

Date: 28th May 2012

To

The CDM Executive Board
UNFCCC Secretariat
Bonn,
Germany.

cdmregistration@unfccc.int

Subject: Comments to request for review

Dear Members,

With reference to the request for review to the request for registration of the "Ayer Hitam landfill gas recovery project" (Project Ref 5797) and the conference call had on 18/05/2012, in accordance with the new procedures to enhance communication with stakeholders and the summary received the same day subsequent to the conference call, we wish to provide the following clarifications:

Kindly refer to the reference list and abbreviations listed in the Validation report version 2.1 attached herewith.

REVIEW QUESTION:

1) The DOE is requested to clarify how it has validated the suitability of the project start date as 16/3/2009; while doing so, the DOE may refer to the issues raised on the additionality of the project activity, in particular, the validation of the project as a stop and recommence project. Please refer to VVM version 01.2 paragraph 104 (a).

CLARIFICATION:

VVM para 104 (a): The validation report shall describe the DOE's validation of the project activity start date provided in the PDD.

The starting date of the project activity is 16/03/2009 and it corresponds to the first financial commitment on implementation of the project which is the date of first invoice 16/03/2009 /53/ received for repairing one engine being the earliest, significant, expenditure made for the restart of the project activity and has been considered as the start date of the project activity.

As explained in the validation report version 1.2, WLSB own 30% of shares of the LFG capture and utilization system from 17/08/2005 /60/. The LFG recovery and utilization plant came to a complete halt on 30/05/2007 /46/. TNB ES was not interested in restarting the project, they were neither willing to sell off the company, however they offered to sell off another 50% shares of the company they hold /105/. The WLSB Board of directors decided on the possibility restarting the project by buying another 50% of shares of the LFG based power plant installed at the Ayer Hitam landfill /105/. After further negotiations TNB ES agrees to sell 50% shares it holds and signed the Share

sale agreement on 18/07/2008 /64/, this transaction was approved by the energy commission on 29/01/2009 /65/ (primary approval), followed by the approval by Ministry of economic planning on 15/04/2009 /66/ (formal approval). As evident from the above, the process of buying the shares of the company is not a single day event and had got finalized on 15/04/2009 /66/. Immediately after the Share sale agreement on 18/07/2008 /64/ and approval by the Energy commission /65/ PP had started work for restarting the LFG collection and utilization plant (the project activity) and its first significant financial commitment was receipt of invoice for repairing existing one engine, consistent with definition for start date of project activity, hence accepted.

According to the Glossary of Terms /27/ the start date is defined as **'the first financial commitment of the Project Participant on implementation or construction of the project'**. Further the glossary /27/ mentions that "circumstances in which an investment decision is taken and the project activity implementation is subsequently ceased. If such project activities are restarted due to consideration of the benefits of the CDM" then this can be considered as the (re)start date of the project activity provided "the cessation of project implementation must be demonstrated by means of credible evidence such as cancellation of contracts or revocation of government permits. Any investment analysis used to demonstrate additionality shall comply with the requirements of paragraph 7 of the "Guidance on the assessment of investment analysis, version 2".

After initial discussions with the PP on the exact applicability of 'restart' in the considered project activity, the PP decided to use the new procedure 'direct communication from stakeholders' in order to get clarification on this point. A question was sent to the Executive board on 04/08/2011. The answer was received on 21/12/2011, and clarified that **'if a project operation started, stopped and then restarted due to the consideration of the benefits of the CDM, it can be considered as a restart'**

In the case of the proposed project activity:

- Did the project operation **start**? YES: in April 2004 /47/
- Did the project operation **stop**? YES: in May 2007 (the PP did not operate it continuously: the operations were totally stopped for 3 years) /46/
- Did the project operation **restart**? YES: in June 2010 /47/
- Was this restart due to the consideration of the benefits of the CDM? YES: as confirmed in the minutes of the Board meeting held in June 2008 /105/

Primary evidences to be validated as per the Glossary of terms /27/ and Guidelines on investment analysis /29/ are

Evidence for project stoppage:

The dates of start and stoppage of the plant are evidenced by confirmation letters received from TNB on 21/09/2011 and 25/10/2011 which confirm that the plant fully stopped on 30/05/2007 and restarted with one engine on 23/06/ 2010. TNB is the state electricity utility and the grid owner. TNB further confirmed that the plant has not been operated outside of the months mentioned in the statement of account (statement provided by TNB on 08/07/2011 which details the amount of electricity generated and purchased by TNB since 2004 /48/).

