

MEETING NOTES

Job Title	BioTherm Renewable Energy Projects
Project Number	47579
Date	23 August 2016
Time	10:00 – 12:00
Venue	DEA Environment House
Subject	BioTherm – Solar Energy Developments – DEA Pre- Application Meeting
Client	BioTherm Energy (Pty) Ltd
Present	See Attached Attendance Register (Appendix A)
Apologies	None
Distribution	As above

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MAT	TERS ARISING	ACTION
1.0	WELCOME AND INTRODUCTIONS	-
1.1	Ashlea Strong thanked the Department of Environmental Affairs (DEA) for the opportunity to meet with them to discuss the solar energy projects.	-
1.2	A round of introductions was done, including:	
	 BioTherm Energy (Pty) Ltd – Michael Barnes, Irene Bezuidenhout and Siphelele Dunga WSP Environmental (Pty) Ltd – Ashlea Strong DEA – Coenrad Agenbach, Muhammad Essop and Mmamohale Kabasa 	
1.3	Ashlea Strong mentioned that the presentation (Appendix B) would be attached to the minutes together with the attendance register (Appendix A).	
2.0	PROJECT DESCRIPTION	-
2.1	The following projects were introduced to the team:	-
	 → Letsoai CSP 1 (150MW) → Letsoai CSP 2 (150MW) → Enamandla PV 1 (75MW) → Enamandla PV 2 (75MW) → Enamandla PV 3 (75MW) → Enamandla PV 4 (75MW) → Enamandla PV 5 (75MW) → Enamandla PV 5 (75MW) → Solar Transmission Integration (400kV) → Water Pipeline 	
2.2	It was noted that in the event that the 400kV transmission integration requirement is required to be downgraded in the future, a new Basic Assessment Application will be required to be submitted.	BioTherm

MATT	ERS ARISING	ACTION
3.0	LEGISLATIVE REQUIREMENTS	
3.1	The water pipeline could be a provincial application; however the DEA noted concerns around incremental decision making. In addition, the DEA noted that without a water connection included in project they don't consider a CSP project viable. Therefore, it was agreed that the water pipeline application would be combined with the CSP 1 or 2 applications rather than being lodged under a separate application. In the case of it being connected to both CSP projects, then this needs to be clarified and made clear in the process.	BioTherm and WSP
3.2	It was noted that the Listed Activity list is a living document and the list and associated application form must be updated at each milestone as the project progresses and resubmitted to the DEA, only if there are changes in the activities applied for, based on the assessment or comments raised by the DEA.	WSP
3.3	The DEA noted that GNR 983 Activity 30 must only be included if a site affects a listed ecosystem in terms NEMBA Section 53(1). This must be verified in the process. All activities for listing notice 3 must be verified In the process and the correct sub activity must be applied for.	WSP
4.0	SPECIALIST STUDIES	
4.1	The DEA agreed on the list of specialist studies. More studies may be noted to be done in the process.	-
4.2	It was noted that water availability must be proven for the CSP projects. The DEA noted that there are serious concerns surrounding the impact of water requirements on existing water allocations.	BioTherm and WSP
4.3	WSP will be required to have all specialist studies undertaken by in-house specialists to be externally peer reviewed.	WSP
4.4	The DEA requested that specialist studies must be specific to each application. In addition, the Terms of Reference for each specialist must be specific to the relevant technology.	WSP
4.5	It was noted that specialists must prove that they reviewed and taken cognisance of other specialist studies from surrounding Environmental Authorisations and other specialist studies done within the area.	WSP
5.0	GENERAL	
5.1	The EAP must be aware of and understand the requirements of the process and their obligations under the 2014 Regulations, and agreed that they understand the process and the requirements.	WSP
5.2	Extensions in terms of Regulations 3(7) will not be considered, and only under exceptional circumstances.	BioTherm and WSP

