



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA ·0001· Environment House ·473 Steve Biko Road, Arcadia· PRETORIA

DFFE Reference: 14/12/16/3/3/2/2007

Enquiries: Ms Thabile Sangweni

Telephone: (012) 399 9409 **E-mail:** TSangweni@environment.gov.za

Mr Mehmet Katmer
Karpowership SA (Pty) Ltd
PO Box 619
PRETORIA
0001

Telephone Number: +90 212 295 47 37 - 121
Email Address: Mehmet.Katmer@karpowership.com

PER E-MAIL / MAIL

Dear Mr Katmer

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: FOR THE GAS TO POWER VIA POWERSHIP PROJECT AT THE PORT OF RICHARDS BAY WITHIN THE UMHLATHUZE LOCAL MUNICIPALITY IN THE KWAZULU NATAL PROVINCE

With reference to the above application, please be advised that the Competent Authority has decided to refuse the application for Environmental Authorisation. The reasons for this refusal are contained in the Record of Refusal, of which a copy is attached hereto.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended (the EIA Regulations), you are instructed to notify all registered interested and affected parties, in writing and within fourteen (14) days of the date of the Record of Refusal, of the Competent Authority's decision as well as the provisions regarding the submission of appeals that are contained in the EIA Regulations.

In terms of the Promotion of Administrative Justice Act, 2000 (Act No 3 of 2000), you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further your attention is drawn to the provisions of the Protection of Personal Information Act, 2013 (Act no. 4 of 2013) which stipulates that the Competent Authority should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Competent Authority accountable should the Competent Authority abuses or compromises your personal information in any way.

Your attention is drawn to Chapter 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribe the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

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Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Competent Authority, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

The Director: Appeals and Legal Review of this Department at the below mentioned addresses.


By email: appealsdirector@environment.gov.za;

By hand: Environment House
473 Steve Biko
Arcadia
Pretoria
0083; or

By post: Private Bag X447
Pretoria
0001

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appealsdirector@environment.gov.za.

Yours faithfully



Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment
Date: 25/06/2007

cc:	Ms Aletta Plomp	Triplo4 Sustainable Solutions	Email: hantie@triplo4.com
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forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Record of Refusal

In terms of Regulation 24(1)(b) of the Environmental Impact Assessment Regulations, 2014,
as amended

Gas to Power via Powership Project at the Port of Richards Bay within the uMhlathuze Local
Municipality in the KwaZulu-Natal Province

King Cetshwayo District Municipality

Application Register Number:	<i>14/12/16/3/3/2/2007</i>
Applicant:	<i>Karpowership SA (Pty) Ltd</i>
Location of activity:	<i>Remainder of Lot 223 uMhlatuzi No 16230; Portion 45 of Erf 5333 Richards Bay; Remainder of Erf 5333 Richards Bay; Portion 21 (of 8) of Erf 5333 Richards Bay; Remainder of Portion 8 of the Erf 5333 Richards Bay; Richards Bay; uMhlathuze Local Municipality; King Cetshwayo District Municipality; KwaZulu-Natal Province</i>

Decision

The Competent Authority is satisfied, on the basis of information available to it that the applicant **should not** be authorised to undertake the activities specified below.

Details regarding the basis on which the Competent Authority reached this decision are set out in Annexure 1 to this Record of Refusal.

Activities refused

By virtue of the powers conferred on it by the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment Regulations, 2014, as amended, the Competent Authority hereby refuses the application for Environmental Authorisation to –

KARPOWERSHIP SA (PTY) LTD

with the following contact details –

Mr Mehmet Katmer

Karpowership SA (Pty) Ltd

PO Box 619

PRETORIA

0001

Telephone Number: +90 212 295 47 37 - 121

Email Address: Mehmet.Katmer@karpowership.com

not to undertake the following activities (hereafter referred to as "the activity"):

