proposed CCPP power plant fired with natural gas is the least emissions intensive of the technology alternatives to provide mid-merit power."

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- 1.9.64 Importantly, the study concludes that "while the proposed CCPP power plant as a single source will increase the national greenhouse gas inventory, mitigations options to reduce its emissions are available. The most important aspect of the proposed power plant is that it has the potential to enable wider decarbonisation of the national grid through enabling the uptake of variable renewable energy technologies."
- 1.9.65 The study goes further to indicate that "the proposed CCPP power plant is the best technology option, and will not materially result in any direct local climate change impacts, subject to the implementation of appropriate mitigation measures."
- 1.9.66 In view of the aforegoing, I am satisfied that the climate change impacts in respect of the proposed development were adequately assessed and where necessary, appropriately mitigated. These measures include "switching to alternative biofuels and carbon capture and storage". For these reasons, this ground of appeal falls to be dismissed.

# Fallure to adequately assess and consider the cumulative Impacts of the Project

- 1.9.67 The appellants submit that section 24O of NEMA instructs the competent authority to "take into account all relevant factors, which may include (i) any-pollution, environmental impacts or environmental degradation likely to be caused if the application is approved or refused."
- 1.9.68 Section 28 of NEMA also provides that:
  - "Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment".
- 1.9.69 The appellants submit that the 2014 EIA Regulations, in particular Appendix 3 section 3(j)(i), requires that "an environmental impact assessment report must contain the information that is necessary for the competent authority to consider and come to a



- decision on the application, and must include each identified potentially significant impact and risk, including (i) cumulative impacts...".
- 1.9.70 Contrary to NEMA, the 2014 EIA Regulations, and section 24 of the Constitution, the Acting Chief Director granted the EA even though the EIA did not consider emissions and cumulative health risk from all polluting sources in Richards Bay.
- 1.9.71 The EIA did not account for the cumulative air quality impacts. Richards Bay is home to several other polluting industrial developments including the Mondi pulp mill, the biggest pulp factory in South Africa and South32's Hillside aluminium smelter. The smelter emits solid particulates such as carbon, alumina, flourides, and condensed hydrocarbons, carbon dioxide, carbon monoxide, gaseous fluorides and sulphur dioxide.
- 1.9.72 The appellants submit that the EIA does not discuss how facilities like the mill and smelter contribute to the existing air pollution in Richards Bay. With regard to emissions from the Mondi factory, the EIA provides only that "[t]he potential impact stated by the environmental manager of Mondi is the odorous gases that may be a nuisance to the CCPP employees."
- 1.9.73 The appellants submit that instead of analysing the cumulative impact of all sources in the area as required, the EIAr concludes that "[n]o cumulative impacts were identified for air quality". Although acknowledging that "[i]ncreased ambient concentrations of [SO2, NOx, VOCs, PM and H2S] may result in negative human health impacts," the EIAr provides that "it is improbable that the facility would approach the emission limits" if it "normally operates at emissions rates approximating those calculated for natural gas, which is inherently very low in sulphur." This analysis neither provides a quantitative assessment of the plant's own contributions to the baseline air pollution in Richards Bay nor assesses the impact of those emissions in combination with pollution from surrounding sources. The EIA did not adequately consider the public health impacts of the CCPP's emissions on the air quality in Richards Bay.
- 1.9.74 The appellants contend that despite acknowledging "impacts on the quality of public health due to emissions from the operating Richards Bay CCPP, combined with existing plant,"

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the EIA concludes that "the positive impacts outweigh the negative impacts from a socio-economic perspective." Given that the baseline ambient air pollution in Richards Bay already exceeds the National Air Ambient Quality Standards (NAAQS), the EIA should have evaluated the cumulative health impacts on surrounding communities from existing pollution and the CCPP power plant's future emissions. Without such an analysis, the EIA's conclusion that the positive impacts of the plant outweigh its negative impacts is invalid.