MAT	TERS ARISING	ACTION
5.3	The Developer needs to obtain comments from SKA	
5.4	Signed land owner consent forms must accompany the application forms.	BioTherm and WSP
5.5	The Comment and Response Report must not be broken into impacts – but should rather deal with each full comment as a single entity. In addition, the use of the words "noted" is not considered favourable, each comment must be addressed.	WSP
5.6	The Comment and Response Report must be separate from the main report and must not group comments, but rather address each comment separately.	
5.7	The adverts included in the reports must be legible.	WSP
5.8	The DEA requested that the electronic copies must not be one big pdf document. In addition, electronic copies must be identical to the hard copy submission	WSP
5.9	The DEA agreed to accept one hard copy and one electronic copy of the Draft Scoping Reports.	WSP
5.10	The DEA specifically requested that a separate copy of the Draft Scoping Reports also be sent to the Department of Environmental Affairs Director: Biodiversity and Conservation.	
5.11	The minutes of the Pre-application Meeting must be attached to the Draft Scoping Reports.	WSP

NEXT MEETING

The Pre-Application Meeting for the Proposed Wind Energy Developments will be held on 25 August 2016.

Appendix A – Attendance Register

ATTENDANCE REGISTER 23 August 2016

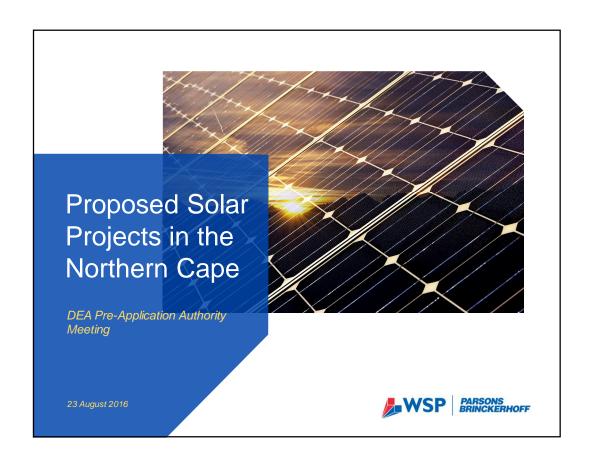
Name	Company Name	Contact Details	Signature
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Proposed BioTherm Solar Energy Developments in the Northern Cape BioTherm Energy (Pty) Ltd DEA Pre-Application Authority Meeting – 23 August 2016 / 10:00 – 12:00

ATTENDANCE REGISTER 23 August 2016

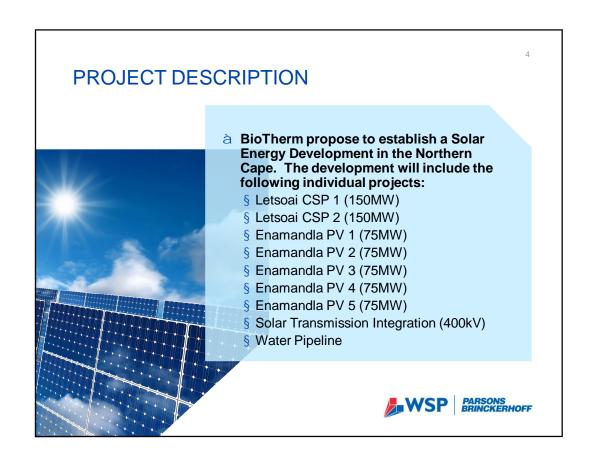
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,		Tel: 011 3674600	
Ton Rezuiderhaut	Biothern Energy	Fax:	
THE RESERVE AND ADDRESS OF THE PERSON NAMED IN		Mobile: 016 822 3484	
		Email: ihezuidenhout@bicthernenegy.com	
		Tel: 011 561 1392	
		Fax:	
Ashlea Stroma	483	Mobile: 082786 7819	
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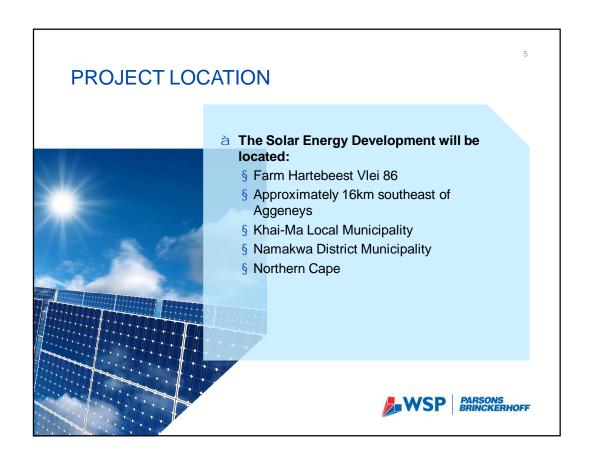
Appendix B - Presentation