Activity number	Activity description
<p><u>Listing Notice 1, Activity 11:</u></p> <p><i>"The development of facilities or infrastructure for the transmission and distribution of electricity-</i></p> <ul style="list-style-type: none"> <i>(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or</i> <i>(ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more;</i> <p><i>excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is —</i></p> <ul style="list-style-type: none"> <i>(a) temporarily required to allow for maintenance of existing infrastructure;</i> <i>(b) 2 kilometres or shorter in length;</i> <i>(c) within an existing transmission line servitude; and will be removed within 18 months of the commencement of development."</i> 	<p>The power generated on the ship will be converted by the on-board High Voltage substation (110kV/170kV) and transmitted along the 132kV twin conductor overhead transmission line. A switching station will be required to facilitate the supply of electricity into the national grid. The transmission line and switching station will be located within the boundaries of the Port of Richards Bay and its capacity falls below the threshold of 275 kV.</p>
<p><u>Listing Notice 1, Activity 12:</u></p> <p><i>"The development of</i></p> <ul style="list-style-type: none"> <i>(ii) infrastructure or structures with a physical footprint of 100 square meters or more;</i> <p><i>where such development occurs</i></p> <ul style="list-style-type: none"> <i>(a) within a watercourse or</i> <i>(c) within 32 meters of a watercourse, measured from the edge of a watercourse</i> <p><i>Excluding:</i></p> <ul style="list-style-type: none"> <i>(dd) where such development occurs within an urban area."</i> 	<p>Based on the proposed route of the transmission line, and the locations of the proposed towers, switching station and the temporary laydown area for the gas pipeline installation, the development will take place within a watercourse (wetland) and within 32 metres of a watercourse.</p>

<p><u>Listing Notice 1, Activity 15:</u></p> <p><i>"The development of structures in the coastal public property where the development footprint is bigger than 50 square metres, excluding—</i></p> <ul style="list-style-type: none"> <i>(i) the development of structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</i> <i>(ii) the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</i> <i>(iii) the development of temporary structures within the beach zone where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or</i> <i>(iv) activities listed in activity 14 in Listing Notice 2 of 2014, in which case that activity applies."</i> 	<p>Structures in the coastal public property exceeding 50 square meters include: Mooring system, gas pipeline, transmission line and the laydown area for the gas pipeline installation. The development of these structures and infrastructure within the coastal public property will occur within the Port of Richards Bay.</p>
<p><u>Listing Notice 1, Activity 17:</u></p> <p><i>"Development—</i></p> <ul style="list-style-type: none"> <i>(i) in the sea</i> <i>(ii) in an estuary;</i> <i>(iii) within the littoral active zone;</i> <p><i>in respect of-</i></p> <ul style="list-style-type: none"> <i>(e) infrastructure or structures with a development footprint of 50 square metres or more —</i> <p><i>but excluding-</i></p> <ul style="list-style-type: none"> <i>(aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</i> <i>(dd) where such development occurs within an urban area."</i> 	<p>The Powerships and FSRU are not being developed. However the mooring system, the gas pipeline, the proposed towers for the transmission line, the switching station and the temporary laydown area for the gas pipeline installation will cumulatively exceed a footprint of 50 square meters within the sea, estuary (Port is situated in an estuarine functional zone and described as an estuarine bay) and littoral active zone. However, it is uncertain whether this infrastructure is deemed to increase the development footprint of the port or not because these activities fall within an existing port.</p>

<p><u>Listing Notice 1, Activity 18:</u></p> <p><i>"The planting of vegetation or placing of any material on dunes or exposed sand surfaces of more than 10 square metres, within the littoral active zone, for the purpose of preventing the free movement of sand, erosion or accretion."</i></p>	<p>Sections of the gas pipeline and transmission line, where it comes on shore, need to be stabilised to prevent erosion on the substrate where the pipeline and transmission line is established. Furthermore, rehabilitation for the land-based portion will be required. Although the area has already been transformed due to port activity, it will require the planting of vegetation on exposed sand surfaces of more than 10 square meters to ensure environmental management</p>
<p><u>Listing Notice 1, Activity 19:</u></p> <p><i>"The infilling or depositing of any material of more than 10m³ into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from a watercourse."</i></p>	<p>Based on the proposed route of the transmission line, and the location of the temporary laydown area for the gas pipeline installation, the development will take place within a watercourse and will require the infilling or depositing of material of more than 10 cubic meters into, and the excavation, removal or moving of soil or sand of more than 10 cubic meters from a watercourse.</p>
<p><u>Listing Notice 1, Activity 19A:</u></p> <p><i>"The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—</i></p> <ul style="list-style-type: none"> <i>(i) the seashore;</i> <i>(ii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or</i> <i>(iii) the sea</i> <p><i>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</i></p>	<p>The Powership mooring system, the gas pipeline, the erection of the towers for the transmission line, and the temporary laydown area for the gas pipeline installation will require the removal of more than 5 cubic metres of soil or sand from the littoral active zone, an estuary or a distance of 100 meters of an estuary, and the sea.</p>

