

Projects to Reduce Emissions Tararua III Wind Farm (TrustPower) 2008 Annual Report Independent Verification Report

Project verified:

*Tararua III Wind Farm
TrustPower
Simon Darmody
Wholesale Markets Systems Manager
64-7-574-4888 ext 4649
simon.darmody@trustpower.co.nz*

Independent verifier:

*Noim Uddin
DNV Certification*

Date of verification:

29/01/2009

PRE Project Information	
Name of Project: Tararua III Wind Farm	
Project Site Address: Manawatu, Tararua	
Name of Project Participant: TrustPower	
Name of Project contact: Simon Darmody	Telephone: 64-7-574-4888 ext. 4649
Postal Address: TrustPower Limited, Private Bag 12023, Tauranga	Email: simon.darmody@trustpower.co.nz
Street Address: Truman Road, Te Maunga, Mt Maunganui	Fax: 64-7-574-4825
Verifier Information	
Name of Company: DNV Certification Pty Ltd	Telephone: 61-2-9922-1966 ext 517
Name of Lead Verifier: Noim Uddin	Fax: 61-2-9929-8792
Email: noim.uddin@dnv.com	Date(s) of Verification: 29/01/2009
Verification Team Members: Darren Chapman (Peer Review)	
PRE Annual Report Verified	
Annual Report 2008	

1 Verification Statement

To:

Simon Darmody
Wholesale Markets Systems Manger
TrustPower
TrustPower Limited, Private Bag 12023, Tauranga

1.1 Introduction

DNV Certification has been engaged by *TrustPower Limited* on behalf of the *Ministry for Environment/Crown* to undertake a verification of the Participant's *Projects to Reduce Emissions as detailed in the Tararua III Wind Farm 2008 Annual Report*. The verification has been planned and performed in accordance with the Verification Plan of 19/01/2009 and our contract of 04/12/2008.

We have reviewed the nature of the *Tararua III Wind Farm 2008 Annual Report* and have concluded that we are able to conduct a reasonable assurance verification of the criteria items directly related to operation of the project and limited assurance verification of the scope items which describe competence of the Project Participant and the interaction of the project with local regulatory authorities. We have indicated the relevant scope items in the Scope of Verification below.

1.2 Objective

The objective of the verification engagement is to form an opinion as to whether the *Tararua III 2008 Annual Report* is prepared in accordance with the PRE Project Agreement between the Crown and the Project Participant and is free from material discrepancy.

1.3 Criteria

DNV Certification conducted sufficient verification procedures to enable us to express a reasonable assurance verification opinion on the following matters that, in all material respects:

1. The *Tararua III Wind Farm 2008 Annual Report* includes the information detailed in Schedule 4 of the Project Agreement;
2. The recording and calculation of the emission reductions for the year uses the relevant (e.g., electricity) emission factors set out in Schedule 2 (or elsewhere as defined with another applicable Agreement);
3. The calculation behind the Emission Units claimed for 2008, uses the net emission reduction and the request ratio ("C") set out in clause 5.1 of the Project Agreement;
4. The construction emissions calculations uses (a) the emission factors set out in Schedule 2, and (b) the records of the quantities of materials, fuels, electricity purchased etc. relevant to emissions during construction;
5. Metering and recording equipment installed has been certified by an independent reputable quality assured service provider;
6. Any other (electricity, heat) generation, not part of the project, that flows through these meters has been indentified, measured and subtracted from the gross total;

7. If applicable, records of emissions as a result of the operation of the project are fairly stated;
8. The participant has justified and documented any significant changes to the PRE project and its baseline scenario that lead to material change in the project's emissions, removals and emission reductions since the previous verification, and which affect the projects ability to conform to the principles, and requirements of the PRE project; and
9. Within the context of verification, any other requirement relating to the PRE project Agreement.

DNV Certification conducted sufficient verification procedures to enable us to express a limited assurance verification opinion on the following matter that, in all material respects:

10. The participant has adequate understanding of the principles and requirements of the PRE programme and is competent to conform to those principles and requirements; and
11. Compliance with the regulatory requirements of local and central government agencies.

