



**ELECTRICITY
GENERATION LICENCE**
AGL POWER GENERATION
(BROWN HILL) PTY LTD
(ABN 96 110 080 325)

**Issued by the Essential Services Commission
on 10 March 2006**

ELECTRICITY

VARIATION HISTORY

<i>Amendment Number</i>	<i>Variation Date</i>

ELECTRICITY GENERATION LICENCE

1. DEFINITIONS AND INTERPRETATION

- 1.1 Words appearing in italics like *this* are defined in part 1 of the Schedule.
- 1.2 This licence must be interpreted in accordance with the rules set out in part 2 of the Schedule.

2. GRANT OF LICENCE

- 2.1 The *licensee* is licensed under Part 3 of the *Act*, and subject to the conditions set out in this licence, to generate electricity:
- (a) using the electricity generating plant as specified in Annexure 1; and
 - (b) at the location described in Annexure 2.

3. TERM

- 3.1 This licence commences on the date it is issued and continues until:
- (a) it is surrendered by the *licensee* under section 29 of the *Act*; or
 - (b) it is suspended or cancelled by the *Commission* under section 37 of the *Act*.

4. ACCESS

- 4.1 The *licensee* must:
- (a) in accordance with, and to the extent required by, the *Electricity Transmission Code*, grant to an *electricity entity* holding a *transmission licence* or a *distribution licence*, rights to use, or have access to, those parts of the *licensee's* electricity generating plant that are interconnected or interface with the *electricity entity's* assets for the purpose of ensuring the proper integrated operation of the South Australian power system and the proper conduct of the operations authorised by that *electricity entity's transmission licence* or *distribution licence*; and
 - (b) in the absence of agreement as to the terms on which such rights are to be granted, comply with a determination of the *Commission* as to those terms.

5. DISPUTE RESOLUTION

- 5.1 A dispute relating to the granting of rights to use or have access to the inter-connecting assets of the *licensee's* electricity generating plant referred to in



clause 4 shall be resolved in accordance with any applicable **industry code** developed by the **Commission** for the resolution of disputes.

5.2 Clause 5.1 does not apply to the extent the dispute is subject to resolution in accordance with or under the **National Electricity Rules**.

6. COMPLIANCE WITH CODES

6.1 The **licensee** must:

- (a) comply with all applicable provisions of the **Electricity Transmission Code**, the **Electricity Distribution Code** and the **Electricity Metering Code**;
- (b) comply with all applicable provisions of any other **industry code** or **rule** made by the **Commission** from time to time; and
- (c) notify the **Commission** if it commits a material breach of the **Electricity Transmission Code**, the **Electricity Distribution Code** or the **Electricity Metering Code** within 3 days after becoming aware of that breach.

7. SAFETY, RELIABILITY, MAINTENANCE AND TECHNICAL MANAGEMENT PLAN

7.1 The **licensee** must:

- (a) within 12 months of the commencement of this licence, or within 3 months of the date (as advised by the **licensee**) of final commissioning and plant acceptance, whichever is the later, prepare a safety, reliability, maintenance and technical management plan dealing with matters prescribed by regulation and submit the plan to the **Commission** for approval;
- (b) annually review, and if necessary update, the plan to ensure its efficient operation, and submit the updated plan to the **Commission** for approval;
- (c) comply with the plan prepared in accordance with clause 7.1(a) and as updated from time to time in accordance with clause 7.1(b);
- (d) not amend the plan without the approval of the **Commission**; and
- (e) undertake annual audits of its compliance with its obligations under the plan and report the results to the **Technical Regulator**, in a manner approved by the **Technical Regulator**.

8. NATIONAL ELECTRICITY MARKET

- 8.1 Subject to clause 8.2 and clause 8.3, the *licensee* must hold and comply with the conditions of any registration required under the *National Electricity Rules* granted by *NEMMCO* (or the person responsible for the granting of such registrations under the *National Electricity Law* or the *National Electricity Rules*) at all times that such registration is required for the operations authorised by this licence.
- 8.2 The *licensee* must be registered as a market generator under the *National Electricity Rules*.
- 8.3 The *licensee* must not apply to be classified as a non-scheduled generator under the *National Electricity Rules*.

9. ANCILLARY SERVICES

- 9.1 The *licensee* must ensure that it has installed, and keeps operational, metering suitable for the purposes of clause 3.15.6A(h) of the *National Electricity Rules* to allow the individual contribution of the electricity generating plant to the aggregate deviation in frequency of the power system to be assessed within each trading interval of the National Electricity Market.
- 9.2 The *licensee* must comply with requirements imposed under the *National Electricity Rules* from time to time in relation to ancillary services arrangements.

