

Licence Number: PPL.p.F1/155/2/2013

LICENCE FOR THE CONSTRUCTION OF A PETROLEUM PIPELINE

This licence is issued by the National Energy Regulator, hereinafter referred to as "the Energy Regulator", in terms of the Petroleum Pipelines Act, 2003 (Act No. 60 of 2003).

This licence is issued to:

Avedia Energy (Pty) Ltd

(Company Registration No: 2003/023054/07)
hereinafter referred to as "the Licensee"

This licence is only for the purpose of construction of a petroleum pipeline which runs from the Sunrise Energy interconnection point to the Avedia Energy storage facility (PPL.sf.F1/155/1/2013) in Saldanha Bay.

The construction of the petroleum pipeline permitted under this licence is subject to the terms and conditions as contained in this licence and/or amendments to these conditions as imposed by the Energy Regulator.

ISSUED at Pretoria on this 1st day of July 2014.



CHIEF EXECUTIVE OFFICER
NATIONAL ENERGY REGULATOR



LICENCE FOR THE CONSTRUCTION OF A PETROLEUM PIPELINE

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CHAPTER ONE: LICENSED ACTIVITY

1. Licensed Activity

1.1 The Energy Regulator issues **Avedia Energy (Pty) Ltd** a licence to construct a petroleum pipeline located at Saldanha Bay, Western Cape, as follows:

- (a) a pipeline to transport liquefied petroleum gas (LPG) consisting of:
 - (i) a 200mm internal diameter, unidirectional pipeline, interconnected to the Sunrise Energy (Pty) Ltd ("Sunrise Energy") pipeline (Licence number: PPL.sf.F1/88/2009) running from the Sunrise Energy interconnection point to the Avedia Energy storage facility (PPL.sf.F1/155/1/2013). The Sunrise Energy pipeline runs from it's multi buoy mooring petroleum loading facility in the Saldanha Bay harbour to the Sunrise Energy storage facility. This licence includes auxiliary infrastructure and equipment associated with the operation of the pipeline including a pig launching facility, a pig receiving facility and appropriate valve and controls; and
 - (ii) the associated infrastructure/auxiliary equipment and an interconnection with the Sunrise Energy pipeline as contemplated in licence condition 10 (Interconnections).

hereinafter referred to as "**the facilities**".

1.2 This licence is issued to the Licensee for the construction of a petroleum pipeline contemplated in paragraph 1.1 for the storage of and transportation of LPG only.

1.3 The proposed pipeline route and interconnection point are shown in **Annexure A: Pipeline Route**.

1.4 Details of the pipeline are provided in **Annexure B: Proposed Pipeline Details**.

2. Commencement and Duration of Licence

2.1 This licence commences on the date of issue reflected on the licence certificate.

2.2 This licence is valid for a period of 25 (twenty-five) years from the commencement date.

2.3 The Licensee may, in accordance with the Act and the Rules, apply for an amendment or renewal of the licence.

CHAPTER TWO: GENERAL CONDITIONS

3. General conditions of Licence

Sections 20(1)(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (q), (s), (t), (u), (v), (x), (y), (z) and (aa) of the Act are conditions of this licence.

4. Compliance with Conditions of Licence

The Licensee must comply with all conditions of this licence.

5. Compliance with Legislation, Codes and Standards

The Licensee must comply with all applicable legislation, construction codes and standards, including those listed in **Annexure C: Legislation, Codes and Standards**.

6. Amendment of Licence

6.1. This licence may only be amended in accordance with the Act and the Rules.

6.2. The Energy Regulator may temporarily change these licence conditions in an emergency.

7. Revocation of Licence

7.1. This licence may only be revoked in accordance with the Act and the Rules.

7.2. Should the licensee fail to commence construction of the facilities within the time period contemplated in condition 12.1, the licensee must within 15 calendar days of the elapse of that time period, apply to the Energy Regulator for the revocation of this licence.

8. Changes in Details of the Licensee

- 8.1. The Licensee must, within 30 days of changes in its control as contemplated in section 12(2) of the Competition Act, 1998 (Act No. 89 of 1998), notify Energy Regulator of such changes.
- 8.2. The Licensee must, within 14 days of any change in its registered name, operating or trading name, registered address and other contact details, notify Energy Regulator of such a change.

9. Changes to the Facilities

- 9.1. When approached by interested parties, the Licensee must negotiate for changes in the routing size and capacity of the proposed pipeline and/or associated infrastructure/auxiliary equipment.
- 9.2. Any changes to the facilities to be constructed that, in terms of the Act, may require an amendment or revocation of this licence, or a new licence, must not be effected until NERSA has amended or revoked this licence or issued a new licence.
- 9.3. Changes to the facilities must be made in accordance with applicable legislation, codes and standards including those listed in **Annexure C: Legislation, Codes and Standards**.