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<p><i>(e) will occur behind a development setback;</i></p> <p><i>(f) is for maintenance purposes undertaken in accordance with a maintenance management plan;</i></p> <p><i>(g) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</i></p> <p><i>(h) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</i></p> <p><i>where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies."</i></p>	
<p><u>Listing Notice 1, Activity 27:</u></p> <p><i>"The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for-</i></p> <p><i>(i) the undertaking of a linear activity; or</i></p> <p><i>maintenance purposes undertaken in accordance with a maintenance management plan."</i></p>	<p>The transmission line, its servitude the switching station and the temporary laydown area and the infrastructure maintenance will cumulatively require clearance of more than 1 hectares of indigenous vegetation.</p>
<p><u>Listing Notice 2, Activity 2:</u></p> <p><i>"The development and related operation of facilities or infrastructure for the generation of electricity from a non-renewable resource where the electricity output is 20 megawatts or more."</i></p>	<p>The two Powerships and FSRU are assembled off-site and will be delivered fully equipped and ready to operate to the Port of Richards Bay where they will be moored and linked via a gas pipeline. The proposed design capacity for the Richards Bay two Powerships is approximately 540MW, which comprises of 27 gas reciprocating engines having heat input of over 10MW each. The 3 steam turbines have a heat input of 15.45MW each. The gas pipeline from the FSRU to the Powerships and the transmission line from the Powerships to the switching station trigger</p>

	<p>separately listed activities as does the need for an AEL which if issued, will regulate the atmospheric emissions during commissioning and operation of the project.</p>
<p><u>Listing Notice 2, Activity 4:</u> <i>"The development and related operation of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres."</i></p>	<p>Storage of LNG on the FSRU will exceed 500 cubic meters (maximum estimated storage is 175000 cubic meters at any given time).</p>
<p><u>Listing Notice 2, Activity 6:</u> <i>"The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding—</i> <i>(i) activities which are identified and included in Listing Notice 1 of 2014;</i> <i>(ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies."</i></p>	<p>The engines used for electricity generation are a Listed Activity under GN 893 of 22 November 2013 (as amended) in terms of Section 21 of the NEM: AQA Subcategory 1.5: Reciprocating Engines. In the case of the proposed project, the Powerships will have a combined sum of 27 engines that each have a heat input capacity of more than 10MW.</p> <p>The three steam turbines have a heat input capacity of less than 50MW, but more than 10MW. These units are therefore declared Controlled Emitters and they will be regulated in terms of GN 831 of 1 November 2013 for Small Boilers.</p>
<p><u>Listing Notice 2, Activity 7:</u> <i>"The development and related operation of facilities or infrastructure for the bulk transportation of dangerous goods—</i> <i>(i) in gas form, outside an industrial complex, using pipelines, exceeding 1 000 metres in length, with a throughput capacity of more than 700 tons per day;</i></p>	<p>A subsea gas pipeline for transportation of gas in gas form is proposed, exceeding 1000 meters.</p>

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<p>(ii) <i>in liquid form, outside an industrial complex, using pipelines, exceeding 1 000 metres in length, with a throughput capacity of more than 50 cubic metres per day; or</i></p> <p>(iii) <i>in solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity of more than 50 tons per day."</i></p>	
<p><u>Listing Notice 2, Activity 14:</u></p> <p><i>"The development and related operation of—</i></p> <p>(i) <i>an anchored platform; or</i></p> <p>(ii) <i>any other structure or infrastructure — on, below or along the sea bed;</i></p> <p><i>excluding —</i></p> <p>(a) <i>development of facilities, infrastructure or structures for aquaculture purposes; or</i></p> <p>(c) <i>the development of temporary structures or infrastructure where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared."</i></p>	<p>The ships will be anchored and moored in existing port operational areas utilising the vessel's anchoring system. The transmission of the NG gas will flow via a gas pipeline from the moored ship along the seabed to the main ship for processing. The subsea gas pipeline is proposed to be installed, operate and maintained along the toe of the existing dredged slopes between the floating storage regasification unit (FSRU) and Powership to ensure gas supply for power generation.</p>
<p><u>Listing Notice 3, Activity 10:</u></p> <p><i>"The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres</i></p> <p><i>KwaZulu-Natal</i></p> <p>i. <i>In an estuarine functional zone;</i></p> <p>vi. <i>Within 500 metres of an estuarine functional zone;</i></p> <p>ix. <i>Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p>	<p>The storage and handling of a dangerous good at the Powerships and FSRU will have a combined capacity of more than 500 cubic meters. The FSRU with a storage capacity not exceeding 175 000 cubic metres is located within the estuarine functional zone at Richards Bay.</p>