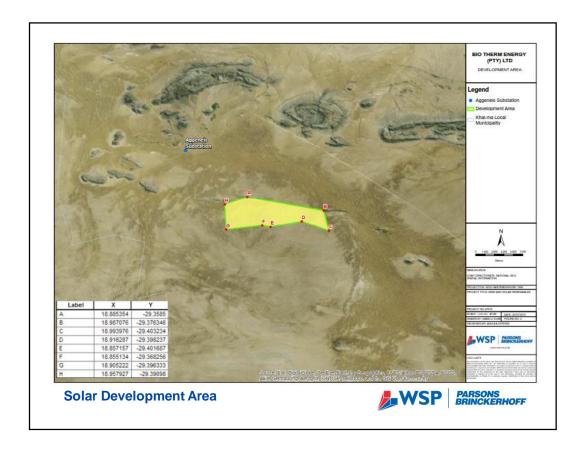


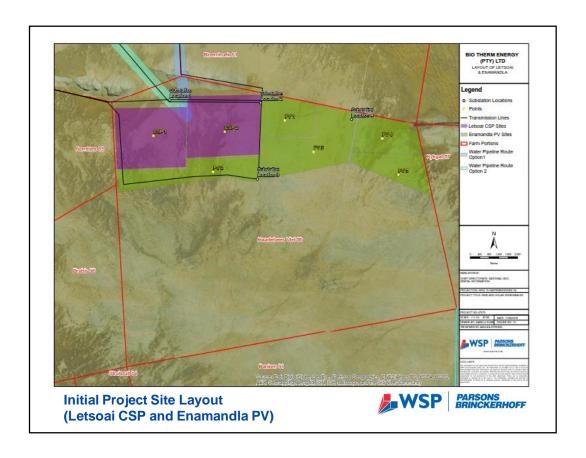


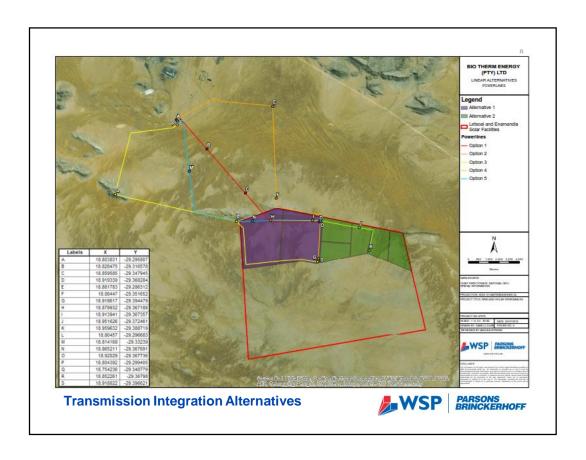


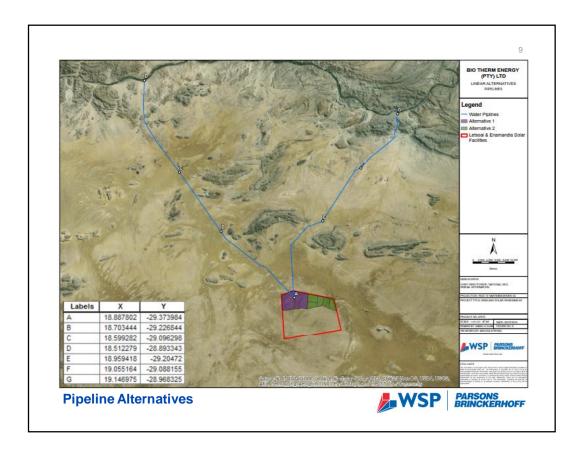














LISTED ACTIVITIES (GNR 983) - LETSOAI CSP 1 & 2

LISTED ACTIVITY AS DESCRIBED IN GNR 983	APPLI	CABLE	APPLICABILITY & LICENCE REQUIREMENT
LISTED ACTIVITY AS DESCRIBED IN GNR 963	CSP 1	CSP 2	APPLICABILITY & LICENCE REQUIREMENT
(11)- The development of facilities or infrastructure for the transmission and distribution of electricity-	Applicable	Applicable	Letsoai CSP 1 and 2 will require the construction of an on- site substation and a 132kV overhead powerline. The powerline will all be outside an urban area and will connect
(i) Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.			to common on-site substation prior to the electricity being evacuated to the Eskom Grid.
(13)- The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014.	Applicable	Applicable	Letsoal CSP 1 and 2 will require water storage tanks / dams and a water treatment plant with a combined capacity that exceeds 50 000 m³.
(14)-The development of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	Applicable	Applicable	Hazardous substances such as fuel will be required to be stored on site. The storage containers will have a combined capacity of more than 80m ³ but less than 500m ⁵ .
(24)-The development of- (ii) A road with a reserve wider than 13,5 meters, or where no reserve exists where the road is no wider than 8 meters.	Potentially Applicable	Potentially Applicable	Internal access roads will be required for access to Letsoai CSP 1 and 2. These roads may be wider than 8m.
(25). The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of more than 2000 cubic metres but less than 15000 cubic metres	Applicable	Applicable	Letsoal CSP 1 and 2 will require a water treatment plant with a daily throughput capacity of more than 2 000m³ but less than 15 000 m³
(28)- Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development:	Applicable	Applicable	Letsoai CSP 1 and 2 are proposed to be developed outside an urban area with a development footprint of more than 1 ha.
(ii) Will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.			