10. FAULT RIDE THROUGH CAPABILITY

- 10.1 Each generating unit of the electricity generating plant operated by the *licensee* must be capable of continuous uninterrupted operation during the occurrence of a normal voltage fluctuation caused by a *transmission network* fault involving a single phase or two phase to ground condition with a loading level after the fault is cleared that is at, or reasonably about, the loading level immediately prior to the fault.
- 10.2 For the purposes of clause 10.1, normal voltage fluctuation means voltage remaining within a band for 3 minutes, 10 seconds and 175 milliseconds following a fault, with the band having:
- (a) an upper boundary of 110% of nominal voltage at all times; and
 - (b) a lower boundary of 0% of nominal voltage for the first 175 milliseconds during the fault, 80% of nominal voltage for the first 10 seconds after the fault is cleared and 90% of nominal voltage for the next 3 minutes.



11. REACTIVE POWER CAPABILITY

11.1 At full rated power output the electricity generating plant operated by the **licensee** must be capable of:

- (a) absorbing reactive power of 0.395 times that power output; and
- (b) delivering reactive power of 0.395 times that power output.

11.2 At generation levels below full rated output the electricity generating plant operated by the **licensee** must be capable of:

- (a) absorbing reactive power at a level at least pro-rata to that of full output; and
- (b) delivering reactive power at a level at least pro-rata to that of full output.

11.3 The electricity generating plant operated by the **licensee** must at all times be capable of providing:

- (a) at least 50 percent of the reactive power capabilities referred to in clause 11.1 and clause 11.2 on a dynamically variable basis; and
- (b) the balance of any reactive power capability referred to in clause 11.1 and clause 11.2 not supplied dynamically on a static basis.

11.4 The reactive power capability of the electricity generating plant operated by the **licensee** must be capable of control by a fast-acting, continuously variable, voltage control system which is able to receive a voltage set point.

11.5 The electricity generating plant operated by the **licensee** must be capable of operating to a power factor set by the **network service provider** from time to time.

12. WIND FORECASTING

12.1 The **licensee** must, on request, provide to the **Planning Council**, the **Commission** or **NEMMCO**, accurate and verifiable wind energy forecasting data and temperature data, appropriately constructed wind energy conversion models, documents and other information concerning the operation of the electricity generating plant which the **licensee** is authorised by this licence to operate.

12.2 Any data, models, documents and information requested under this clause must be provided in the manner and form and within the time frame specified by the **Planning Council**, the **Commission** or **NEMMCO**.

- 12.3 The **licensee** must cooperate with the development and implementation of wind energy forecasting systems for use in the National Electricity Market and must provide timely, accurate, and verifiable information for this purpose.

13. INFORMATION TO NEMMCO

- 13.1 The electricity generating plant operated by the **licensee** must be:
- (a) able to meet the requirements specified by **NEMMCO** from time to time for the real time supply of data on active and reactive power, wind speed and wind direction; and
 - (b) capable of remote control by **NEMMCO**.
- 13.2 The electricity generating plant operated by the **licensee** must meet the information provision requirements specified in clause 13.1(a) for at least 3 hours following total loss of supply at the connection point.
- 13.3 The **licensee** must provide **NEMMCO** with forecasts of expected generation output for the purposes of incorporation into pre-dispatch, medium term and long term PASA data.

14. SYSTEM CONTROLLER AND PLANNING COUNCIL

- 14.1 The **licensee** must, following a request from the **Planning Council**, provide to the **Planning Council** such documents and information as the **Planning Council** may reasonably require for the performance of its functions under the **Act**.
- 14.2 The **Licensee** must comply with any directions given to it by the **System Controller**.

15. INFORMATION TO THE COMMISSION

- 15.1 The **licensee** must, from time to time, provide to the **Commission**, in a manner and form determined by the **Commission**:
- (a) details of the **licensee's** financial, technical and other capacity to continue the operations authorised by this licence; and
 - (b) such other information as the **Commission** may require from time to time.
- 15.2 The **licensee** must notify the **Commission** of any changes to its **officers**, and (if applicable) major shareholders, within 30 days of that change.



16. OPERATIONAL AND COMPLIANCE AUDITS

- 16.1 The **licensee** must undertake periodic audits of the operations authorised by this licence and of its compliance with its obligations under this licence and any applicable Codes in accordance with the requirements of Energy Industry Guideline No. 4 issued by the **Commission**.
- 16.2 The **licensee** must also conduct any further audits at a frequency and in manner approved by the **Commission**.
- 16.3 The results of audits conducted under this clause must be reported to the **Commission** in a manner approved by the **Commission**.
- 16.4 The **Commission** may require the licensee to use an independent expert approved by the **Commission** to conduct audits under this clause.
- 16.5 The **Commission** may require the costs of using an independent expert approved by the **Commission** to conduct audits under this clause to be met by the **Licensee**.