Evidence for consideration of CDM benefits:

CDM was a decisive factor in the decision to undertake the restart of the project, as confirmed by the Board meeting minutes of 13/06/2008 where the benefits of CDM are clearly considered in the decision making to acquire the shares in the project. TNB stopped the operations of the LFG collection and Utilization plant and was looking for selling their shares in the project. WLSB, the new stakeholder, wanted to invest in the project because of the consideration of CDM benefits.

There was a stop / restart from both an operational and ownership perspectives. In addition, from a CDM standpoint too; the project was stopped and restarted:

- The first 3 PDD were written by CDM consultant ECAIR (Jan 2007, April 2007, May 2008), with DOE TUEV Rheinland; the project participant was a JV between ECAIR and WLSB
- While after the restart, the CDM consultant, the DOE and the PP have changed.

Therefore, following the Glossary of terms /25/ and the clarification from the EB /99/, **the project can be considered as a restart.**

Considering that the project is a restart, the first financial commitment by the Project Participant on implementation (i.e. **restart of implementation**) of the project is the date of first invoice received for repairing one engine (16/03/2009), which is the earliest significant expenditure made for the restart of the project activity.

Further elements regarding project additionality: FIRST OF ITS KIND IN 2009

Additionality of the project is demonstrated based on investment analysis, however as explained in Step 4 of section B.5 of the PDD, as per the Tool for the demonstration and assessment of additionality (version 6.0, EB65) /06/, . Ayer Hitam LFG recovery and utilization/flaring plant started during the year 2004 is the first of its kind. It was stopped in 2007 and restarted in 2010. There are no other similar plants in Malaysia even during its decision to restart /77/ /103/, hence this project is also considered as First of its kind, where:

- the applicable geographical area is Malaysia
- the measure is (c) Methane destruction
- the output is LFG capture and utilization for electricity generation

According to an ICCBT 2008 study ("An Overview on the Feasibility of Harvesting Landfill Gas from MSW to Recover Energy") /77/, Ayer Hitam is the first LFG to energy project to be implemented in Malaysia. As further demonstrated and referenced in the PDD, there are no plants that deliver the same output or capacity, within the applicable output range as the proposed project activity and have started commercial operation before the re-start date of the project (March 2009).

In addition, the project applies a crediting period of 10 years with no options of renewal.

Both conditions are satisfied to conclude that the project is the first-of-its-kind, hence it has barriers and CDM is important for the continued operation of the plant.

REVIEW QUESTION:

2) The power plant first began operations on 9/4/2004, the current PP (WLSB) acquired 30% ownership to start the project on 17/8/2005 and the CDM was considered on 10/10/2005 i.e. after 17/8/2005.

Further clarification is sought on how the DOE has validated the prior consideration of the CDM. Please refer to VVM, 1.2, para 98.

CLARIFICATION:

As explained in the previous comment, the start date of the project activity is considered as 16/03/2009, which is at the time of recommencing the project.

In the context of the project restart of 16/3/2009, the prior consideration of the CDM must be established according to the GUIDELINES ON THE DEMONSTRATION AND ASSESSMENT OF PRIOR CONSIDERATION OF THE CDM.

According to the guidelines applicable at the time of the start date, "for project activities with a starting date on or after 02/08/2008, the project participant must inform a Host Party DNA and/or the UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status". The project is in compliance with the guidelines since the Host Party DNA was informed of the intention of doing a CDM project at the time of decision to restart the project. This can be verified through the LoA, granted by the DNA in February 2009.