(56)- The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre-	Potentially Applicable	Potentially Applicable	The main access road that connects Letsoai CSP 1 and 2 to the N14 may require widening.
(i) Where the existing reserve is wider than 13,5 meters; or			RRINGKERHOEE

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LISTED ACTIVITIES (GNR 984) - LETSOAI CSP 1 & 2

LISTED ACTIVITY AS DESCRIBED IN GNR 984	APPLI		APPLICABILITY & LICENCE REQUIREMENT
(1)- The development of facilities or infrastructure for the generation of electricity from a renewable	CSP 1 Applicable	CSP 2 Applicable	Letsoai CSP 1 and 2 will generate electricity from a renewable resource with an electricity output of more than
resource where the electricity output is 20 megawatts or more, excluding where such development of			20 megawatts (150MW).
facilities or infrastructure is for photovoltaic installations and occurs within an urban area.			
(4)- The development 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	Applicable	Applicable	In the event that a storage option is required for the Hea Transfer Liquid then hazardous substances such a either molten salt or fuel oil will be required to be store on site. The storage containers will have a combiner capacity of more than 500 m3.
(6)-The development of facilities or infrastructure for any process or activity which requires a permit or license in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent	Applicable	Applicable	A water use license will be required for the discharge o wastewater to the evaporation ponds.
(15)- The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for- (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance	Potentially Applicable	Potentially Applicable	Letsoai CSP 1 and 2 will potentially require more than 20ha of indigenous vegetation to be cleared.
with a maintenance management plan. (1)- The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more, excluding where such development of facilities or infrastructure is for photovoltaic intelligibles.			



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LISTED ACTIVITIES (GNR 983) – ENAMANDLA PV 1 - 5