1.4 Verification scope

The scope of verification of the *Tararua III Wind Farm 2008 Annual Report* is as follows:

1.4.1 GHG project and baseline scenarios relevant to the Project

The relevant project and baseline scenarios are as follows:

1. Baseline scenario: continuation of electricity supply from the national grid; and
2. Project scenario: renewable and clean electricity generation from renewable wind resources.

1.4.2 Physical infrastructure, activities, technologies and processes of the GHG project

The elements of the project subject to verification are as follows:

1. Physical infrastructure: wind turbines, metering and transmission network, and associated infrastructure, etc;
2. Project activities: electricity generation from wind turbines and supply to the national grid;
3. Technologies: wind turbine; and
4. Processes: metering of generated electricity and electricity transmission network.

1.4.3 GHG sources, sinks and/or reservoirs included within the Project boundary

Project GHG sources, sinks and reservoirs within the Project boundary are:

1. GHG sources: any fossil fuel consumption within project boundary, e.g. any stand-by diesel generator, construction and transportation related to construction

1.4.4 Types of GHGs included within the project boundary

The GHG species included within the Project Agreement are:

1. CO₂

1.4.5 Time period of the Annual Report

The verification is of all project activities in the period *1 January 2008 to 31 December 2008*.

1.5 Verification Principles

DNV Certification conducted the verification in accordance with ISO14064-3, ISO 14065 and our contract with the *TrustPower Limited* and the verification principles under clause 7 of the Project Agreement between the PP and the Crown.

1.6 Project Participant's Responsibilities

The PP is responsible for preparing the *PRE Tararua III Wind Farm 2008 Annual Report* and maintaining an effective internal control environment and data management system, including control procedures supporting the inputs into this documentation, in accordance with accepted good practice.

1.7 Verifier Responsibilities

The verification has been conducted in accordance with ISO14064-3 and ISO14065 in order to provide a reasonable and limited level of assurance as described in the Scope of Work above to *TrustPower Limited*. As such *DNV Certification* has undertaken the following procedures that we considered appropriate to be able to provide a reasonable and limited level of assurance.

1.8 Verification Procedures

Our verification has been conducted in accordance with ISO14064-3 and ISO14065 to provide reasonable assurance that the greenhouse gas assertions and other information contained in the *Tararua III Wind Farm 2008 Annual Report* is free from material misstatement. Accordingly, we have conducted such tests and procedures as we considered appropriate including:

- *Teleconferencing with personnel from Tararua III Wind Farm to examine any changes with regard to installation, on-site control procedures, and physical connection to the TransPower national grid;*
- *Review of key documents, including:*
 - *Projects to Reduce Emissions Agreement with the Crown;*
 - *Tararua III Wind Farm 2008 Annual Report, including correspondence from the Half Hour Data Administrator; and*
 - *Correspondence dated 19 November 2008 from TrustPower Limited with regard to sharing of Network Connection TWC 2201.*

- *Examination of substation electrical drawings TWF-7G-0005 and TWF-7G-0008 showing the electrical connection, metering and protection arrangements; and*
- *Testing of source data, including:*
 - *Electricity generation by wind turbines*
 - *Cross-checking of recorded electricity generation and net sent out data*
- *Confirmation that the calculation methodology is in compliance with the Schedule 2 of the Project Agreement*
- *Observation and review of relevant documentation.*

The results of the verification procedures undertaken are set out in the following Verification Checklist.

DNV Certification confirms that we are not aware of any actual or perceived conflict of interest in having completed this engagement.

1.9 Independent Review

DNV Certification has completed an independent review, undertaken by competent personnel who did not participate in the verification, to:

- Confirm that all verification activities have been undertaken; and
- Conclude whether or not the assertions in the *Tararua III Wind Farm 2008 Annual Report* are free from material discrepancy, and whether the verification activities provide either a reasonable level of assurance or a limited level of assurance in accordance with the scope items nominated above.

In making this verification statement, we confirm that we are currently accredited as a *DOE* by CDM Executive Board as per the Ministry for the Environment requirements, that this verification has been conducted in accordance with the requirements of the accreditation and that the findings and conclusions documented in this report are guided by professional judgment and supported by verification records held by *DNV Certification*.