RINA had contacted the DNA of Malaysia on 22/05/2012, Copy of the email communications RINA had with Mr. Shahril Faizal Abdul Jani, Director for Climate Change, Environment Management and Climate Change Division under the Ministry of Natural Resources and Environment (The DNA of Malaysia) and his executive secretary Ms. Siti Kahdijah on 22/05/2012 and 23/05/2012 /106/. The DNA of Malaysia confirmed that "The Project Participant submitted a LoA application previously, which was rejected in 2007. In 2008, a new application was submitted and presented to the National Committee for CDM on 6th November 2008. We confirm that it was a separate application from the one rejected in 2007", Hence it is transparent that this application for LoA and the LoA /57/ issued on 13/02/2009, were post PP's decision to restart the project by investing 50% more shares in the company and by repairing the broke-down gas engines and revamping of gas wells. Demonstrating prior consideration for the restart of the project activity.

Further the DNA confirmed that the DNA was informed informally that the project has been stopped due to technicality. The LoA was reissued for the project on 06/07/2011 as the LoA issued previously had expired.

Therefore, the start date has been validated in accordance with the UNFCCC guidelines on prior consideration of CDM. It is further established that the project was restarted **due to the consideration of the benefits of the CDM** through the Board meeting minutes of 13/06/2008 /105/ where the benefits of CDM are clearly considered in the decision making to acquire 50% additional shares in the project

It is noted that during 2005, prior to PP's 30% financial acquisition of the project activity on 17/08/2005, email communications the PP /104/ had with the CDM consultant Ecair during March 2005, transparently demonstrates PP's CDM consideration prior to its investment in the LFG collection and utilization plant, as there were no prescribed procedures of communication at this point of time. Hence CDM has always been a decisive factor for taking up this project.

Also, the acquisition of 30% of the project assets by the PP on 17/8/2005 is not to be considered a start date, since that acquisition was purely a financial transaction and not a **'commitment of the Project Participant on implementation or construction'**. As a proof, there was no investment in the project after that transaction, and the project stoppage was subsequent to that acquisition. Therefore, the financial acquisition of 30% of the shares cannot be considered in the context of the project restart, since it happened 4 years before the restart and 2 years before the project stoppage. Nevertheless, PP had considered CDM prior to acquiring these 30% shares, demonstrated through the email communications between ECAIR and WLSB during March 2005 well before 17/08/2005.

REVIEW QUESTION:

3) The proposed project activity collects and uses landfill gas (LFG) to generate electricity in a power plant that started operations in April 2004 and in which the current PP (WLSB) had acquired a 30% share in Aug. 2005. The PP had earlier decided to undertake the same LFG-based power plant as a CDM project in Oct. 2005 and the PDD was submitted for validation for the 1st, 2nd, and 3rd time in Jan. 2007, April 2007 and May 2008, respectively, even as the project stopped operations - partly in Oct 2006 (one engine) and fully in 2007. The PP has acquired 80% ownership of the power plant on 18/7/2008 and has resubmitted the project as a "recommended" project with project start date in March 2009.

(a) The DOE is requested to explain how it has considered that the project activity is a restart project given that it was already submitted as a CDM project and that the PP has continued to operate it, despite previous breakdowns. If it is to be considered as a new or "recommended project", the DOE shall explain how it has considered that the PP needed the CDM to proceed with the project activity given that it has made further investment to acquire 80% ownership of the power plant.

CLARIFICATION:

This question has been already answered against review question 1. To address the question more specifically further clarifications are made here. Though the terms 'restart' can be found in the context of guidelines related to Investment Analysis and in the Glossary of Terms, there is no specific definition of 'restart' anywhere in the CDM documentation.

After initial discussions with the PP on the exact applicability of 'restart' in the considered project activity, the PP decided to use the new procedure 'direct communication from stakeholders' in order to get clarification on this point. A question was sent to the Executive board on 04/08/2011. The answer was received on 21/12/2011, and clarified that **'if a project operation started, stopped and then restarted due to the consideration of the benefits of the CDM, it can be considered as a restart (...)'**

In the case of the proposed project activity:

Did the project operation **start**? YES: in April 2004 /47/

Did the project operation **stop**? YES: in May 2007 (the PP did not operate it continuously: the operations were totally stopped for 3 years) /46/

Did the project operation **restart**? YES: in June 2010/47/

Was this restart due to the consideration of the benefits of the CDM? Yes (see explanation below) /105/

Therefore, following the Glossary of terms /25/ and the clarification from the EB /99/, **the project can be considered as a restart.**

Moreover, to address the question specifically:

- 'How did the DOE consider that the project activity is a restart project given that it was already submitted as a CDM project?'

