

Compliance Reporting Form

Embedded Generation via Rotating Machine Bumpless

Transfer Rotating Machine LV connection >30kVA and ≤1,500 kVA



Certification

Energex WR#:

Date: / /

Embedded Generation via Bumpless Transfer RM > 30 kVA and ≤ 1,500 kVA

Project Name:

Location:

I certify that as a Registered Professional Engineer of Queensland and by virtue of my training and experience, that the submission documentation complies with the requirements of the latest revisions of the following:

- Energex Technical Study Report provided for the above stated project.
- STNW1175 - Standard for HV Embedded Generation Connections
- AS/NZS 3000 – Electrical Installations – Wiring Rules
- AS 2067 - Substations and high voltage installations exceeding 1kV A.C
- AS 60034.1 Rotating electrical machines, Part 1: Rating and performance.
- AS 60034.22 Rotating electrical machines, Part 22: AC generators for reciprocating internal combustion (RIC) engine driven generating sets.
- Queensland Electricity Connection Manual

In addition to the above, the following attachments have been submitted as part of the application:

- Attachment 1 – Rotating Machine Specifications & Checklist
- Attachment 2 – Compliance Checklist
- Attachment 3 – Compliance Report-Commissioning
- Attachment 4 – As Constructed Drawings

Signature

	RPEQ Engineer Name
	Registration Number
	Professional Title
	Company Name
	Company Address
	Contact Details

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Transfer-Class A1



All questions in each applicable section must be answered.

Attachment 1 – Rotating Machine Specifications & Checklist

Installation details	Data
Customer Name	
Customer contact details	
Energex contact	
Installation approved capacity (kVA)	
Installation approved export (kW)	Bumpless – nil export
Installed capacity (kVA) (Must not exceed approved limit)	
Installed export power limit (kW) (Must not exceed approved export)	
Subject description (plant information) e.g. backup generation for water treatment plant	

As installed – Engine/Turbine Technical Data

Parameters	Data
Engine/Turbine type	
Make	
Model	
Rated Power (kWe/kWm)	
Rated Voltage (V)	
Rated Current (A)	

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As installed – Alternator Technical Data

Parameters	Data
Make	
Model	
Rated Power (kVA)	
Rated Current (A)	
Rated Voltage (V)	
Peak Short Circuit Current (kA)	

Manufacturer's specification data sheet/user manual attached Yes No

As installed Generating System

Description	Tested by
Complies with AS 60034.1, AS 60034.22	

Comments

(please supply additional information for any non-compliances)

Single Line Diagram (SLD) attached Yes No

Existing Onsite Embedded Generating Systems

Existing Installation details*	Data
Types	
Capacity	

*Prior to this application

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All questions in each applicable section must be answered.

Attachment 2 – Compliance Checklist

Compliance with Standard for HV EG Connections

Clause	Description	Complies		
4.4.4	Changeover switch standards compliance (AS/NZS IEC60947.6.1)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
4.15	Interlocking	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
4.5.1	Re-energisation and synchronisation	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
4.7.2	Standards compliance (AS60034.1, AS60034.22)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
7	Commissioning	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
8	Operation and maintenance	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

Comments

(please supply additional information for any non-compliances and settings as required)

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All questions in each applicable section must be answered.

Attachment 3 – Compliance Report – Commissioning

Commissioning shall include the following information and test certificates are recommended for further evidence:

Compliance with Standard for HV EG Connections

System Details	Complies	Data, provide details (attach docs if required)
Installed system meets all criteria outlined in the Energex Technical Study Report issued for project	Yes <input type="checkbox"/> No <input type="checkbox"/>	

Rotating Machine

System Details	Complies	Data, provide details (attach docs if required)
AC Output Voltage from generator on commissioning	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Input and Output power from rotating machine on commissioning	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Re-energisation and synchronisation as per standard	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Rotating machine performed as per approved Operating type (Clause 4.3)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Operating Type: Bumpless

Protection

System Details	Complies	Data, provide details (attach docs if required)
Tripping and control scheme logic	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Instrument transformer ratios	Yes <input type="checkbox"/> No <input type="checkbox"/>	

Comments

(please supply additional information for any non-compliances and settings as required)

Commissioning results attached

Yes No

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All questions in each applicable section must be answered.

Interlocking

System Details	Complies	If Yes, provide details (attach docs if required)
Manual (Key based) or	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Automated	Yes <input type="checkbox"/> No <input type="checkbox"/>	

Prior approved automated design attached

Yes No

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All questions in each applicable section must be answered.

Attachment 4 – As Commissioned Drawings

Single Line Diagram and AC Schematics should include:

1. RPEQ Signature		
3. Rotating machine unit protection details		
Single Line Diagram (SLD) attached	Yes <input type="checkbox"/>	No <input type="checkbox"/>
AC schematics attached	Yes <input type="checkbox"/>	No <input type="checkbox"/>