- 1.9.75 In response to this ground of appeal, the applicant submits that Chapter 9 of the EIAr included a full-rounded cumulative impact assessment for the development of the Richards Bay CCPP project. The applicant submits that the cumulative impacts assessed for the project included those impacts related to all specialist fields of study undertaken as part of the project. The fields of study for cumulative impacts included ecological, water resources, land use, soil and agricultural potential, geohydrology, heritage resources, air quality, climate change, visual, socio-economic, traffic and risk impacts.
- 1.9.76 The applicant submits that the approach taken for the assessment of cumulative impacts as part of the EIAr was the consideration and assessment of the project considered in isolation versus the cumulative-impact of the proposed project and other projects in the area. This approach provided the Department with an indication and understanding of the contribution of the proposed project in terms of impact, considering the other existing projects located within the area.
- 1.9.77 The applicant submits that the appellants specifically highlight the cumulative impacts associated with impacts on air quality. A cumulative impact assessment of the project and existing emission sources within Richards bay were included in the Air Quality Impact Assessment report. The Richards Bay baseline was based on the air quality dispersion modelling study assessing the cumulative impact of operations within the Richards Bay domain and was consulted with permission of the authors WSP Environment and Energy and the Richards Bay Clean Air Association (RBCAA) under the request for confidentiality of its members. The description of the existing sources was excluded due to confidentiality agreements with the RBCAA and its members. This report is considered by the RBCAA to

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be the most comprehensive assessment of normal operations of the industries in the Richards Bay airshed, although limitations of the assessment are detailed in the report. These limitations include omission of some industrial sources where information was not available; exclusion of vehicular traffic emissions; and intermittent sources such as sugarcane burning. Simulated annual average concentrations of PM10, NO2, and SO2 were provided for cumulative assessment of the baseline conditions and the proposed facility. The applicant submits that the Air Quality Impact Assessment specifically identified and assessed the cumulative impact of the proposed facility and ambient air quality concentrations. Therefore, the Air Quality Impact Assessment report has considered and assessed the cumulative impact in terms of emissions associated with the project.

- 1.9.78 In terms of health impact, the applicant submits that the Richards Bay CCPP was compared with the NAAQS which were developed to protect human health. Since the impact of normal operations was not simulated to have an off-site impact, a full health impact assessment was not deemed necessary for the EIA.
- 1.9.79 In response to this ground of appeal, the Department submits that cumulative impact assessment for the project was undertaken and was considered appropriate and sufficient for decision-making. In the Air Quality Assessment that was undertaken as part of the specialist studies, the negative human health impact, were rated medium before mitigation and medium to low post mitigation. Consequently, the Department submits that it was not necessary to conduct a full health impact assessment.
- 1.9.80 In evaluating this ground of appeal as well as responses thereto, I have taken note of Chapter 9 of the final EIAr which deals with the assessment of potential cumulative impacts (page 246-259 thereof), read with the Air Quality Impact Assessment. Cumulative impacts assessment dealt with the following:
  - Ecological (fauna, flora and avifauna) impacts;
  - Impacts on Water Resources;
  - Impacts on Land Use, Soil and Agricultural Potential;
  - Impacts on Geohydrology;

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- Impacts on Heritage Resources;
- Impacts on Air Quality;
- Impacts on Climate Change;
- Visual Impacts;
- Socio-Economic Impacts:
- Traffic Impacts; and
- Risk impacts.
- 1.9.81 I have also considered the conclusion regarding cumulative impacts as outlined in page 259 of the final EIA, which states the following:

"Considering the findings of the specialist assessment undertaken for the project, the cumulative impacts for the proposed Gas to Power Plant will be acceptable and the majority are rated as being High, Medium and Low significance (depending on the impact considered) with the implementation of appropriate mitigation were feasible.

Based on the detailed evaluation, the cumulative impacts associated with the construction and operation of the proposed RB CCPP and other development within the RBIDZ: Phase 1D are considered to be acceptable. The limited potential for cumulative impacts and risks makes the location of this project within the RBIDZ: 1D a desirable location for further consideration provided that environmental impacts are mitigated to suitable standards as recommended within this EIA Report."