As clarified by the EB /99/ in its answer received on 21/12/ 2011, the definition of a restart is based on the operation/stoppage/restart of the project activity, and not the CDM submission.

However, we would like to clarify that from the CDM standpoint too; the project was stopped and restarted:

- The first 3 PDD were written by CDM consultant ECAIR /01/ (Jan 2007, April 2007, May 2008), with DOE TÜV Rheinland
- As there was no movement on implementation of the project since 2007, the project validation also was not moving forward, Ecair moved out of the project activity and the contract with Ecair was terminated. As the DOE was contracted through Ecair, the contract with DOE was also eventually terminated. Termination of contract was confirmed by verifying the UNFCCC website and based on email dated 03/02/2011 /69/ from Mr. Norbert Heidelmann, Business Manager Carbon Services, TUV Rheinland. Subsequently the project PP appointed a new consultant Ably Carbon /70/. Thereafter RINA was appointed as the DOE and project activity was webhosted on 24/05/2011.

- 'How did the DOE consider that the project activity is a restart project given that the PP has continued to operate it?' The PP has not continued to operate the project.

- the project activity was operated by TNB (and not the PP), from April 2004 to May 2007 /59/ /44/
- the project activity was stopped from May 2007 to June 2010 /47/

- the project activity was restarted by the PP in June 2010 /47/, (after the PP took over the control of the project in January 2009 and decided to invest in repair in March 2009).

Therefore, it is not correct that the PP 'continued to operate the project': the PP started to operate the project in June 2010 /44/ /47/ /59/.

- 'How did the DOE consider that the PP needed the CDM to proceed, given that it had made investment to acquire 80% ownership of the power plant in July 2008?'

When the PP acquired 80% ownership of the powerplant, it was after considering (through the Board meeting minutes of 13/062008) the necessary investments to restart the project, as well as the expected revenue from electricity and CDM. As explained above, the prior CDM consideration is established as per the applicable guidelines.

REVIEW QUESTION:

b) The DOE has considered the project activity as a stop and recommence project and hence validated the value of the recoverable assets as investment costs for the project activity. It is not clear how the value has been estimated.

(i) The DOE is requested to clarify the percentage of costs that was considered recoverable from the original investments and provide a breakdown of the estimated recoverable and unrecoverable assets.

(ii) Further the DOE should clarify on what basis the recoverable value was evaluated i.e. whether the value was estimated on the basis that the landfill gas collection system and power plant would be completely abandoned and that the old assets (purchased prior to 13/6/2009) would be sold as scrap or the value was estimated based on what a potential buyer would pay to restart the LFG collection and power plant system. Please refer to VVM 1.2, para 111 (a), (b), (d)..

CLARIFICATION:

The value considered for the recoverable assets is based on the transaction cost of buying the shares in the project for potential re-use; it is not based on the breakdown of the list of asset. As such, the breakdown of the estimated recoverable and unrecoverable assets cannot be provided.

It should be noted that the initial investment was not done by the PP but by Tenaga Nasional Berhad (TNB), in 2003-2004 /59/. The detailed information and supported evidence related to the initial investment were not provided by TNB, which is now a third-party to the project activity. The PP did not know and were not able to supply documents on the initial cost of TNB.

The value of the recoverable assets was estimated based on what a potential buyer would pay to restart the LFG collection and power plant system, which is the potential reuse of the tangible assets. This value is reflected in the cost of transaction for acquiring the project considered (market

value). Since most assets cannot be recovered and sold at scrap (the LFG capture network, the HDPE liner, etc...), it is conservative to consider the re-use value of the assets.