10. Interconnections

- 10.1. The Licensee must allow interconnections with facilities of other licensees, as long as the interconnection is technically feasible and the person requesting the interconnection bears the increased costs occasioned thereby.
- 10.2. Any changes to the facilities to be constructed as a result of an interconnection that, in terms of the Act, may require an amendment or revocation of this licence, or a new licence, must not be effected until the

revocation of this licence, or a new licence, must not be effected until the Energy Regulator has amended or revoked this licence or issued a new licence as the case may be.

10.3. Changes to the facilities as a result of an interconnection must be made in accordance with applicable legislation, codes and standards including those listed in **Annexure C: Legislation, Codes and Standards**.

11. Correspondence with the Energy Regulator

11.1. All official communication with the Energy Regulator must be in writing and must be addressed to the Chief Executive Officer and copied to the Regulator Member Primarily Responsible for Petroleum Pipeline Regulation.

11.2. The Licensee must, in all correspondence with the Energy Regulator, quote the licence number as it appears on the licence certificate.

CHAPTER THREE: SPECIFIC CONDITIONS

12. Commencement and Completion of Construction

- 12.1. Construction of the facilities must commence within twelve (12) calendar months from the date of issue of this licence.
- 12.2. The Licensee must prior to the commencement of the construction of the facilities provide the Energy Regulator with:
- 12.3. The Licensee must prior to the commencement of the construction of the facilities provide the Energy Regulator with:
 - (a) proof of the arrangements in terms of interconnection with the Sunrise Energy facilities (herein after “the interconnection”) as follows:
 - (i) the date of commencement and completion of construction of the interconnection:
 - a. confirmation that the licensee assumes responsibility for the cost and construction of the interconnection or confirmation of any other arrangements that may have been entered into;
 - b. the design and technical specifications of the interconnection; and
 - c. the location of interconnection (GPS coordinates).
 - (b) the final, revised engineering design drawings for the facilities, if any changes took place since the licence application was submitted; and
 - (c) the date on which construction will commence and provide the revised project schedule, if applicable.
- 12.4. The construction of the facilities must be completed and ready for operation within thirty (30) months of the commencement of this licence.

13. Information for Monitoring Purposes

- 13.1. The Licensee must provide NERSA with reports on progress in the construction of the pipeline, after every four calendar months.
- 13.2. The reports contemplated in condition 13.1 above, must be submitted within seven (7) days from the last day of every four calendar months.
- 13.3. The first progress report must be submitted within seven (7) days of the last day after the expiry of four full calendar months calculated from the date of issue of this licence. The four month period for all subsequent reports will be calculated from the end of this four month period.
- 13.4. The reports contemplated in condition 13.1 above must provide updates on:
 - (a) progress towards and award of all Engineering Procurement and Construction contracts;
 - (b) any negotiations contemplated in sections 20(1)(n) and 20(1)(o) of the Act;
 - (c) progress in the construction of the facilities compared to the project plan schedule (where there have been changes to the project schedule, the updated project plan must be submitted with the progress report);
 - (d) proof of compliance with the conditions of the environmental authorisation issued by the relevant authority; and
 - (e) any other related matter.
- 13.5. Upon completion of construction of the pipeline, the Licensee must:
 - (a) Provide the Energy Regulator with:
 - (i) the as-built maps, drawings, diagrams and schedules, identifying any deviations and differences from **Annexures**

A, B and C, and must provide reasons for such deviations and differences;

- (ii) the final audited costs of construction of the pipeline; and
- (iii) a certificate or confirmation from a competent authority certifying or confirming that the pipeline is fit for operation.

14. Regulatory Reporting

The Licensee must comply with volumes 1 and 4 of Energy Regulator's Regulatory Reporting Manuals published under GN 1118 in *Government Gazette* No. 31392 of 10 September 2008, which may be amended by the Energy Regulator from time to time.

15. Entry, Inspection and Gathering of Information

The Licensee must, in a manner prescribed by the Rules, permit any authorised person to enter and inspect any property on which the licensed activity is taking place.

16. Provision of Information to NERSA

The Licensee must on request by the Energy Regulator, provide all other information the Energy Regulator may require to perform its functions under the Act.