17. CONFIDENTIALITY

- 17.1 The **licensee** must, unless otherwise required by law, this licence, an **industry code**, or the **National Electricity Rules**, comply with any **rules** made by the **Commission** from time to time relating to the use of information acquired by the **licensee** in the course of operating the business authorised by this licence.

18. COMMUNITY SERVICE

- 18.1 The **licensee** must comply with the requirements of any scheme approved and funded by the Minister for the provision by the State of customer concessions or the performance of community service obligations by the **electricity entities**.

19. COMPATIBILITY

- 19.1 The **licensee** must not do anything to its electricity generating plant affecting the compatibility of its electricity generating plant with any **distribution network** or **transmission network** so as to prejudice public safety or the security of the power system of which the electricity generating plant forms a part.

20. INSURANCE

- 20.1 The **licensee** must undertake and maintain during the term of this licence insurance against liability for causing bush fires.

20.2 The **licensee** must provide to the **Commission** a certificate of the insurer or the insurance broker by whom the insurance was arranged (in a form acceptable to the **Commission**) to the effect that such insurance is adequate and appropriate, given the nature of the **licensee's** activities conducted under this licence and the risks associated with those activities.

21. COMPLIANCE WITH LAWS

21.1 The **licensee** must comply with all applicable laws including, but not limited to, any technical or safety requirements or standards contained in regulations made under the **Act**.

22. VARIATION

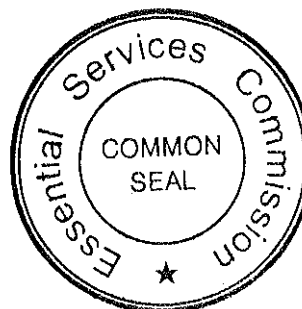
22.1 This licence may only be varied in accordance with section 27 of the **Act**.


23. TRANSFER

23.1 This licence may only be transferred in accordance with section 28 of the **Act**.

This licence was issued by the **Commission** on 10 March 2006.

THE COMMON SEAL OF)
THE ESSENTIAL SERVICES)
COMMISSION OF SOUTH)
AUSTRALIA was hereunto affixed)
by authority of the Chairperson)
and in the presence of:)

