MONITORING REPORT NO. 3

FOR PERIOD **01.01.2011-31.12.2011**

SUDENAI AND LENDIMAI WIND POWER

JOINT IMPLEMENTATION PROJECT

UNFCCC NO. LT2000007

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1. GENERAL INFORMATION

Project name:	Sudenai and Lendimai Wind Power Joint Implementation Project
Project location:	Sudenu and Lendimu villages in Kretingos county in Lithuania 
Project owner:	UAB Lariteksas (Sudenai) and UAB Vejo Elektra (Lendimai) UAB Lariteksas Reg. adr. Didžioji str. 25, LT-01128 Vilnius, Lithuania Address for correspondence: Šv. Ignoto str. 1, LT-01120 Vilnius, Lithuania UAB Vejo Elektra Reg. adr. Didžioji str. 25, LT-01128 Vilnius, Lithuania Address for correspondence: Šv. Ignoto str. 1, LT-01120 Vilnius, Lithuania
Carbon credit purchaser:	Nordic Environment Finance Corporation, NEFCO in its capacity as Fund Manager to the Baltic Sea Region Testing Ground Facility Emission Reduction Purchase Agreement (ERPA) as of 2007-12-11
Project description:	The project involves an 8 MW wind farm at Sudenai (consisting of 4 Enercon E82 2000 kW wind turbines) and a 6 MW wind farm at Lendimai (consisting of 3 Enercon E82 2000 kW wind turbines).

	GHG emission reduction is achieved via displacement of carbon intensive electricity produced from fossil fuel sources in the Lithuanian power network. Crediting period for emission reductions: 01 September 2008 – 31 December 2012
Operation during monitoring period:	During the whole monitoring period both Sudenai and Lendimai wind farms operated without major technical interruptions except for two turbines fault due to the lightning caused surge arresters defects in Sudenai farm in August, 2011. The fault was resolved in 2 weeks.

2. IMPLEMENTATION OF THE JI PROJECT

LoE issuance by host country DFP	21 February, 2007
PDD publication on UNFCCC website	23 Mar 07 - 22 Apr 07
LoA issuance by investor country DFP	15 January, 2008
LoA issuance by host country DFP	30 January, 2008
Determination report issuance by AIE	19 June, 2009

Notes: DFP – designated focal point, LoE – Letter of Endorsement, LoA – Letter of Approval, AIE – accredited independent entity, PDD – Project design document, UNFCCC – United Nations Framework Convention on Climate Change.

3. MONITORING METHODOLOGY

Description:	Monitoring is based on the procedures defined in the document "Monitoring Plan of Sudenai and Lendimai Wind Power Joint Implementation Project. Version 1.0 July 15, 2010". The amount of net electricity supply to the grid from the JI project is defined as the key activity to monitor.
Grid connection and measuring meters:	The Sudenai and Lendimai wind farm connection to the Main Grid (110kV) is established via one coupling point to the national electricity transmission system operator (TSO) Litgrid AB. The Main Grid meter is connected to the TSO SCADA and monitored remotely by TSO. The meter is backed up with a back up meter. Totally there are 7 wind turbines. There are 3 20kV lines on the 20kV side of the 110/20kV transformer - 2 lines have 2 turbines each connected and 3rd line has 3 turbines connected. These lines are equipped with separate power meters that are owned by TSO and read as needed, to verify if any deviation from data of the main meter exists. If it was then data from the backup meter would be read. Net power production is calculated as a difference between actual power production and active power consumption. Active power consumption is measured with the same measuring equipment (as mentioned above) as used for measuring of actual power production. The equipment has 2 separate electronic registers (1 (one) for actual power production and 1 (one) for active power consumption). The overall delivered and consumed power amount is divided up between Lariteksas UAB and Vejo Elektra UAB using ratio 4:3. The two commercial power meters belong to TSO. Calibration of measuring meters is processed according to Lithuanian legislation and standards, and the TSO, owner of the meters is responsible for the calibration and maintenance. According to the national legislation the calibration of the meters is required every 8 years. Two commercial electric power meters installed: - VJ-3.T-101 (commercial accounting): serial number 289132, calibrated on Sep 29, 2005; - VJ-3.T-101/D (duplicated commercial accounting): serial number 379391, calibrated on Aug 16, 2006. The contractual party of purchase of power generated by Sudenai and Lendimai wind farms is Lietuvos Energija AB and Litgrid AB (purchaser of the public obligation services (POS) part). Additionally each turbine has separate meters which send data to Enercon SCADA database. The database data are used monthly to verify the production. It can be read any moment and real time as well.