1.9.82 With regard to the contentions made in relation to health impacts, I have taken note of the Air Quality Assessment undertaken as part of the EIA process. This assessment identified the negative human health impact as medium before mitigation and medium to low post mitigation. Furthermore, the Air Quality Assessment report assessed and considered the cumulative impacts on air quality. In this regard, it is recorded that "No cumulative impacts were identified for air quality." The following is recorded on page 255 of the final EIAr:

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"The normal operation of the proposed combined cycle power station will result in emission of gaseous and particulate pollutants including: SO2, NOX, VOCs, and to a lesser extent PM and H2S. Increased ambient concentrations of these pollutants may result in negative human health impacts, and nuisance odours. Increased nuisance Dustfall is likely because of vehicle entrainment of particulates along access roads. If the facility normally operates at emission rates approximating those calculated for natural gas, which is inherently very low in sulphur, it is improbable that the facility would approach the emission limits. Under normal operating conditions, off-side exceedances of the SO2 NAAQS are unlikely".

1.9.83 In light hereof, there is accordingly no merit on the argument that the cumulative impacts of the proposed CCPP project were not adequately assessed and considered. Hence, I proceed to dismiss this ground of appeal.

# EA was granted in the absence of material information

- 1.9.84 The appellants submit that the Department authorised the project without key substantive technical studies and investigations having been completed. This includes the following:
  - A comprehensive climate change impact analysis that complies with all of the requirements described above;
  - A comprehensive assessment of climate change mitigation measures, including their cost, potential design, and feasibility;
  - A final Wetland Offset Plan (condition 36 of the authorisation); and
  - A cumulative impacts study that assesses other major emitters in the area.
  - 1.9.85 These studies and investigations cover material information that the Department should have reviewed and considered prior to making an informed decision regarding the proposed project. The appellants are of the view that without these studies, the Department could not have taken into account all the pollution, environmental impacts or environmental degradation likely to be caused by the proposed project.

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- 1.9.86 In response to this ground of appeal, the applicant submits that the claims made by the appellants in terms of the absence of material information and impact assessments is disputed as the EIAr considered all impacts associated with the various developmental phases of the project through the consideration and integration of independent specialist impact assessments undertaken as per the requirements of the 2014 EIA Regulations, specifically Appendix 6 thereof. The applicant submits that substantive technical studies, in terms of climate change, air quality and cumulative impact were undertaken and submitted to the Department as part of the final EIAr for decision-making. The applicant contends that the studies undertaken comply not only with the requirements of the 2014 EIA Regulations, but also international guidelines and standards which are formally applied in the studies, where national guidelines are not available.
- 1.9.87 The applicant submits that the EIAr made available for a 30-day public review period, which was provided to the appellants for review, recommended that "The offset plan is to be approved in principal by the Department of Environmental Affairs". However, the final wetland offset plan must be submitted for approval prior to its Implementation to the Department of Environmental Affairs, Department of Water and Sanitation and the Local Municipality and KZN Ezemvelo. The applicant submits that the offset plan/proposal must be drafted in agreement with the Municipality, EKZN Ezemvelo and any other relevant party and must also take into consideration the offset requirements which may be needed for the associated infrastructure located outside of the project site assessed for the power station". This recommendation was also included in the final EIAr submitted to DEA for decision-making. Therefore, the appellants and Department were aware that the final wetland offset plan was not available at the decision-making stage and was aware that the final plan will be submitted for approval once negotiations with the relevant parties are finalised.
- 1.9.88 In response to this ground of appeal, the Department submits the correct decision was made based on the information available at decision making stage of the EIA process. In making the decision, the CD: IEA complied with section 24O of NEMA, by considering the environmental impacts of the proposed development and the recommended mitigation

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measures and the fact that no environmental impacts of high significance will be left post mitigation.