<p>xii. <i>Outside urban areas:</i> (bb) <i>Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or</i></p> <p>xiv. <i>Inside urban areas:</i> (bb) <i>Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined."</i></p>	
<p><u>Listing Notice 3, Activity 12:</u> <i>"The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan</i></p> <p>d. KwaZulu-Natal</p> <p>vi. <i>Within the littoral active zone or 100 metres inland from the high water mark of the sea, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;</i></p> <p>xiii. <i>In an estuarine functional zone.</i></p>	<p>This activity will be triggered by the transmission line and its servitude, the switching station and temporary stringing yard/laydown area infrastructure will cumulatively require clearance of more than 300 square meters of indigenous vegetation.</p>
<p><u>Listing Notice 3, Activity 14:</u> <i>"The development of—</i></p> <p>(i) <i>dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or</i></p> <p>(ii) <i>infrastructure or structures with a physical footprint of 10 square metres or more;</i></p> <p><i>where such development occurs—</i></p> <p>(a) <i>within a watercourse;</i></p> <p>(b) <i>in front of a development setback; or</i></p>	<p>Based on the proposed route of the transmission line, and the locations of the proposed towers, switching station and the temporary laydown area for the gas pipeline installation, the development will take place within a watercourse (wetland) and within 32 metres of a watercourse, within the littoral active zone and in an estuarine functional zone.</p>

<p>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour</p> <p>KwaZulu-Natal</p> <p>i. In an estuarine functional zone;</p> <p>x. Outside urban areas: (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea</p> <p>xi. Inside urban areas: (cc) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea."</p>	
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as described in the Environmental Impact Assessment (EIA) dated April 2021.

21 Digit SG Codes

N	0	G	V	0	0	0	0	0	0	0	1	6	2	3	0	0	0	0	0	0
N	0	G	V	0	4	2	1	0	0	0	0	5	3	3	3	0	0	0	4	5
N	0	G	V	0	4	2	1	0	0	0	0	5	3	3	3	0	0	0	0	0
N	0	G	V	0	4	2	1	0	0	0	0	5	3	3	3	0	0	0	2	1
N	0	G	V	0	4	2	1	0	0	0	0	5	3	3	3	0	0	0	0	8

- for the 540MW Gas to Power Powership Project at the Port of Richards Bay within the uMhlatuze Local Municipality in the KwaZulu-Natal Province, hereafter referred to as "the property".

The proposed Gas to Powership Project will entail the following:

- Two Floating Mobile Powerships and Floating Storage Regasification Unit (FSRU);
- Berthing and mooring of the Powerships and FSRU;
- Transmission lines;

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- Gas pipelines;
- Water requirements;
- Handling and storage of hazardous goods; and
- Waste management.

Technical details of the proposed facility:

Component	Description/ Dimensions
Location of the site	Port of Richards Bay
Export capacity	~540MW
Preferred Site access	The proposed location of the project is situated within the existing and operational Port of Richards Bay, and therefore the existing access roads network from the N2 and R34 will be used to access the Powership Project site

Legislative Requirements

Refusal of the application

1. The application for Environmental Authorisation is refused for the 540MW Gas to Power Powership Project at the Port of Richards Bay within the uMhlathuze Local Municipality in the KwaZulu-Natal Province as described above.

Notification of refusal and right to appeal

2. The applicant must notify every registered interested and affected party, of the Competent Authority's decision, in writing and within 14 (fourteen) calendar days of the date of this record of refusal.
3. The notification referred to must –
 - 3.1. specify the date on which the record of refusal was issued;
 - 3.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 3.3. advise the interested and affected party that a copy of the record of refusal will be furnished on request; and,
 - 3.4. give the reasons of the Competent Authority for the decision.