17. Ancillary Obligations

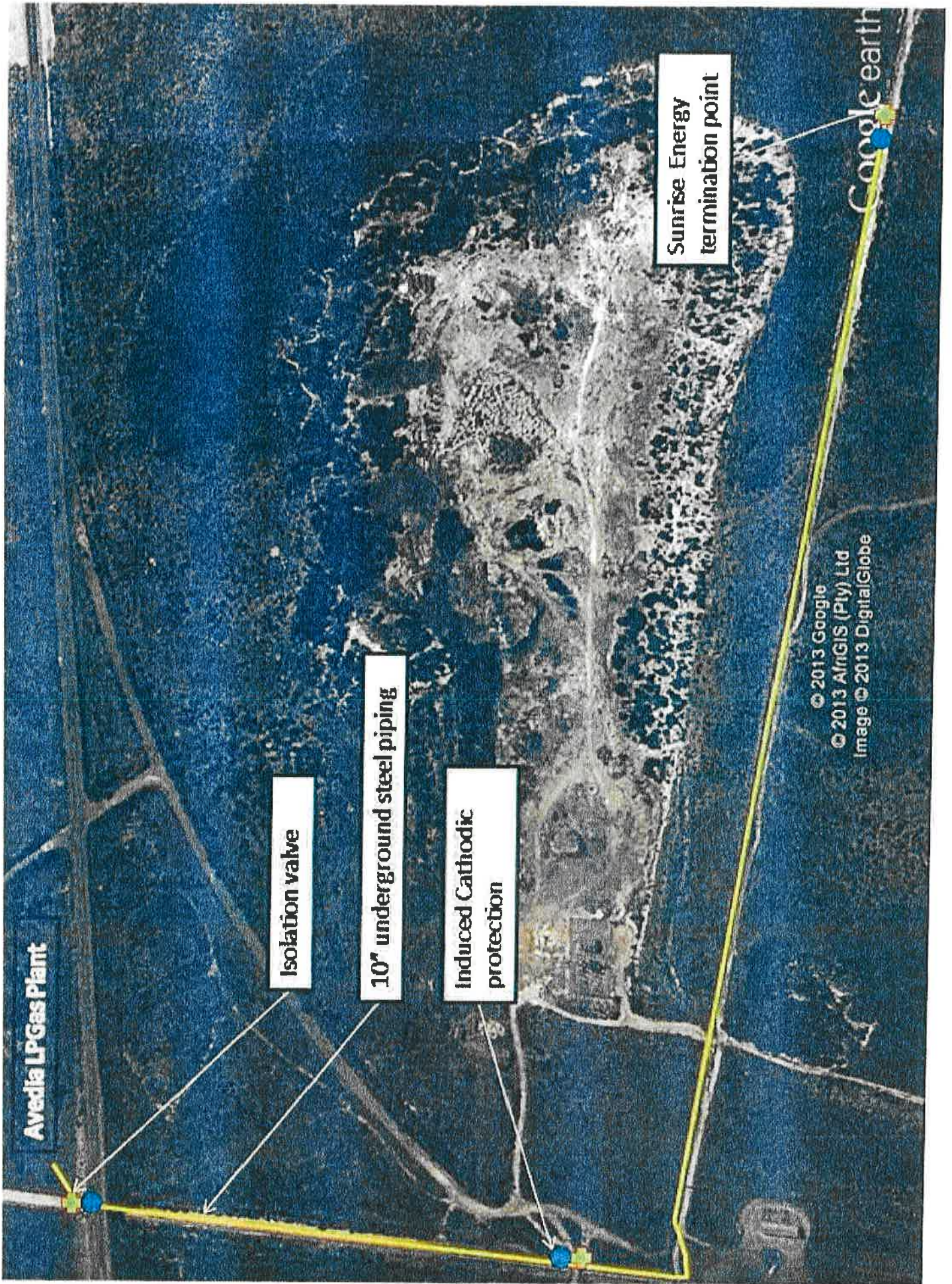
The Licensee is responsible for compliance with these licence conditions regarding any work on the facilities or services that are the subject of this licence and/or that are subcontracted to other parties.

18. Whole Licence

This licence constitutes the entire licence and supersedes any prior understandings and agreements between the Licensee and the Energy Regulator.

ANNEXURE A: Proposed Pipeline Route

Refer to the attached Google map image showing the start, pipeline route and interconnection point.



ANNEXURE B: Pipeline Details

Table 1: Pipeline Details

Diameter (inside)	200mm (8 inch)
Length	Approximately 1150m
Design flow rate	900 m ³ /hr (depend on Sunrise pipeline design)
Flow	Unidirectional
Start & finish	Interconnection point on Sunrise Energy's pipeline to Avedia Energy storage facility inlet manifold.
Type	LPG Fully pressurised system

ANNEXURE C: Legislation, Codes and Standards

The Licensee must comply with all relevant codes and standards including the following submitted in its licence application:

1. The applicant included a list of applicable regulations, operating and technical standards, codes and specifications, including:
 - Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
 - The National Environmental Management Act, 1998 (Act No. 107 of 1998)
 - The Environment Conservation Act, 1989 (Act No.73 of 1989)
 - The Hazardous Substances Act, 1973 (Act No. 15 of 1973)
 - The Mine Health and Safety Act, 1996 (Act No. 29 of 1996)
 - The National Health Act, 2003 (Act No. 61 of 2003)
 - The Hazardous Chemical Substance Regulations, 1995(R1179 of 1995)
 - The Fire Brigade Services Act, 1987 (Act No. 99 of 1987)
 - The Disaster Management Act, 2002 (Act No. 57 of 2002)
 - ASME VIII Boiler and Pressure Vessel Code (BPVC), Section VIII, Division 2
 - South African National Standards (SANS) 10087: 2008 Part 3 Edition 4
 - SANS 10089 – Part 1: Storage and Distribution of petroleum products in above-ground bulk installations
 - SANS 10089 – Part 2: Electrical installations in the distribution and marketing sector
 - SANS 10089 – Part 3: The installation of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations.
 - SANS 10086 – 1: The installation, inspection and maintenance of equipment used in explosive atmospheres. Part 1: Installations including surface installations of mines.
 - National Fire Protection Association (NFPA) 58: LP-Gas Code latest edition and addendums)
 - SANS 10108: 2005 : The classification of hazardous locations and the selection of apparatus for use in such locations
 - SANS 10142: 2012 : The wiring of premises

- SANS 10087 Part 3 Latest Edition: The handling, storage, distribution and domestic, commercial and industrial installations Part 3: Liquefied petroleum gas installations involving storage vessels of individual water capacity exceeding 500L.
- SANS 10227: Criteria for the operation of inspections authorities performing inspection in terms of the pressure equipment.
- SANS 17020/ISO/IEC 17020: General criteria for the operation of various types of bodies performing inspections.
- SANS 17021/ISO/IEC 17021: Conformity assessment – requirements for bodies providing audit and certification of management systems.
- NFPA 58: Liquefied Petroleum Gas (LPG) Code latest edition and addendums.
- NFPA 70E: Electrical Code latest edition and addendums – Standard for Electrical Safety in the workplace.
- American Petroleum Institute (API) Standard 2510 Eighth Edition: Design and Construction of LPG Installations.
- API Standard 2510A (R2010): Fire Protection Considerations for the Design and Operation of the LPG Storage Facilities.
- United Kingdom LPG Code of Practice 1 Part 4: Bulk storage at fixed installations: Buried/ Mounded LPG Gas storage vessels.
- The Engineering Equipment and Materials Users' Association (EEMUA), Publication No. 190:2000 titled "Guide for the Design, Construction and use of Mounded Horizontal Cylindrical Steel Vessels for pressurised storage of LPG at Ambient temperatures".
- American Society of Mechanical Engineers (ASME) B31.4: Pipeline Transportation Systems for liquid Hydrocarbons and Other Liquids.
- ASME B31.3-2008: Process Piping guide.
- ASME B31.8: Gas Transmission and Distribution Piping Systems.
- API 570 Third Edition: Piping Inspection Code: In-Service Inspection, Rating, Repair, and Alteration of Piping Systems.
- API 1104: Standard for Welding of Pipelines and Related Facilities.
- API 1160: Managing System Integrity for Hazardous Liquid Pipelines.

Licence Number PPL.p.F1/155/2/2013/AM1

Licence for the construction of a petroleum pipeline system issued to

Avedia Energy (Pty) Ltd

(Company Registration Number: 2003/023054/07)

Amendment No.1

As approved by the Energy Regulator on: **17 December 2015**

Effective date of amendment: **17 December 2015**

Explanatory note:

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Words in bold type in square brackets indicate omissions from existing conditions of licence.

Words underlined with a solid line indicate changes to the existing conditions of licence.

Amendments

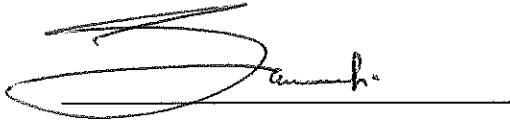
1. Licence condition 12.1 and 12.4 are replaced by the following:

- a) The construction of the facility must commence within **[twelve (12)]** forty-eight (48) calendar months from the date of issue of this licence.

- b) The construction of the facilities must be completed and ready for operation within **[thirty (30)]** sixty-two (62) months of the commencement of this licence.

Annexure D: Proposed Execution Schedule is deleted and replaced by a new **Annexure D: Proposed Execution Schedule** attached hereto.

Signed at Pretoria on the 17th day of December 2015.

A handwritten signature in black ink, appearing to read 'Paseka Nku', is written over a horizontal line. The signature is stylized with a large, sweeping initial 'P'.

Mr Paseka Nku

Acting Chief Executive Officer
National Energy Regulator

ANNEXURE D: PROPOSED EXECUTION SCHEDULE

Table 1: Commencement and Completion of construction dates

Key project milestone	Commencement date
Construction of a LPG pipeline in Saldanha Bay	4 years (48 months)
Key project milestone	Completion date
The construction of the facilities must be completed and ready for operation within	Sixty-two (62) months