- 1.9.89 The Department considered the information as contained in the final EIAr dated August 2019, which was considered materially sufficient for decision making. The draft wetland offset plan was submitted with the final EIAr for a decision. The nature of offsets requires agreements to be entered to between the affected parties and declaration of the areas designated for offsetting. These processes are undertaken outside the EIA process due to strict timeframes of EIA process. In addition, the Department put forward that should the applicant fail to comply with the offset condition, the project would not commence with construction. The draft wetland offset plan that was provided during the EIA process assessed the suitability of the offset options that were investigated and made recommendations on the preferred offset option and this was taken into account in deciding this application.
- 1.9.90 In evaluating this ground of appeal as well as responses, I have taken note of the EIAr that was submitted to the Department, with specific reference to the climate change assessment study, air quality study and cumulative impact assessment submitted in support of the abovementioned EA application.
- 1.9.91 The climate change assessment study makes specific reference to the GHG emission and the impact thereof on climate change, and also set out mitigation options that could be considered for future inclusion within the generation facility. The air quality study concludes as follows: "From an air quality perspective it is recommended that the project go ahead on condition that:
  - Emissions due to construction activities be mitigated using good practise guidelines.
  - Maintain SO2 and NOx emissions near the emission factor estimates.
  - To limit the possibility of off-site exceedances during emergency events, it is suggested that Emergency 2- type events be avoided as far as practically possible by using low sulphur (50ppm) diesel only, when diesel is used as energy source."

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- 1.9.92 I also take note of condition 49 of the EA which states: "An Air Emission License must be obtained from the appropriate authority before commencement of the development".
- 1.9.93 I have also taken note of the indication made of cumulative impact associated with this CCPP on page XVII of the final EIAr which states that: "The cumulative impacts have been assessed to be acceptable with no unacceptable loss or risk expected".
- 1.9.94 With regard to the wetland offset plan, I have taken note of condition 35 of the EA which states the following: "The preliminary Wetland Offset Plan dated January 2018 (updated February 2019) with Option 2 indicated as the preferred option must be finalise in consultation of the City of uMhlathuse Local Municipality and Ezemvelo (KwaZulu Natal Wildlife) prior to commencement." Furthermore, condition 36 of the EA states the following: "The final Wetland Offset Plan must be submitted to the Department: Chief Directorate: Integrated Environmental Authorisations for written approval prior to the commencement of the activity".
- 1.9.95 In light of the aforegoing, there is no merit to infer that the Department approved an EA application in the absence of material information. For this reason, this ground of appeal falls to be dismissed.

Decision to issue the authorisation contravenes NEMA Principles, the Constitution and PAJA

- 1.9.96 The appellants submit that section 33 of the Constitution recognises that everyone has the right to administrative action that is lawful, reasonable and procedurally fair. PAJA seeks to give effect to this right. The appellants submit that section 6(2) of PAJA provides that a court or tribunal has the power to judicially review administrative action if, inter alia:
  - Irrelevant considerations were taken into account or relevant considerations were not considered;
  - The action itself contravenes a law or is not authorised by an empowering provision;
  - The action itself is not rationally connected to the information before the administrator; and

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- The exercise of the power or the performance of the function authorised by the empowering provision, in pursuance of which administrative action was purportedly taken, is so unreasonable that no reasonable person could have so exercised the power or performed the function. Irrelevant considerations were taken into account or relevant considerations were not considered.
- 1.9.97 The appellants submit that the decision to grant the abovementioned EA is in direct contravention of a number of provisions of NEMA, the 2014 EIA Regulations, as well as section 24 of the Constitution. The action itself is not rationally connected to the information before the administrator. The EIAr indicates that existing air pollution in Richards Bay has resulted in exceedances of the NAAQS, even without the addition of a large gas plant.
- 1.9.98 Furthermore, the reasons for the decision show no attempt by the Department to critically assess the mitigation measures proposed in the ElAr or consider alternatives to gasgenerated electricity in reducing South Africa's carbon footprint. This is particularly the case for the mitigation measures proposed to address climate change impacts. In granting the WEA, the Department demonstrates that they falled to give adequate consideration to the above information, as well as other relevant considerations, in the revised ElAr. As a result thereof, this decision is not rationally connected to the information that was before the Department. The exercise of the power or the performance of the function authorised by the empowering provision, in pursuance of which administrative action was purportedly taken, is so unreasonable that no reasonable person could have so exercised the power or performed the function.
- 1.9.99 The appellant submits that the decision to grant the EA is unreasonable for the reasons stated in the grounds above, including that it:
  - Fails to assess viable, and cost effective renewable alternatives that are less polluting, use less water, and have a much smaller carbon footprint;
  - Fails to recognise cumulative impacts on air quality from the project and neighbouring developments;