LISTED ACTIVITY AS DESCRIBED IN GNR 983			APPLICABLE			APPLICABILITY & LICENCE
EIGTED ACTIVITY AS DESCRIBED IN CHR 300	PV 1	PV 2	PV 3	PV 4	PV 5	REQUIREMENT
(11)- The development of facilities or infrastructure for the transmission and distribution of electricity-	Applicable	Applicable	Applicable	Applicable	Applicable	The projects will require the construction of an on-site substation and a 132kV overhead powerline.
(i) Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.						The powerline will all be outside an urban area and will connect to common on-site substation prior to the electricity being evacuated to the Eskom Grid.
(14)- The development of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	Applicable	Applicable	Applicable	Applicable	Applicable	Hazardous substances such as fuel will be required to be stored on site. The storage containers will have a combined capacity of more than 80m³ but less than 500m³.
(24)- The development of- (ii) A road with a reserve wider than 13,5 meters, or where no reserve exists where the road is no wider than 8 meters.	Potentially Applicable	Potentially Applicable	Potentially Applicable	Potentially Applicable	Potentially Applicable	Internal access roads will be required for access. These roads may be wider than 8m.
(28)- Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development:	Applicable	Applicable	Applicable	Applicable	Applicable	The projects are proposed to be developed outside an urban area with a development footprint of more than 1 ha.
(ii) Will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.						
(30) Any process or activity identified in	Not	Not	Applicable	Not	Not	A small Critical Biodiversity Area is
terms of section 53(1) of the National Environmental Management: Biodiversity Act. 2004 (Act No. 10 of 2004).	Applicable	Applicable		Applicable	Applicable	located within the Enamandla PV 3 site.
(56)- The widening of a road by more	Potentially	Potentially	Potentially	Potentially	Potentially	The main access road that connects
than 6 metres, or the lengthening of a road by more than 1 kilometre-	Applicable	Applicable	Applicable	Applicable	Applicable	the project area to the N14 may require widening.
(i) Where the existing reserve is wider than 13,5 meters; or						

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LISTED ACTIVITIES (GNR 984) - ENAMANDLA PV 1 - 5

LISTED ACTIVITY AS DESCRIBED IN GNR 984			APPLICABLE			APPLICABILITY	& LICENCE
LISTED ACTIVITY AS DESCRIBED IN GNR 904	PV 1	PV 2	PV 3	PV 4	PV 5	REQUIREMENT	
(1) The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more, excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs within an urban area.	Applicable	Applicable	Applicable	Applicable	Applicable	generate electricit	PV projects will y from a renewable electricity output of awatts (75MW).
(15)- The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for-	Applicable	Applicable	Applicable	Applicable	Applicable		PV projects will 20ha of indigenous eared.
(i) the undertaking of a linear activity; or							
(ii) maintenance purposes undertaken in accordance with a maintenance management plan.							
(1)- The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more, excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs within an urban							



LISTED ACTIVITIES (GNR 985) - ENAMANDLA PV 1 - 5

LISTED ACTIVITY AS DESCRIBED IN GNR 985			APPLICABLE			APPLICABILITY	&	LICENCE
LISTED ACTIVITY AS DESCRIBED IN GNR 903	PV 1	PV 2	PV 3	PV 4	PV 5	REQUIREMENT		
(4) - The development of a road wider than 4 metres with a reserve less than	Not	Not	Applicable	Not	Not	A small Critical		
13,5 metres.	Applicable	Applicable		Applicable	Applicable	site.	ic Enaman	uiu i v c
In The Northern Cape -								
(ee) Critical biodiversity areas as								
identified in systematic biodiversity plans adopted by the competent								
authority or in bioregional plans								
(12) - The clearance of an area of 300	Not	Not	Applicable	Not	Not	A small Critical		
square meters or more of indigenous	Applicable	Applicable		Applicable	Applicable	located within th	ne Enaman	dla PV 3
vegetation except where such clearance of indigenous vegetation is required for						site.		
maintenance purposes undertaken in								
accordance with a maintenance								
management plan								
In the Northern -								
(i) Within critical biodiversity areas								
identified in bioregional plans (14) - The development of –	Not	Not	Applicable	Not	Not	A small Critical	Disaborate	
` '			Applicable			located within th		
(xii) infrastructure or structures with a physical footprint of 10 square meters or more	Applicable	Applicable		Applicable	Applicable	site.	ic Enamen	uia i v i
In the Northern Cape								
(ff) Critical biodiversity areas or								
ecosystem service areas as identified in								
systematic biodiversity plans adopted by								
the competent authority or in bioregional plans;								