Date of refusal of the application for Environmental Authorisation: 23/06/2021


Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Competent Authority took, *inter alia*, the following into consideration -

- a) The listed activities as applied for in the application form received on 05 October 2020.
- b) The information contained in the Scoping Report received on 18 November 2020 and the EIAR dated April 2021.
- c) The comments and inputs received from the interested and affected parties (I&AP's) including various Organs of State, *inter alia*: Ezemvelo KZN Wildlife, KwaZulu-Natal Economic Development, Tourism and Environmental Affairs, Eskom, SAHRA, the Department of Forestry, Fisheries & the Environment: Biodiversity and Conservation, Oceans and Coast and Air Quality, the uMhlatuze Local Municipality, Birdlife SA, Transnet as included in the EIAR dated April 2021.
- d) The information contained in the specialist studies contained within the appendices of the EIAR dated April 2021 and as indicated below:

Title	Prepared by	Date
Wetland Delineation and Functionality	Triplo4 Sustainable Solutions	February 2021
Terrestrial Ecological Assessment	Ms Leigh Anne De Wet	April 2021
Archaeological Impact Assessment	Umlando: Archaeological Surveys and Heritage	March 2021
Estuarine and Coastal Assessment	GroundTruth & Coastwise Consulting	April 2021
Climate Change Impact Assessment	Themis Environmental Peer Reviewed by: Luke Richard Moore	April 2021
Geohydrological, Hydrology & Hydropedology Assessments	GCS Water & Environmental Consultants	April 2021
Aquatic Impact Assessment	GCS Water & Environmental Consultants	April 2021
Major Hazardous Installations (Risk Assessment)	Major Hazard Risk Consultants	February 2021
Marine Ecology Assessment	Lwandle Marine Environmental Services	April 2021
Air Quality Impact Assessment	uMoya-Nilu Consulting	April 2021
Wetland Rehabilitation Plan	Triplo4 Sustainable Solutions	April 2021
Noise Impact Assessment	Safetech	October 2020
Avifauna Impact Assessment	Ms Leigh Anne De Wet Peer Reviewed by: A.N. Marchant	April 2021
Socio Economic Impact Assessment	Urban-Econ	April 2021
Underwater Archaeological Impact Assessment	Vanessa Maitland	March 2021

- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

2. Key factors considered in making the decision

All information presented to the Competent Authority was taken into account in the Competent Authority's consideration of the application. A summary of the issues which, in the Competent Authority's view, were of utmost significance is set out below.

- a) The information contained in the application form, the SR received on 18 November 2020 and the EIAr dated April 2021;
- b) The information contained in the specialist studies as contained as Appendix I of the EIAr;
- c) The comments received by various I&AP's and the responses thereto as contained in Appendix D of the EIAr.
- d) The comments by the Chief Directorate: Integrated Environmental Authorisation on the draft SR, the acceptance of the SR and the draft EIAr dated 02 November 2020, 06 January 2021 and 11 March 2021, respectively.

3. Findings

After consideration of the information and factors listed above, the Competent Authority made the following findings -

- a) Numerous concerns and complaints were raised by various Interested and Affected Parties relating to inadequacies of the public participation process conducted as part of the EIA process. These concerns were raised specifically with regards to failures to involve small-scale fishing communities, tribal authorities and communities as well as informal settlers and land users in and around the port.
- b) The Environmental Impact Assessment Process was compromised as the applicant failed to comply with the requirements prescribed in terms of Section 24(1A)(c) of the NEMA in relation to any procedure relating to public consultation and information gathering. The draft EIAr was subjected to public review for a period less than the legislated 30 days as indicated by I&AP's. The documents were removed from the website, and were only returned after queries were raised by various I&AP's.
- c) The EAP failed to enlist the provision of Regulation 23(1)(b) of the EIA Regulations, 2014 as amended, as the EIAr dated April 2021 contains significant changes and/or significant new information which was not contained in the reports consulted on during the public participation process before it was submitted to the Competent Authority for decision making. This then compromises the decision making powers of