	No meters have been changed and all meters functioned properly during the period January 1, 2011 – December 31, 2011 and can therefore be properly used as basis for the calculation of achieved emission reductions.

4. ACHIEVED EMISSION REDUCTIONS

In accordance with the Monitoring Plan the formula for calculation of achieved emission reductions is the following:

ERy (tCO2e) = EGy (MWh) x EFy (tCO2/MWh)

Emission reductions have been calculated in accordance with the Monitoring Plan as follows:

	2011
Project constants	
Emission factor EFy, tCO2/MWh	0,629
Actual data	
Net power production EGy, kWh, Sudenai	18503699
Net power production EGy, kWh, Lendimai	13879392
Annual Emission reduction, tCO2, Sudenai	11638,826
Annual Emission reduction, tCO2, Lendimai	8730,137
Total emission reduction, tCO2e, Sudenai & Lendimai	**20369**

According to PDD it was planned that total net power production of Sudenai & Lendimai park for year 2011 would be 28,988 MWh, but by fact it is 32,383 MWh. This difference could be explained by increase in expected wind speed in 2011 comparing to data of the past years. Wind speed data is illustrated in Annex 5.

Sudenai and Lendimai Wind Power JI Project generated **20 369 tCO2e of emission reductions** during the monitoring period of year 2011.

5. ANNEXES

1	Annual production report of Sudenai wind farm 2011
2	Annual production report of Lendimai wind farm 2011
3	Monitoring protocol 2008-2012
4	Internal staff training records
5	Wind speed data
6	Replies to 2010 Verification Report FARs

Tadas Navickas
Director
UAB Lariteksas and UAB Vejo elektra

Annex 1. Annual production report of Sudenai wind farm, 2011

	Actual power production (kWh)*	Active power consumption (kWh)*	Net power production (kWh)
January	1 793 108	541	1 792 567
February	1 767 399	542	1 766 857
March	1 892 327	602	1 891 725
April	1 157 449	852	1 156 597
May	1 169 286	644	1 168 642
June	990 408	438	989 970
July	732 561	754	731 807
August	1 221 835	283	1 221 552
September	1 521 312	196	1 521 116
October	1 835 789	889	1 834 900
November	1 445 090	759	1 444 331
December	2 985 721	2 086	2 983 635
Total 2010	**18 512 285**	**8 586**	**18 503 699**

* Data according to TSO Litgrid AB power meter.

Annex 2. Annual production report of Lendimai wind farm, 2011

	Actual power production (kWh)*	Active power consumption (kWh)*	Net power production (kWh)
January	1 344 989	407	1 344 582
February	1 325 702	405	1 325 297
March	1 419 410	451	1 418 959
April	868 186	637	867 549
May	877 066	482	876 584
June	742 894	330	742 564
July	549 486	567	548 919
August	916 482	211	916 271
September	1 141 118	148	1 140 970
October	1 377 001	666	1 376 335
November	1 083 946	572	1 083 374
December	2 239 553	1 565	2 237 988
Total 2010	**13 885 833**	**6 441**	**13 879 392**

* Data according to TSO Litgrid AB power meter.