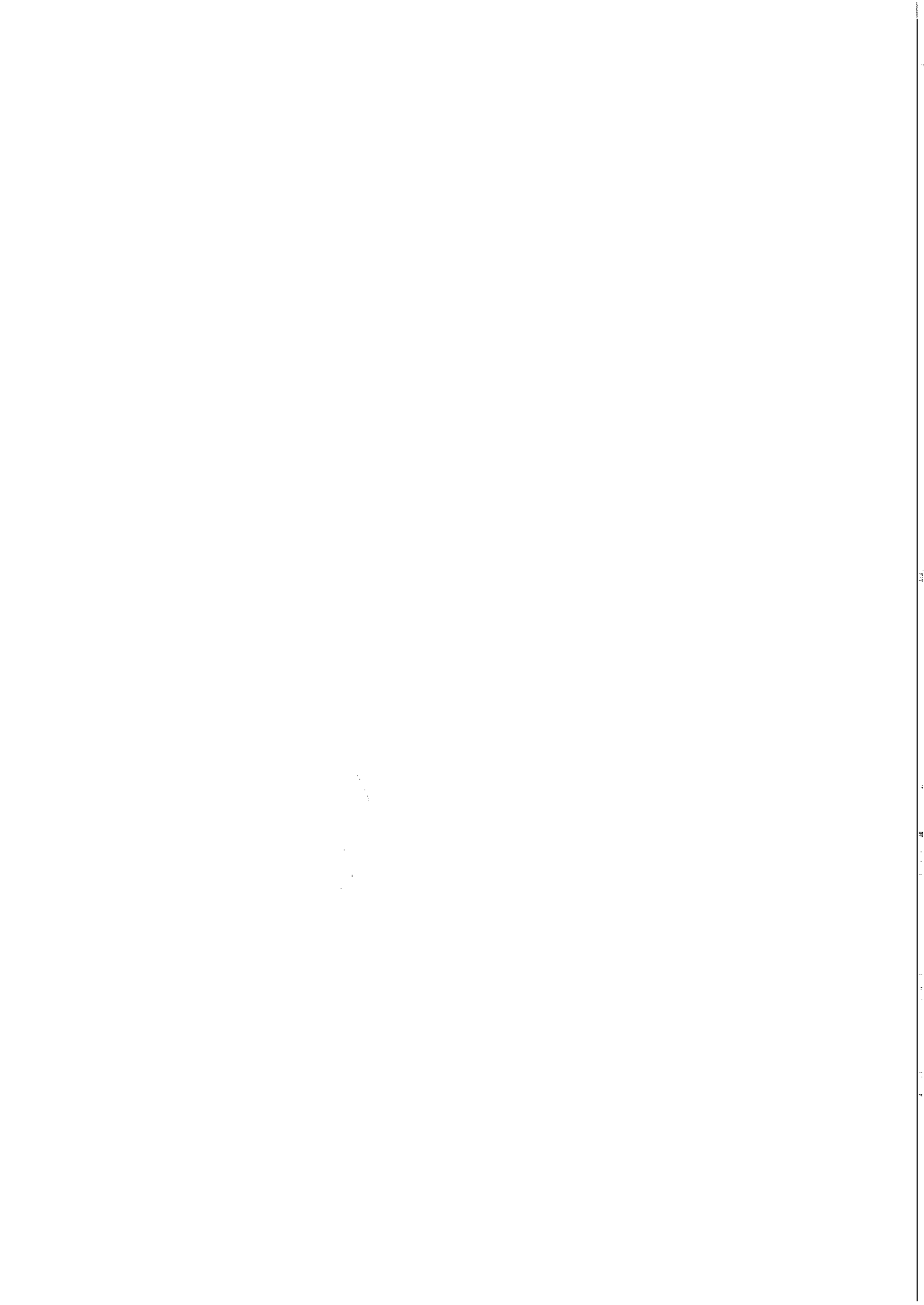


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Witness

.....10/03/2006.....

Date



SCHEDULE: DEFINITIONS AND INTERPRETATION

DEFINITIONS

In this licence:

“Act” means the Electricity Act 1996 (SA);

“business day” means a day on which banks are open for general banking business in Adelaide, excluding a Saturday or Sunday;

“Commission” means the Essential Services Commission established under the **ESC Act**;

“distribution licence” means a licence to operate a **distribution network** granted under Part 3 of the **Act**;

“distribution network” has the meaning given to that term under the **Act**;

“Electricity Distribution Code” means the code of that name made by the **Commission** under section 28 of the **ESC Act** which regulates connections to a **distribution network** and the supply of electricity by distributors;

“electricity entity” means a person who has been granted a licence under Part 3 of the **Act** to carry on operations in the electricity supply industry;

“Electricity Metering Code” means the code of that name made by the **Commission** under section 28 of the **ESC Act** which regulates the installation, maintenance and testing of meters;

“Electricity Transmission Code” means the code of that name made by the **Commission** under section 28 of the **ESC Act**;

“ESC Act” means the Essential Services Commission Act 2002 (SA);

“generator” means a holder of a licence to generate electricity granted under Part 3 of the **Act**;

“industry code” means any code made by the **Commission** under section 28 of the **ESC Act** from time to time;

“Licensee” means AGL Power Generation (Brown Hill) Pty Ltd (ABN 96 110 080 325);



“National Electricity Rules” has the meaning given to that term in the **National Electricity Law**;

“National Electricity Law” means the National Electricity Law referred to in the National Electricity (South Australia) Act 1996 (SA);

“network service provider” means ElectraNet SA Pty Ltd (ACN 094 482 416);

“NEMMCO” means the National Electricity Market Management Company Limited (ACN 072 010 327);

“Planning Council” means the Electricity Supply Industry Planning Council established under Part 2 of the **Act**;

“rule” means any rule issued by the **Commission** under section 28 of the **ESC Act**;

“System Controller” means the person licensed under Part 3 of the **Act** to exercise system control over a power system;

“Technical Regulator” means the person holding the office of Technical Regulator under Part 2 of the **Act**;

“transmission licence” means a licence to operate a **transmission network** granted under Part 3 of the **Act**; and

“transmission network” has the meaning given to that term under the **Act**.

1. INTERPRETATION

In this licence, unless the context otherwise requires:

- (a) headings are for convenience only and do not affect the interpretation of this licence;
- (b) words importing the singular include the plural and vice versa;
- (c) words importing a gender include any gender;
- (d) an expression importing a natural person includes any company, partnership, trust, joint venture, association, corporation or other body corporate and any governmental agency;
- (e) a reference to any statute, regulation, proclamation, order in council, ordinance or by-law includes all statutes, regulations, proclamations, orders in council, ordinances or by-laws varying, consolidating, re-enacting, extending or replacing them and a reference to a statute includes all regulations, proclamations, orders in council, ordinances, by-laws and determinations issued under that statute;
- (f) a reference to a document or a provision of a document includes an amendment or supplement to, or replacement or novation of, that document or that provision of that document;
- (g) an event which is required under this licence to occur on or by a stipulated day which is not a **business day** may occur on or by the next **business day**.

ANNEXURE 1

- 1. 45 Suzlon S88 2.1MW wind turbine electricity generators with a total combined maximum output capacity of 95MW for the entire electricity generating plant operated by the licensee.**

ANNEXURE 2

Location of electricity generating plant