- the Competent Authority as information was not presented to I&AP's for their consideration, prior to decision making.
- d) The Public Participation Process was not conducted in terms of Regulation 39, 40, 41, 42, 43 & 44 of the EIA Regulations, 2014, as amended as well as per the principles of NEMA as outlined in Chapter 2 of the Act.
 - e) The Competent Authority advised the EAP on a number of occasions, i.e. comments on the draft Scoping Report, acceptance of the Scoping Report and comments issued on the draft Environmental Impact Assessment Report that the EAP must ensure that all relevant listed and specified activities are applied for, are specific and can be linked to the development activity or infrastructure as described in the project description, and that a final list of all applicable listed activities must be clearly identified and provided. However, the final EIAR and amended application form both contain listed activities where the EAP indicated uncertainty in terms of their applicability and requirement for environmental authorisation. As such, the objectives of the Environmental Impact Assessment Process as outlined in Appendix 3 of the EIA Regulations, 2014 as amended were not fulfilled and the Competent Authority was unable to make an informed decision on the on the potential impacts of the listed or specified activities on the receiving environment.
 - f) While the Noise Specialist Report (dated October 2020) notes, the close proximity of the Richards Bay Nature Reserve to this noise source, it only quantifies above-ground noise, and only determines the impact of noise on human sensitive receptors. It does not detail what impact noise of between 50 and 70 dBA would have on non-human receptors within the nature reserve. The Richards Bay Nature Reserve should have been identified as a sensitive receptor for non-humans. The potential for disturbance to birdlife and reclusive species in the fringes of the reserve's swamp and mangrove forest components is a critical omission in terms of the impact assessment. Noise of 50dBA would most certainly result in displacement of species from their core habitat; however, this is not mentioned or assessed and mitigation measures are not provided.
 - g) The "Marine Ecology Specialist Study G2P Development, Port of Richards Bay" dated April 2021 recommends that a Noise Modelling Study should be undertaken to gain a more quantitative understanding of the noise produced from power ship operations in the Port of Richards Bay and the cumulative impacts on the surrounding marine ecology. The same recommendation is reinforced by the Estuarine Specialist. The Noise Modelling study should have been conducted as part of the EIA process to fully understand the impacts of the proposed development.
 - h) The conclusion of the SACNASP Peer Review of the Estuarine Impact Report dated 23 April 2021 states that impacts identified is not a true reflection of the scale of the project in terms of influence. There are impacts that trigger regional and global scale impacts and the specialist recommends that these be

reassessed and in addition the peer review states that there is no clear recommendation from the estuarian specialist. This should have been reassessed and finalised by the EAP prior to submission of the report for decision making.

- i) Richards Bay is an important area on the KZN Coast for Indian Ocean Humpback Dolphin (*Sousa plumbea*), a recently recognised species distinct from its original taxon, *S. chinensis* and classified as Endangered in the IUCN Red List of Threatened Species. As the Underwater Noise Impact Assessment was not undertaken, underwater noise impacts on an endemic population of dolphins have not been considered, and therefore the impact is unknown, although suggested to be relatively high given that dolphins and whales are particularly impacted upon by underwater noise.
- j) The Underwater Noise Impact would have also assessed the impacts the proposed development would have on dolphins, sharks, fish, turtles and macrobenthos, as well as specifically address whether the noise would impact on the migration of prawns out of the estuary into the marine environment.
- k) There were countless concerns raised by Ezemvelo KZN Wildlife, Department of Forestry, Fisheries and the Environment: Biodiversity and Conservation, KZN Department of Economic Development, Tourism and Environmental Affairs and I&AP's regarding the Avifauna Impact Assessment, an independent peer reviewer was contracted to peer review the said study. The results of the peer review indicate that:
- Not bringing in the fact that South Africa is Co-signatory to a convention and to a treaty for migratory birds: (1) the Convention of Migratory Species (CMS), also known as the Bonn Convention, which is a convention on the conservation of migratory species of wild animals, and (2) African Eurasian Waterbird Agreement (AEWA), an intergovernmental treaty dedicated to the conservation of migratory waterbirds & their habitats across Africa & Europe, is an oversight or gap.
 - According to De Wet the Important Bird Area (IBA) status for Richard's Bay Game Reserve (RBGR) – (IBA trigger species still there albeit in lower numbers) has been taken down a notch from Global to a sub-regional IBA, which in no way detracts from the importance of the area to meet the requirements of the convention and the treaty.
 - It is unclear whether all the wader counts mentioned included going into the RBGR, as one of De Wets' brief surveys of the RBGR was from a distant vantage point, which even if a telescope was used (not mentioned) is totally inadequate as you are looking at 1200ha of grey mud flats at low tide and most waders are small, and the experience of the peer reviewer is that most of the waders are at the far end of the reserve. When the tide goes out the birds spread out very thinly across the freshly exposed mud flats and are difficult enough to see even if the observer(s) is out there on the mud flats with a telescope. So, the counts overall may not reflect the true numbers of birds.