1.10 Inherent Limitations

Because of the inherent limitations in any internal control environment and data management system, it is possible that fraud, error, or non-compliance with the PRE Agreement may occur and may not be detected. Further, the verification was not designed to detect all weakness or errors in the internal control environment and data management system so far as they relate to the scope set out above, as the verification has not been performed continuously throughout the period and the procedures performed on the relevant internal information and data management system were on a test basis. Any extrapolation from this verification to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

DNV Certification did not conduct any verification procedures with respect to the internal control environment and data management system of the PP as a whole. As such, no assurance is provided on any internal control environment and data

management system not associated with the *Tararua III Wind Farm 2008 Annual Report*.

The verification opinion expressed in this Report has been formed on the above basis.

1.11 Verification Opinion

Our opinion, following the reasonable assurance verification undertaken at the *DNV Certification offices Sydney*, of the GHG assertions included in the *Tararua III Wind Farm 2008 Annual Report* and the subsequent review of associated documents is that the following matter is fairly presented, in all material aspects, in accordance with the PRE requirements:

1. The *Tararua III Wind Farm 2008 Annual Report* includes the information detailed in Schedule 4 of the Project Agreement;
2. The recording and calculation of the emission reductions for the 2008 uses the relevant emission factors (e.g., electricity) set out in Schedule 2 of the Project Agreement (or elsewhere as defined with another applicable Agreement);
3. The calculation behind the Emission Units claimed for the 2008 period uses the net emission reduction and the request ratio ("C") set out in clause 5.1 of the Project Agreement;
4. Metering and recording equipment installed has been certified by an independent reputable quality assured service provider;
5. Electricity generation, not part of the project, that flows through these meters has been identified, measured and subtracted from the gross total;
6. Records of emissions as a result of the operation of the project are fairly stated;

In our opinion, nothing came to our attention during the limited assurance verification of the *Tararua III Wind Farm 2008 Annual Report* and subsequent review of associated documents. Further, it is our assertion that the regulatory requirements of local and central government agencies have been met and indicate, in all material aspects, as being in accordance with the PRE Guidance requirements:

1. The participant has adequate understanding of the principles and requirements of the PRE programme and is competent to conform to those principles and requirements; and
2. Compliance with the regulatory requirements of local and central government agencies.



1.12 Suggestions

No suggestion is made

1.13 Limitations on use

This Verification Statement has been prepared for the *Ministry for the Environment/Crown* solely for use in relation to the *Projects to Reduce Emissions* programme. The *DNV Certification* disclaims any liability for reliance upon this Report by any other party or for any other purpose other than for which it was prepared.

COMMERCIAL IN CONFIDENCE

Name of Lead Verifier:	Noim Uddin
Position:	Lead Climate Change Verifier
Company and Location:	DNV Certification Pty Ltd, Sydney
Signature of Lead Verifier:	
Date:	30/01/2009
Name of Independent Reviewer	Darren Chapman
Signature of Independent Reviewer	
Date:	9/02/2009

Attachment 1 – Verification Procedures and Findings

2 Attachment 1 – verification procedures and findings

Attachment 1 is a record of the verification procedures conducted in accordance with ISO 14064-3 and ISO 14065 and of the verification findings. The checklist is not a comprehensive description of all the verification procedures performed or all verification evidence obtained during the verification process, but is a fair presentation of the procedures and findings in sufficient detail to enable all findings (both positive and negative) to be verified.

Criteria Item 1 verified	The <i>Tararua III Wind Farm 2008 Annual Report</i> includes the information detailed in Schedule 4 of the Project Agreement.		
Description of requirement	That all of the information detailed in Schedule 4 of the Project Agreement for inclusion in the Annual Report has been included and is fairly stated.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	Cross check of Annual Report information with the requirements documented in Schedule 4 of the Project Agreement	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12 February 2009)</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November 2008)</p>	The <i>Tararua III Wind Farm 2008 Annual Report</i> is in compliance with Schedule 4 of the Project Agreement
Findings	<p>The <i>Tararua III Wind Farm 2008 Annual Report</i> was reviewed during this verification, and the required items were checked against Schedule 4 of the Project Agreement (Contents of Annual Reports), these being:</p> <ul style="list-style-type: none"> • Total generation in GWh for each turbine for the reporting year – Item 3, p2 of the Report; • Third party verification of the total generation injected from the project into the national grid for the reporting year – meter calibration certificates are attached to the Annual Report. A separate letter dated 15 January 2009 from the Half Hour Data Administrator, TrustPower Limited, is referenced in the Annual Report (Item 11, p4) and confirms total Net Sent Out generation of 295.610 GWh; and 		