LISTED ACTIVITIES (GNR 983) - TRANSMISSION INTEGRATION

LISTED ACTIVITY AS DESCRIBED IN GNR 983	APPLICABLE	APPLICABILITY & LICENCE REQUIREMENT
(12) - The development of-	Potentially	The powerline route may cross a watercourse.
(xii) infrastructure or structures with a physical footprint of 100 square metres or more;	Applicable	
where such development occurs-		
(a) within a watercourse;		
(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;		
(19) - The infilling or depositing of any material of more than 5	Potentially	The powerline route may cross a watercourse.
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-	Applicable	
(i) a watercourse;		
(27) - The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for-	Applicable	The construction of the common on-site substations w require the clearance of indigenous vegetation of more that the but less than 20 ha.
(i) the undertaking of a linear activity; or		
(ii) maintenance purposes undertaken in accordance with a maintenance management plan.		
(28) - Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development:	Applicable	The construction of the common on-site substations a proposed to be developed outside an urban area with development footprint of more than 1 ha
(ii) will occur outside an urban area, where the total land to be		



LISTED ACTIVITIES (GNR 984) - TRANSMISSION INTEGRATION

LISTED ACTIVITY AS DESCRIBED IN GNR 984	APPLICABLE	APPLICABILITY & LICENCE REQUIREMENT
(9) - The development of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex.	Applicable	The CSP and PV facilities will require the construction of on-site substations and one 400kV overhead powerline in order to connect to the Eskom Grid

LISTED ACTIVITIES (GNR 985) - TRANSMISSION INTEGRATION

LISTED ACTIVITY AS DESCRIBED IN GNR 985	APPLICABLE	APPLICABILITY & LICENCE REQUIREMENT
(4) - The development of a road wider than 4 metres with a reserve less than 13,5 metres.	Potentially Applicable	The powerline route may intersect a Critical Biodiversity Area.
In The Northern Cape - (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans		
(12) - The clearance of an area of 300 square meters 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	Potentially Applicable	The powerline route may intersect a Critical Biodiversity Area
In the Northern - (i) Within critical biodiversity areas identified in bioregional plans		
(14) - The development of –	Potentially	The powerline route may intersect a Critical Biodiversity Area
(xii) infrastructure or structures with a physical footprint of 10 square meters or more	Applicable	
In the Northern Cape		
(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;		



LISTED ACTIVITIES (GNR 983) - WATER PIPELINE

LISTED ACTIVITY AS DESCRIBED IN GNR 983	APPLICABLE PV 5	APPLICABILITY & LICENCE REQUIREMENT
(9) - The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water-	Applicable	The CSP facilities will require water. The water supplipieline to be constructed will be longer than 1000m and
(i) with an internal diameter of 0,36 metres or more; or		will have an internal diameter of more than 0,36 meters.
(ii) with a peak throughput of 120 litres per second or more;		
(12) - The development of-	Potentially	The pipeline route may cross a watercourse.
(xii) infrastructure or structures with a physical footprint of 100 square metres or more;	Applicable	
where such development occurs-		
(a) within a watercourse;		
(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;		
(19) - The infilling or depositing of any material of more than 5	Potentially	The pipeline route may cross a watercourse.
cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more	Applicable	
than 5 cubic metres from-		
(i) a watercourse;		



LISTED ACTIVITY AS DESCRIBED IN GNR 985	APPLICABLE PV 5	APPLICABILITY & LICENCE REQUIREMENT
(4) - The development of a road wider than 4 metres with a reserve less than 13,5 metres. In The Northern Cape - (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in	Potentially Applicable	The pipeline route may intersect with a Critical Biodiversity Area.
bioregional plans (12) - The clearance of an area of 300 square meters 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	Potentially Applicable	The pipeline route may intersect with a Critical Biodiversity Area.
In the Northern - (i) Within critical biodiversity areas identified in bioregional plans		
(14) - The development of – (xii) infrastructure or structures with a physical footprint of 10 square meters or more	Potentially Applicable	The pipeline route may intersect with a Critical Biodiversity Area.
In the Northern Cape (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;		