- Furthermore, in the original desk top assessment there is no reference to the Natal Parks Board/EKZNW bird list for RBGR and surrounds – a list of birds seen there over a long period of time, which may have proved useful.
 - While the original study mentions a number of times that the sandspit and Kabeljous flats areas in the harbour area have been identified as very sensitive habitat for water-associated birds, and waders in particular, and are irreplaceable, the peer reviewer does not believe that there has been enough emphasis on these two areas, especially the Kabeljou flats which are basically an extension of the RBGR and act as a buffer zone to the Protected Area. Any downsizing, or loss, of the Kabeljou flats could have a devastating effect on RBGR. Especially as many years ago a large area of wader habitat was lost with the extension of the coal terminal, and any further loss could be the final straw.
 - The mudflats provide all the habitat and food the waders require, especially the migratory waders that arrive undernourished in spring, and need to 'fatten up' for the return journey. The estuarine habitats in South Africa, including mud flats, have been severely depleted over the years. Any further loss will be devastating for migrant birds and will have a global impact - as signatory to the Bonn Convention and the AEWA Treaty mentioned above, South Africa would be remiss to allow this to happen. South Africa should regard any further loss as non-negotiable – a point the reviewer feels was not highlighted.
 - Not considering the thermal heating of water as a potential threat to food resources and the risk of pollution from the ships e.g. oil, ruptured undersea pipes, etc. Any one of these events is likely to have large negative effects on the above food sources and thus on the birds.
 - The importance of the connectivity between the various sites was not really covered. This connectivity is important as all the sites are relatively small and the loss of one could result in a domino effect on the other sites.
 - The peer reviewer, for reasons given throughout the review does not agree that the development should go ahead.
- l) The "Independent Review of the Avifaunal Assessment of the Proposed Gas to Power Project Karpower Project, Richards Bay, KwaZulu-Natal" dated 23-25 April 2021 disagrees with the statement of the original Avifaunal Assessment which states that *"It is the opinion of the specialist that the proposed development go ahead"*. The peer review states that *"I cannot agree with this for all the reasons given throughout my review, and I regard it to be a premature statement."* As such, the peer review conducted contradicts the findings of the original assessment, and no new assessment was done in this regard, to provide a firm position on the proposed development.
- m) Most of the specialists indicated limitations to their respective studies; amongst, others that they either had very limited time to apply their minds, or it does not apply to the standards of undertaking the

assessments and that these studies were undertaken in the wrong season. These limitations were highlighted in the comments raised by various I&AP's as well as in the comments issued by the Chief Directorate: Integrated Environmental Authorisations. The gaps and limitations identified in the respective assessments; raises concerns with regard to the adequacy of the assessment and the validity of the findings. The studies should have been updated and amended prior to submission for decision making.

- n) As a result of the significant gaps and limitations with the assessments conducted, the Competent Authority cannot fully understand the potential impacts of the proposed development and thus not able to make an informed decision. As such, the objectives of the Environmental Impact Assessment Process as outlined in Appendix 3 of the EIA Regulations, 2014 as amended cannot be met.
- o) In this light, the inconsistencies between the original Avifauna Study, peer review, comments from Ezemvelo KZN Wildlife, Department of Forestry, Fisheries and the Environment: Biodiversity and Conservation, KZN EDTEA and I&AP's, the Department does not have enough information or certainty on the potential impacts of the proposed development to make an informed decision.
- p) The EIAR in its current form is not adequate to make an informed decision on the abovementioned application.

In view of the above, the Competent Authority is of the following opinion:

- i. The minimum requirements, specifically with regard to public participation, were not met. The purpose of public participation is not only to promote informed decision making, but also to promote the legitimacy and acceptance of an outcome or decision and to promote participatory democracy.
- ii. The actual and potential impacts on the environment as well as socio-economic conditions could not be properly evaluated (particularly insofar as small-scale fisheries are concerned), especially because of the lack of a proper underwater noise impact study and because of the contradictory information that was made available.
- iii. The effects of activities on the environment could not receive adequate consideration because one of the major impacts, underwater noise generation, was not fully investigated nor were discrepancies and contradictions between specialist studies clarified by the Environmental Assessment Practitioner.
- iv. Under this circumstances it is not possible to make a determination with regard to the significance of potential impacts or consequences for the environment, the effectiveness of potential mitigation measures or whether the project under consideration will constitute a sustainable development.

Consequently there is no sufficient, adequate and reliable basis upon which the statutory discretion of the Competent Authority can be exercised in favour of the applicant and therefore the application for Environmental Authorisation is refused.