COMMERCIAL IN CONFIDENCE

	<ul style="list-style-type: none">• Calculation of tonnes CO₂-e Emission Reductions calculated in accordance with the methodology from Schedule 2 of the Project Agreement – the calculation is documented in Item 6 p3 of the Annual Report.
Conclusion	All of the information detailed in Schedule 4 of the Project Agreement has been included and fairly stated.

COMMERCIAL IN CONFIDENCE

Criteria Item 2 verified	The recording and calculation of the emission reductions for the year uses the relevant (e.g., electricity) emission factors set out in Schedule 2 (or as otherwise defined).		
Description of requirement	That the emission factors used in the Annual Report are the same as those in Schedule 2 (or as otherwise defined) of the Project Agreement, and that the mathematical calculation of emission reductions using the emission factors and project activity parameters are fairly stated.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	Cross check of emission factors used in the emission reduction calculation with the emission factors in Schedule 2 (or as otherwise defined) of the Project Agreement	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12 February 2009)</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November 2008)</p>	The electricity emission factor (625 tonnes CO ₂ e/GWh) has been correctly applied in accordance with Schedule 2 – Measurement of Emission Reductions.
	Emission factors not included in Schedule 2 are from properly authorised sources or are based on test results from properly accredited laboratories	<p>Test results</p> <p>Emission source documentation</p> <p>Laboratory accreditation certificates</p>	Not applicable as there is no other emission factors were used other than in Schedule 2.
	Confirmation that the measurement of project activity parameters has been properly undertaken	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12</p>	Electricity generated from each wind turbine has been reported in the <i>Tararua III Wind Farm 2008 Annual Report</i> .

COMMERCIAL IN CONFIDENCE

		February 2009) Letter from Manager Data Management (19 November 2008)	
	Confirmation that the measured project activity parameters have been accurately transcribed to the Annual Report	Tararua III Wind Farm 2008 Annual Report (21 January 2009) Tararua III Wind Farm 2008 Annual Report (12 February 2009)	The measured project activity parameters have been accurately transcribed.
	Confirmation by alternate or check calculation that the determination of emission reductions is fairly stated	Emission reduction calculation	Yes, the total emission reductions calculation was checked and found is fairly stated.
Findings	The relevant emission factors have been correctly applied in accordance with Schedule 2 –Measurement of Emission Reductions. The emission factor used in the Annual Report are: <ul style="list-style-type: none"> • Electricity – 625 tonnes CO₂-e/GWh 		
Conclusion	The electricity emission factor (625 tonnes CO ₂ -e/GWh) has been correctly applied in accordance with Schedule 2 – Measurement of Emission Reductions.		

Criteria Item 3 verified	The calculation behind the Emission Units claimed for 2008 uses the net emission reduction and the request ratio ("C") set out in clause 5.1 of the Project Agreement.		
Description of requirement	That the calculation of Emission Units properly uses the net emission reduction calculated for the year 2008 taking due account of the request ratio ("C") set in Clause 5.1 of the Project Agreement.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	Confirm that the calculation takes proper account of the request ratio	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12 February 2009)</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November 2008)</p>	The correct request ratio (C= 0.84) has been used to estimate 2008 emission reduction unit claims.
	Confirm that the calculation of Emission Reduction units is based on net emission reductions.	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12 February 2009)</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November 2008)</p> <p>Confirmation of net grid electricity from NZWF (email</p>	The calculation of the emission reduction units is based on net emissions reduction.