- Fails to assess and take into account health impacts from increased pollutant levels;
- Fails to apply the principles and provisions of NEMA and to give recognition to the duty to uphold the constitutional right to an environment not harmful to health or well-being; and
- Authorises the CCPP despite acknowledging existing non-compliance with the NAAQS.
- 1.9.100 in response to this ground of appeal, the applicant submits that regulation 42 of the 2014 EIA Regulations states that a register of I&APs must be created, maintained and submitted to the competent authority. This regulation stipulates that the register must contain the details of:
  - All persons who, as a consequence of the public participation process conducted in respect of that application, have submitted written comments or attended meeting with the proponent, applicant or EAP;
  - b) All persons who have requested the proponent or applicant, in writing, for their names to be placed on the register; and
  - All organs of state which have jurisdiction in respect of that activity to which the application relates.
- 1.9.101 The applicant therefore submits that the following means were implemented as part of the EIA process, during both the Scoping and EIA Phases to invite potential interested and affected parties to register as part of the database and participate in the public participation process:
  - Placement of site notices announcing the EIA process at visible points along the boundary of the project site, in accordance with the requirements of the EIA Regulations. The site notices included the contact details of Savannah Environmental inviting I&APs to register on the database.
  - Placement of advertisements announcing the EIA process for the project and inviting members of the public to register themselves as I&APs on the project database and announcing the availability of and inviting comment on the Scoping



- Report were placed in The Mercury newspaper and in the Zululand Observer. The advertisement also invited I&APs to attend a public meeting (two public meetings were held during the Scoping Phase).
- Compilation of a background information document (BID) for the project in order to
  provide information regarding the Richards Bay CCPP and the EIA process. The
  BID was distributed to identified stakeholders and I&APs and was also made
  available electronically on the Savannah Environmental website.
- Placement of advertisements announcing the availability of the EIAr and Inviting comment thereon as well as publicising the dates of the public meetings were placed in The Mercury Newspaper and Zululand Observer which are widely distributed within the vicinity of the project site, as well as in The Sunday Times and The Rapport which are national newspapers.
- Placement of advertisements announcing the availability of the revised EIAr and inviting comment on the report, and inviting any interested and affected party to register on the project database, were placed in the Zululand Observer, The Mercury Newspaper, The Sunday Times and The Rapport.
- During the 30-day review periods of both the Scoping Report and the EIAr, hard copies of the reports were placed at the Richards Bay Public Library and Empangeni Public Library. All reports included the relevant contact details of Savannah Environmental where registration on the project database of I&APs could be undertaken. Registration of interested and affected parties was undertaken throughout the entire EIA process.
- 1.9.102 In light of the above, the applicant submits that no requests from I&APs specifically stating they are part of the fishing community were submitted to Savannah Environmental for inclusion as part of the I&AP database. Further to this, no comments were raised during the meetings held as part of the public participation process or as part of written comments submitted relating to the fishing community and impacts on their livelihoods. In addition, no impacts on these communities were identified by the specialist studies undertaken. Groundwork provided comments on the revised EIAr but did not raise the potential impact on fishing communities as a concern.