The total investment cost of 10,171,579 RM considered in the investment analysis /18/ is composed of:

- Recoverable (re-use) value of assets, based on the potential reuse of the tangible assets: 5,400,000 RM. This value is based on the transaction for acquiring 50% of the shares in the project: WLSB bought 50% of JLSB for RM 2.7 Million. The market fair value of the company, as evidenced by this transaction, is thus RM 5.4 Million. Further this value and the transaction is approved by the Energy commission of Malaysia /65/ and the Ministry of Economic Planning /66/, hence considered accurate and appropriate to be the value of the recoverable assets a potential buyer would pay to restart the LFG collection and power plant system.
- Cost incurred after the re-start covering the repair of the existing equipment (engine and wells) and improvement :
 - o 2,231,270 RM for repairing the 2 engines
 - o 2,540,309 RM for repairing and improving the LFG collection system

REVIEW QUESTION:

4) *The investment analysis spreadsheet has many assumptions to arrive at a net electricity generation; the assumptions include the recovery rate of the LFG, plant load factor, different electrical installed capacities that change in different years. No validation opinion has been provided on the different assumptions. The DOE should further validate the electricity generation used in the investment analysis. In particular it should further validate:*

(a) *why the minimum between the installed capacity and electrical capacity has been used in the calculation of the electricity generated;*

(b) *how the electrical capacity has been calculated:*

(i) *why a recovery rate of 60% for the LFG generated has been used;*

(ii) *how the ratio capacity/flow has been validated, including the suitability of using values from 1.49 to 1.62 for different years as per the spreadsheet submitted and;*

(c) *why from year 2019 onwards the installed capacity only considers one 1,048MW engine. Please refer to VVM 1.2, para 111.*

CLARIFICATION:

The minimum of the installed capacity and electrical capacity has been used in the calculation of the electricity generated because

- if the calculated electrical capacity is above the installed capacity, the amount of electricity generated is capped by the capacity of the plant (e.g. in 2019 the electrical capacity is calculated as 1061 kW based on the amount of LFG available but since the capacity of the

engine is 1048 kW, the electricity generated is calculated based on the capped installed capacity)

- if the calculated electrical capacity is below the installed capacity, the amount of electricity generated is calculated based on the electrical capacity and taking into account the load factor of the engine

(i) The electrical capacity is calculated based on a recovery rate of 60%:

As explained in CL11 of the Validation Report, the recovery rate has been assessed using a technical template /75/ based on landfill characteristics such as shape of the landfill, quality of the cover, leachate management and . The template was validated by the audit team. This parameter is further discussed in paragraph 3.7.1 of the Validation Report, where a validation opinion is already provided. . The IPCC 2006 guidelines prescribe a recovery rate from 10% to 85% /26/ already referred in the validation report version 1.2

For reference, ACM0001 v11 does not provide any guidelines for estimating the capture rate of a LFG project. (unlike ACM0001 v12 which proposes a default value of 50%).

It's worth noting that in the framework of the additionality assessment, a rate of 60% is more conservative than the proposed default value of 50% as per ACM0001 v12 since it overestimates the amount of LFG captured and thus the revenue

(ii) The electrical capacity is calculated based on the specification of the engines:

For a gas engine type JGC 320 GS-L.L of capacity 1,063 kW, the following ratios apply:



0.01 Technical Data (container)

Data at:

				Full load	Part Load	
				4	75%	50%
Fuel gas LHV		kWh/Nm³		100%		
Energy input		kW	[2]	2.629	2.025	1.422
Gas volume		Nm³/h	*)	657	506	356
Mechanical output		kW	[1]	1.095	821	548
Electrical output		kW el.	[4]	1.063	796	529

The ratio capacity / flow are thus:

Load	100%	75%	50%
ratio capacity / flow	1.62	1.57	1.49

The engines installed in the project scenario are an older version of the same model and same manufacturer (but the capacity is slightly lower 1,048 kW). This data is not specified in the technical documentation of the engines installed in the project, therefore it has been assumed that the same ratios would apply for the capacity / flow of the 1,048 kW engine as follows:

Load	100%	75%	50%
Gas flow	648 Nm ³ /h	500 Nm ³ /h	353 Nm ³ /h
Capacity	1,048 kW	786 kW	524 kW
ratio capacity / flow	1.62	1.57	1.49

The load factor of the engines has been calculated for each year based on the LFG flow.