COMMERCIAL IN CONFIDENCE

		correspondence 22 January 2009, Simon Darmody)	
Findings	The net electricity generation (295.610 GWh) from Tararua III Wind Farm has been used to calculate net emission reduction. Electricity supply from the New Zealand Wind Farm (1.955 GWh) was subtracted from TWC2201 network data and losses (electricity transmission) were considered accordingly.		
Conclusion	The calculation behind the Emission Units claimed for 2008 uses the net emission reduction and the request ratio ("C") set out in clause 5.1 of the Project Agreement.		

COMMERCIAL IN CONFIDENCE

Criteria Item 4 verified	If applicable: the construction emissions calculations uses (a) the emission factors set out in Schedule 2 (or as defined elsewhere), and (b) the records of the quantities of materials, fuels, electricity purchased etc. relevant to emissions during construction.		
Description of requirement	That calculation of construction emissions uses the emission factors set out in Schedule 2 (or as defined elsewhere) and measured quantities of construction materials, accurately transcribed to the Annual Report.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	Confirm that the calculation uses the correct emission factors	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12 February 2009)</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November 2008)</p>	No construction emissions recorded in item 1, pg.1 of the <i>Tararua III Wind Farm 2008 Annual Report</i> .
	Confirmation that all appropriate construction materials have been included		Not applicable as the construction of the Tararua II Wind Farm occurred during 2006 and reported during previous reporting period.

COMMERCIAL IN CONFIDENCE

	Review of the record keeping arrangements to confirm that the measured quantities of construction materials are a fair presentation of actual usage		Not applicable as the construction of the Tararua II Wind Farm occurred during 2006 and reported during previous reporting period.
	The exercise of professional judgement in relation to whether the claimed quantity of construction materials was reasonable		No professional judgement is made with regard to use of construction materials and emission attributable to construction materials.
	Alternate calculations and cross checks to confirm that the calculation of construction emissions is fairly presented		Not applicable as the construction of the Tararua II Wind Farm occurred during 2006 and reported during previous reporting period.
Findings	The greenhouse gas emission from project construction took place during previous reporting periods. No construction emissions recorded in item 1, pg.1 of the <i>Tararua III Wind Farm 2008 Annual Report</i> .		
Conclusion	In the opinion of the verifier it appears reasonable that no construction emissions occurred during 2008.		

COMMERCIAL IN CONFIDENCE

Criteria Item 5 verified	Metering and recording equipment installed has been certified by an independent reputable quality assured service provider.		
Description of requirement	That the metering and recording equipment installed has been certified by an independent reputable quality assured service provider.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	Examination of calibration and maintenance certificates to ensure that they are current	<p>Compliance certificates:</p> <p>TWF III – 33kV Incomer 1 – CB3062 Revenue Metering Installation AccuCal CERT- 2006-214 (valid till 24 November 2009)</p> <p>TWF III – 33kV Incomer 2 – CB3122 Revenue Metering Installation (AccuCal CERT- 2006-215) (valid till 24 November 2009)</p> <p>TWF III – CB3052 DVAR (ICP No. 0001187170WF770) (Revenue metering installation) AccuCalCERT- 2008-52 (valid till 07 May 2011)</p> <p>Calibration certificates:</p> <p>Tararua Wind Farm Stage 3 CB3052 (ICP No. 0001187170WF770) (revenue meter CTs) AccuCalCAL- 2008-104 (valid till 08 May 2018)</p> <p>Tararua Wind Farm Stage 3 CB3052</p>	Calibration of the meters had been completed by AccuCal and is currently valid.

COMMERCIAL IN CONFIDENCE

		(ICP No. 0001187170WF770) (revenue meter) AccuCalCAL-2008-103 (valid till 07 May 2011)	
	Examination of installed instruments to confirm that the installed instruments are those covered by the calibration certificates	Tararua Wind Farm 220/33kV relay and instrument diagram (TWF-7G-0008) Tararua Wind Farm single line diagram (TWF-7G-0005) Confirmation of Tararua III ICP (Letter from Data Management, Trust power 19 November 2008)	The metering and recording equipment installed at the wind farm substation was found to be the same as calibrated by AccuCal and compared with instrument diagrams. The ICP for Tararua III remains identical with correspondence letter from Manager, Data Management (19 November 2008).
	Confirmation that the calibration agency is appropriately qualified and accredited for the instruments which have been calibrated	Agency Accreditation scope	AccuCal is registered the with Electricity Commission as a class A approved test house. The calibration test is performed by AccuCal according to the Australian National Standards of Measurement.
Findings	<p>The metering and recording equipment installed at the wind farm substation was found to be of a standard appropriate for its purpose and calibrated and tested to be in good operating condition. Calibration of the meters was current and had been completed by AccuCal. Calibration certificates for each of the revenue meters are attached to the 2008 Annual Report.</p> <p>AccuCal is appropriately qualified and accredited agency to perform calibration and compliance tests for the Tararua III Wind Farm instruments which have been calibrated.</p>		