- 1.9.103 The applicant submits that the appellants refer to existing exceedances of the NAAQS, without the addition of the Richards Bay CCPP project. According to the applicant, the appellant does not consider the information relating to the exceedances included in the EIAr and the Air Quality Impact Assessment report. The specialist indicated that the pollutants of concern in Richards Bay are PM and SO2. Non-compliance with daily PM10 NAAQS was noted at 2 stations in the RBCAA network during 2015 and less than 4 days per year at all other stations during 4 years assessed (2014 2018). SO2 hourly and dally exceedances are within the permitted frequency of exceedances for all stations during the 4 years assessed. Furthermore, annual compliance is noted at all stations. The Richards Bay CCPP, based on the fuel type natural gas, is not likely to be a significant source of these pollutants during normal operations as shown in section 5.1.5 in the Air Quality Impact Assessment.
- 1.9.104 In response to this ground of appeal, the Department submits that they complied with the requirement of PAJA as the decision made was based on the information submitted. According to the Department, the decision was reasonable and fair since all views of I&APs were taken into consideration and the decision maker is delegated to make this decision. The Department submits that all relevant information provided to the Department at decision making stage of the EIA process was considered including comments received from I&APs.
- 1.9.105 The Department submits that the reasons for the decision clearly stipulate that the information provided was sufficient to make the decision and that no residual impacts were found to be of high significance and the mitigation measures recommended in the EIAr were acceptable.
- 1.9.106 The Department is of the view that the applicant complied with requirements of Chapter 6 of the 2014 EIA Regulations, Furthermore the Department submits that the decision to approve the EA application did not contravene any provisions of NEMA as well as section 24 of the Constitution.

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- 1.9.107 In evaluating this ground of appeal as well as responses thereto, I have taken note of all the information submitted to the Department, including but not limited to the PPP, comments and response reports, specialist studies, need and desirability and location of the proposed facility.
- 1.9.108 Having duly considered the EIAr submitted in support of the abovementioned EA application, I am satisfied that environmental impacts associated with the proposed Richards Bay CCPP have been investigated, assessed, appropriately mitigated and considered by the Department prior to making a decision grant an EA to the applicant. In my view, the Department complied with their responsibilities in terms of NEMA, the Constitution and PAJA. Hence I proceed to dismiss this ground of appeal.

#### 2. DECISION

- 2.1. In reaching my decision on the appeal against the decision of the Department to grant the abovementioned EA to the applicant, I have taken the following\_information into consideration:
- 2.1.1. The EA granted by the Department on 25 December 2019;
- 2.1.2. Appeal submitted by the appellants on 27 January 2020;
- 2.1.3. Responding statement submitted by the applicant on 14 February 2020;
- 2.1.4. Comments submitted by the Department on 24 February 2020; and
- 2.1.5. The ElAr and EMPr, together with specialists' studies annexed thereto.
- 2.2. In terms of section 43(6) of NEMA, I have the authority, after considering the appeal, to confirm, set aside or vary the decision, provision, condition or directive or to make any other appropriate decision.
- 2.3. Having carefully considered the abovementioned information and in terms of section 43(6) of NEMA, I have decided to dismiss the appeals and confirm the decision of the Department to grant the abovementioned EA to the applicant.

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APPEALS AGAINST THE GRANTING OF AN ENVIRONMENTAL AUTHORISATION TO ESKOM HOLDINGS SOC LTD FOR THE PROPOSED RICHARDS BAY COMBINED CYCLE POWER PLANT PROJECT (CCPP) 3000MW, LOCATED IN KWAZULU-NATAL PROVINCE

- 2.4. In arriving at my decision on the appeal, it should be noted that I have not responded to each and every statement set out in the appeal and/or responses thereto, and where a particular statement is not directly addressed, the absence of any response thereof should not be interpreted to mean that I agree with or abide by the statement made.
- 2.5. Should the appellants be dissatisfied with any aspect of my decision, they may apply to a competent court to have this decision judicially reviewed. Judicial review proceedings must be instituted within 180 days of notification hereof, in accordance with the provisions of section 7 of PAJA.

MS B D CREECY, MP

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MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

DATE 13/10/2020