Then the ratios were applied as follows:

When the load factor is comprised:

Between 100% and 87.5%, the 1.62 ratio was applied to estimate the capacity

Between 87.5% and 62.5%, the 1.57 ratio was applied

Between 50% and 62.5%, the 1.49 ratio (lower performance)

From year 2019 onwards the installed capacity only considers one 1,048MW engine because there is not enough gas to operate 2 engines: the load factor would be below 50% and the engines would not function properly. Thus it is estimated that one engine will be removed in 2019. In addition, removing the engine avoids the cost of an overhaul that would have been required that particular year for this engine.

It's worth noting that the scrap value of the engine removed is considered as a cash inflow in the investment analysis, and the operating costs have been adapted to a 1 MW capacity from 2019 and onwards.

REVIEW QUESTION:

5) The baseline LFG2 has been selected and the DOE has validated that as there was no LFG recovery between 2005-07, it can be accepted that there was total release of LFG in the baseline. The DOE has validated that the adjustment factor of zero is appropriate. However, the applied methodology provides an equation to estimate the destruction efficiency of the system where historical data exists. Considering the LFG was captured for electricity generation from 2004-07 i.e. historical data exists for baseline estimation, further clarification is sought on how the DOE has validated the estimation of the baseline emissions, in particular, how it considers use of AF as zero conservative. Please refer to VVM version 01.2 paragraph 84,90.

CLARIFICATION:

We would like to clarify that nowhere in the validation report or in the PDD it is mentioned that there was no LFG recovery between the years 2005-07. The first engine failed during October 2006 and the second engine during May 2007 from then on till the restart one engine June 2010 the LFG generated in the landfill was completely vented /47/.

The adjustment factor has been estimated as 0 because there is no regulation or contractual obligation to recover and destroy the LFG and because at the time of recommencing the project and the year before and from May 2005, no LFG was recovered and destroyed on the site of the proposed project activity. Hence the formula prescribed by the methodology cannot be used and if used the value becomes zero once again as explained below.

:

By applying the formula of ACM0001 v11 to estimate the destruction efficiency of the system where historical data exists (formula 3), $\epsilon_{BL} = MD_{hist} / MG_{hist}$

Where:

ϵ_{BL} Destruction efficiency of the baseline system (fraction)

MD_{Hist} Amount of methane destroyed historically measured for the previous year before the start of project activity (tCH₄)

MG_{Hist} Amount of methane generated historically for the previous year before the start of project activity, estimated using the actual amount of waste disposed in the landfill as per the latest version of the "Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site" tCH₄)

Since no LFG was recovered/ destroyed for the previous year before the start of the project (the plant was fully stopped for 3 years prior to the restart), $MD_{hist} = 0$.

Thus $\epsilon_{BL} = 0$

And it results an AF of zero.

REVIEW QUESTION:

6) The DOE should further explain how it has validated that the formula used to calculate the ex-ante baseline emissions. In particular the DOE should describe how the use of a collection efficiency of 60% and a calculated ratio of 92.5% is in line with the formula described in the methodology for the estimation of the the amount of methane that would have been destroyed/combusted during the year.

CLARIFICATION:

Please refer to ACM0001 version 11, formula 13.

The formula applied to calculate ex-ante amount of methane that would have been destroyed/combusted during the year ($MD_{project}$) is presented in section B.6.3 of the PDD as:

$$MD_{project,y} = BE_{CH_4,SDWS,y} / GWP_{CH_4} * R_r * A$$

Where:

$MD_{project,y}$ is the quantity of methane destroyed by flaring taking into account the efficiency of the degassing system which will be installed in the project activity, converted in tCO₂e.

R_r is the efficiency of the collecting system. The recovery rate is ex-ante estimated as 60% which is appropriate and conservative considering the physical conditions of the landfill and the quality of the cover as observed during site visit.