COMMERCIAL IN CONFIDENCE

Conclusion	Metering and recording equipment installed has been certified by an independent reputable quality assured service provider.
-------------------	---

COMMERCIAL IN CONFIDENCE

Criteria Item 6 verified	Any other (electricity, heat) generation, not part of the project, that flows through these meters is indentified, measured and subtracted from the gross total.		
Description of requirement	That any other (electricity, heat) generation, not part of the project, that flows through these meters is indentified, measured and subtracted fro the gross total and fairly stated.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	Review of the process and instrumentation diagram of the project to confirm the presence or absence of other energy flows through the project metering installation	<p>Tararua Wind Farm 220/33kV relay and instrument diagram (TWF-7G-0008)</p> <p>Tararua Wind Farm single line diagram (TWF-7G-0005)</p> <p>Confirmation of Tararua III ICP (Letter from Data Management, Trust power 19 November 2008)</p>	<p>The metering arrangements at the Tararua III substation were reviewed by relay and instrument diagram and metering single line diagram. The existing substation comprises two HV busbars connected with a bus-tie circuit breaker, each with a number of incoming feeders from the wind farm, and one outgoing feeder to a sub-transmission transformer and then to the national grid.</p> <p>TrustPower Generation and New Zealand Wind Farm generation are connected to a network TWC 2201.</p> <p>New Zealand Wind Farm's two ICPs (0001187181WFB22 and 0001190422WF679) are within TWC2201 network. An external agent collects and submits data from these two ICPs to</p>

			<p>Reconciliation Manager.</p> <p>Energy Market Services (EMS) reads the metering that connects TWC2201 network and reports to Reconciliation Manager. The Reconciliation Manager subtracts New Zealand Wind Farm data from EMS data and reports TrustPower as electricity generation for ICP 0001187170WF770.</p> <p>New Zealand Wind Farm confirms the electricity generation as reported by TrustPower (email correspondence 22 January 2009).</p>
	<p>Consideration of the nature and design of the project</p>	<p>Tararua Wind Farm 220/33kV relay and instrument diagram (TWF-7G-0008)</p> <p>Tararua Wind Farm single line diagram (TWF-7G-0005)</p>	<p>New Zealand Wind Farm generates electricity from renewable wind resources and exports to a 33 kV grid.</p>
	<p>Review of the record keeping process to confirm that the metered data is accurately measured and recorded</p>	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12 February 2009)</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November</p>	<p>TrustPower is an Electricity Commission Approved Half Hour Data Administrator and responsible for TrustPower's submission to the Reconciliation Manager.</p> <p>Electricity generated by each wind turbines at Tararua III Wind Fram is recorded by an</p>

		<p>2008)</p> <p>Certified Reconciliation Participant - TrustPower Limited (Certificate issued by the Electricity Commission, 24 October 2008).</p> <p>QMS Certificate Data Administration and Metering Groups, TrustPower, (Telarc SAI Limited, 9 May 2007)</p>	<p>individual meter.</p> <p>Total electricity delivered to the Network is measured by a revenue meter.</p> <p>Any difference between two metered values provides an estimate of electrical losses at the wind farm and before connection to the lines network or Transpower grid.</p>
	<p>Review of the metering arrangements to confirm that the measurements of other energy flows truly represent those flows</p>	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12 February 2009)</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November 2008)</p> <p>Email correspondence 22 January 2009 with regard to electricity generation measurement by New Zealand Wind Farm</p>	<p>New Zealand Wind Farm's two ICPs (0001187181WFB22 and 0001190422WF679) are within TWC2201 network.</p> <p>An external agent collects and submits data from these two ICPs to Reconciliation Manager.</p> <p>The Reconciliation Manager subtracts New Zealand Wind Farm data from EMS data and reports TrustPower as electricity generation for ICP 0001187170WF770.</p> <p>New Zealand Wind Farm confirms the electricity generation as reported by TrustPower (email correspondence 22 January 2009).</p>