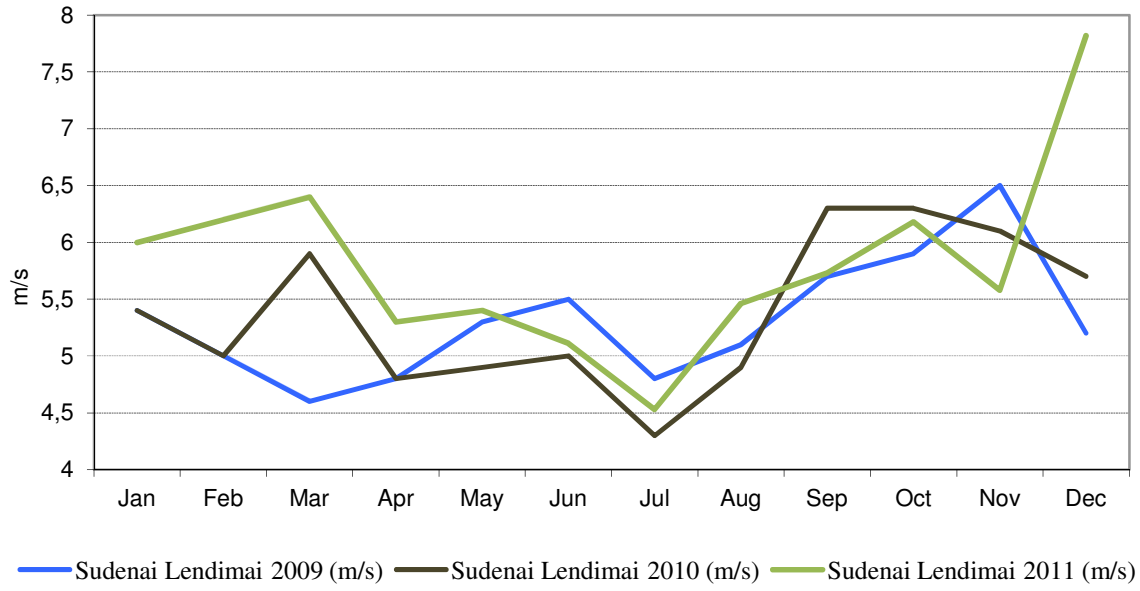
Annex 3. Monitoring Protocol 2008-2012

	2008	2009	2010	2011	2012
Project constants					
Emission factor EFy, tCO2/MWh	0,629	0,629	0,629	0.629	0,629
Actual data					
Net power generation EGy, kWh, Sudenai	1106070	15820969	15242869	18503699	
Net power generation EGy, kWh, Lendimai	715134	11867113	11433485	13879392	
Annual Emission reduction, tCO2, Sudenai	695,718	9951,390	9587,765	11638,827	
Annual Emission reduction, tCO2, Lendimai	449,819	7464,414	7191,662	8730,138	
Total emission reduction, tCO2e, Sudenai and Lendimai	**1146**	**17416**	**16779**	**20369**	
Cumulative emission reduction of the JI project, tCO2e	**1146**	**18562**	**35341**	**55710**	

Annex 4. Internal staff trainings during the monitoring period

Date	Training by	Participants	Topic
July 2010	Hannu Lamp, 4energia JI consultant	Tadas Navickas, 4energia UAB Managing Director Julius Mikalauskas, 4energia UAB Project Manager	Preparation of improved Monitoring Plan on basis of monitoring procedure as defined in project PDD and on basis of FARs as stated in verification report of BV.
January 2011	Julius Mikalauskas, Project Manager	Ieva Vaisvilas, 4energia UAB Project Assistant	Introduction to requirements related to monitoring and verification for JI project. Produced electric power accounting and control.
February 2011	Hannu Lamp, 4energia JI Consultant	Ieva Vaisvilas, 4energia UAB Project Assistant	Preparation of Monitoring Report for 2010.
December 2011	Hannu Lamp, 4energia JI consultant	Vaida Timinskaite, 4energia UAB Project Assistant	Introduction to requirements related to monitoring and verification for JI project. Basis of monitoring procedure as defined in project PDD. Preparation of Monitoring Report for 2011.

Annex 5. Wind speed data



* Data from WIND TURBINE SCADA.

Annex 6. Comments to 2010 Verification Report FARs

FAR 1: *Please provide simplified single-line electric diagram with exact position of each electric meter in monitoring scheme*