A is a ratio that takes into account the availability of the power plant of 85% and the efficiency of the flare of 50% while the power plant is not operating. The ratio is calculated as 85% + (15%*50%) = 92.5%.

It is worth noting that ACM0001 v11 formula 13 states: $MD_{project,y} = BE_{CH_4,SWDS,y} / GWP_{CH_4}$

But also specifies that “**The efficiency of the degassing system** which will be installed in the project activity **should be taken into account** while estimating the *ex ante* estimation”.

To comply with the methodology, it is thus required to consider the efficiency of the degassing system in the estimation of $MD_{project}$.

The ratios considered in the efficiency of the degassing system are:

60% = the expected capture rate of the system (efficiency of the recovery system)

85% = the availability of the power plant (efficiency of the destruction system in case of energy generation)

50% = the efficiency of the flare (default value for an open flare in case LFG is destroyed through flaring)

The validation report has been updated covering the above clarifications made in response to the review questions raised for the project "Ayer Hitam landfill gas recovery project"(Project Ref 5797).

We sincerely hope the above clarification will be accepted by the Executive Board.

Yours sincerely,



Cyril Augustus Arokiasamy.
CDM Team Leader,
RINA India Pvt Ltd.



Laura Severino
Authorized officer signing for the DOE
RINA Services S.p.A.

Annexes:

/46/	TNB ES: Letter confirming project chronology, reference TNBES/JLSB/Sept-11, dated 21/09/2011.
/47/	TNB ES: Power generation details for the years 2004, 2005, 2006, 2007, 2010 and 2011 , reference: TNB(B)/PP&P/PSTK/ 8/11/4, dated 08/07/2011 – available in Malaysian language and partially in English, sufficient for the purpose of the document.
/48/	TNB ES: Letter confirming restart date of the project activity and no power generation during 2004-2007, reference: TNB(B)/PP&P/RE>/ 8/11/4, dated 25/10/2011.
/53/	JD Energy Systems Sdn Bhd: Invoice No.837 for a value of RM 252,930 of 16/03/2009 for repair of one LFG gas engine.
/59/	TNB: TNB Corporate report 2003 giving its organizational structure.
/64/	Share sale agreement between TNB ES and WLSB 18/07/2008
/65/	Surhanjaya Tenaga (Energy commission of Malaysia): Authorization of the Energy Commission to proceed with the transfer of shares of JLSB dated 29/01/2009 and its English translation.
/66/	Economic Planning unit-Prime Minister's department: Authorization of the Economic Planning to proceed with the transfer of shares of JLSB dated 15/04/2009 and its English Translation
/69/	TUV Rheinland: Email from Mr. Norbert Heidelmann, Business Manager Carbon Services, TÜV Rheinland Energie und Umwelt GmbH dated 03/02/2011
/77/	Universiti Tenaga Nasional (National Energy University):C.H. Yip, Universiti Tenaga Nasional, Malaysia: An Overview on the Feasibility of Harvesting Landfill Gas from MSW to Recover Energy of 2008, available at weblink :

	http://www.uniten.edu.my/newhome/uploaded/coe/iccbt/iccbt%202008/conference%20%20extract/UNITEN%20ICCBT%2008%20An%20Overview%20on%20the%20Feasibility%20of%20Harvesting%20Landfill%20Gas%20from.pdf in English, retrieved on 06/12/2011.
/99/	CDM Executive Board: Clarification on restart of a project activity with CDM revenues dated 20/12/2011
/103/	UNFCCC Website: Weblink http://cdm.unfccc.int available in English, retrieved on 27/12/2011
/104/	Email communications between ECAIR and WLSB during March 2005, as a document to support PP's CDM awareness and CDM consideration prior to their first (30%) financial acquisition during August 2005.
/105/	WLSB: Board minutes dated 13/06/2008.
/106/	Email communications RINA had with Mr. Shahril Faizal Abdul Jani, Director for Climate Change, Environment Management and Climate Change Division under the Ministry of Natural Resources and Environment (The DNA of Malaysia) and his executive secretary Ms. Siti Kahdijah on 22/05/2012 and 23/05/2012.