COMMERCIAL IN CONFIDENCE

	<p>Review of the energy calculation methodology to confirm that any other energy flows have been correctly subtracted and that the final result truly reflects the net energy flow attributable to the project</p>	<p>2008 Annual Report</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November 2008)</p>	<p>2008 Annual Report s4 (p2) reports other energy flows through the same network connection points.</p> <p>The actual electricity generation is calculated subtracting any other electricity generation from New Zealand Wind Farms.</p> <p>The actual electricity generation (295.610 GWh) for year 2008 from Tararua III, truly reflects the net energy flow attributable to the project.</p>
Findings	<p>Electricity from New Zealand Wind Farms, not part of the project that flows through the Tararua III meters is indentified.</p>		
Conclusion	<p>Review of the Tararua III and New Zealand Wind Farm metering arrangements confirm that the measurements of energy flows from New Zealand Wind Farm truly represent those flows.</p>		

COMMERCIAL IN CONFIDENCE

Criteria Item 7 verified	If applicable, the record of emissions as a result of the operation of the project is fairly stated.		
Description of requirement	That the record of emissions as a result of operation of the project is fairly stated.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	Confirm that the calculation uses the correct emission factors		
	Confirmation that all appropriate operational activities have been included		
	Review of the record keeping arrangements to confirm that the measured quantities of operational materials are a fair presentation of actual usage		
	The exercise of professional judgement in relation to whether the claimed quantity of operational materials was reasonable		
	Alternate calculations and cross checks to confirm that the calculation of operation emissions is fairly presented		
Findings	No record of emissions (in numeric values) as a result of the operation of the Tararua III Wind Farm has been reported in item 2 pg.1 of the <i>Tararua III Wind Farm 2008 Annual Report</i> . Tararua III Wind Farm was commissioned in 2007 and operated		

COMMERCIAL IN CONFIDENCE

	in full capacity during 2008.
Conclusion	Diesel and petrol use due to operation of the project has been reported as negligible. No emission was recorded due to operation of the project, and according to verifier's opinion is reasonable.

Criteria Item 8 verified	The participant has justified and documented any significant changes to the PRE project and its baseline scenario that lead to material change in the project's emissions, removals and emission reductions since the previous verification, and which affect the projects ability to conform to the principles, and requirements of the PRE project.		
Description of requirement	Identify any additional requirements related to the PRE Project Agreement which require verification and verify those requirements.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	Physical infrastructures Project activities Technologies Processes	Tararua III Wind Farm 2008 Annual Report (21 January 2009) Tararua III Wind Farm 2008 Annual Report (12 February 2009) Project Agreement (29 March 2005) Amendment of Project Agreement (18 November 2008)	No changes in physical infrastructures of Tararua III Wind Farm, its processes and technologies.
Findings	No evidence has been identified in 2008 Annual Report of any significant changes to the PRE project and its baseline scenario that lead to material change in the project's emissions and emission reductions since the previous verification, and which affect the projects ability to conform to the principles, and requirements of the PRE project.		
Conclusion	No additional requirement related to PRE Project Agreement was identified. No additional verification was performed.		

COMMERCIAL IN CONFIDENCE

Criteria Item 9 verified	Within the context of verification, any other requirement relating to the PRE project Agreement.		
Description of requirement	Identify any additional requirements related to the PRE Project Agreement which require verification and verify those requirements.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	PRE requirements	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12 February 2009)</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November 2008)</p>	All PRE project agreement requirements have been met.
Findings	During the review process, there was no finding that any other requirements from the PRE project agreement that had not been met.		
Conclusion	All PRE project agreement requirements have been met.		

Criteria Item 10 verified	The participant has adequate understanding of the principles and requirements of the PRE programme and is competent to conform to those principles and requirements.		
Description of requirement	Identify any additional requirements related to the PRE Project Agreement which require verification and verify those requirements.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	<p>Understanding of PRE project requirement</p> <p>Reporting requirement according to Schedule 4</p> <p>Understand of measurement of emission reduction</p> <p>And understanding of Emission Trading</p>	<p>Tararua III Wind Farm 2008 Annual Report (21 January 2009)</p> <p>Tararua III Wind Farm 2008 Annual Report (12 February 2009)</p> <p>Project Agreement (29 March 2005)</p> <p>Amendment of Project Agreement (18 November 2008)</p>	<p>TrustPower personnel:</p> <p>Simon Darmody – Wholesale Markets Systems Manager</p> <p>Mathew James – Manager Data Management</p> <p>Richard Spearman – Operations Manager</p> <p>Denyse Cambie – Quality and Compliance Administrator</p> <p>Correspondence with monitoring, reporting and quality personnel confirm that adequate understanding of the principles and requirements of the PRE programme and are competent to conform to those principles and requirements.</p>
Findings	No additional requirements related to the PRE Project Agreement which require verification and verify those requirements.		
Conclusion	The participant has adequate understanding of the principles and requirements of the PRE programme and is competent to conform to those principles and requirements.		

Criteria Item 11 verified	Compliance with the regulatory requirements of local and central government agencies.		
Description of requirement	That nothing came to the notice of the verifier to indicate that the project was not compliant with the regulatory requirements of local and central government agencies.		
Verification procedures	Verification item	Information Source/Evidence	Comments
	Review compliance conditions made within the Resource Consent or other regulatory approvals	Resource Consent and other regulatory approvals	
	Review correspondence between the local authorities and the project operator to evaluate compliance with requirements	Applicable correspondence and reports	
	Review the activities at the site to confirm that the project arrangements are generally compliant with regulatory requirements	Resource Consent conditions Site arrangements Third party and consultant reports	
	Confirm that project monitoring includes relevant regulatory and compliance conditions.	Third party and consultant reports Participant monitoring reports Reports prepared for submission to Regulatory Authorities	

COMMERCIAL IN CONFIDENCE

<p>Findings</p>	<p>No discernable issue of non-compliance with regulatory requirements was noted during the first and initial verification carried out by DNV Certification in 2008 except inherent limitations (s1.10). Subsequent to the onsite verification in 2008, TrustPower provided correspondence from the local authority, Palmerston North City Council, dated 14 August 2007 confirming that the project had achieved compliance with the Schedule A conditions 1, 16, 18, 19, 20 and 22 of the Resource Consent and had received approval to commence operation of the wind farm.</p> <p>Verifier accepts that approval from Consent Authority as definitive and remains valid during Tararua III Wind Farm operation in 2008.</p> <p>Verifier did not undertake any other specific verification procedures in relation to this scope item during current verification.</p>
<p>Conclusion</p>	<p>Tararua III Wind Farm is in compliance with the regulatory requirements of local and central government agencies.</p>

COMMERCIAL IN CONFIDENCE

3 Documents Reviewed	4 Please include author, date prepared and date reviewed by Verifier
Annual Report 2008	TrustPower, 21 January 2009, reviewed January 2009
Annual Report 2008	TrustPower, 12 February 2009, reviewed February 2009
Project Agreement 2005	Crown/Ministry for the Environment, March 2005, reviewed January 2009
Amendment Project Agreement 2008	Crown/Ministry for the Environment, November 2008, reviewed January 2009
Certified Reconciliation Participant - TrustPower Limited	Electricity Commission, October 2008, reviewed January 2009
QMS Certificate Data Administration and Metering Groups, TrustPower	Telarc SAI Limited, May 2008, reviewed January 2009
Confirmation of net grid electricity from NZWF	Simon Darmody, January 2009, reviewed January 2009
Confirmation of Tararua III ICP	TrustPower, November 2008, reviewed January 2009

5 Site Visit location	6 Address, date of visit, personnel interviewed
No-site visit conducted	Simon Darmody – Wholesale Markets Systems Manager via teleconferencing during December 2008 – January 2009