

## LOCAL ASSESSMENT CHECKLIST FOR “GANPATI CO-GENERATION PROJECT AT MEDAK, ANDHRA PRADESH (CDM.VAL0287)

### Additional information to be verified by local assessors / site visit

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
<p><i>Key assumptions and data presented in the PDD must be verified, usually by local assessors or during a site visit. Where the baseline is constructed from historic emissions data, a site visit by an Assessor or Lead Assessor will be necessary; where the baseline is constructed from an economically attractive course of action, a local assessor may be sufficient. Where the baseline uses 48c (measure of best practice) any combination of Assessor / Lead Assessor / Local Assessor and Expert may be required.</i></p> <p><i>During the line by line review of the PDD, identify all statement / facts / assumptions / variables etc that need to be verified. List them below and then ensure that the team verifies the data and provides references / supporting documentation where necessary.</i></p> <p><i>The list may be quite long therefore avoid repetition.</i></p>					
<p>Letter from DNA for host country</p> <p>Please check with date of issue, format and see the original copy of the letter.</p>	SV	DNA Web site	<p>HCA received and scan copy enclosed as</p> <p>L Annex – 1</p>	OK	OK
<p>The project was listed for comments on the UNFCCC website from 25/10/2005 till 23/11/2005 and was commented by Joergen Fenhann “The link to the PDD for 15 MW biomass co-generation in Andhra Pradesh do not work”</p> <p>Was the comment regarding wrong link addressed? If</p>	SV & Personal opinion	UNFCCC web site	<p>In fact if we refer his comment, the International Stake Holder (ISH) visited the website at 9:45 AM on the first day of the web hosting.</p> <p>If the web link was not active during that point of time, whom</p>	OK	OK

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yes, when and how, please provide a copy of the response.			<p>should we held responsible UNFCCC, SGS or the ISH due to some internet connectivity problem?</p> <p>We did not receive similar comment there after; it implies that the web connectivity and opening of the web page must have been restored.</p> <p>Later we checked the web &amp; documents they were available &amp; accessible.</p>		
In the PDD it is mentioned that 'of the 5071 sugar mills in India,	PDD page 3	Refer Web sites under comments column	<p>The numbers of 5071 as shown in the PDD were wrong. As per the information available through letter of offer issued by Balrampur sugar for invitation for shares through sebi web site. There are 507 working sugar factories instead of 5071 as mentioned in the PDD.</p> <p>Refer page 55 of the enclosed report available on following web link.</p>	OK	OK

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<p>Only 30<sup>1</sup> have cogeneration systems which are capable of meeting their in-house captive requirement as well as wheeling power to the grid only 16 are of a high pressure configuration out of which only 12 mills<sup>2</sup> are successfully exporting power to the grid'.</p> <p>The link <a href="http://www.indiansugar.com/sugarstn.htm">http://www.indiansugar.com/sugarstn.htm</a> doesn't work, check the figures quoted above</p> <p>High-pressure bagasse co-generation in Indian sugar</p>	Pg. 10,15 PDD		<p><a href="http://www.sebi.gov.in/dp/balrampurfinal.pdf">www.sebi.gov.in/dp/balrampurfinal.pdf</a></p> <p>The same has been corrected in the PDD</p> <p>Obtained source of information, which the project developer used, which can be accessed through following URL Link, refer: <sup>1</sup> page – 11 <sup>2</sup> page – 11, para, 5.37 of the web document.</p> <p>Refer:  <a href="http://www.mnes.nic.in/annualreport/2001_2002_English/ch5_pg11.htm">http://www.mnes.nic.in/annualreport/2001_2002_English/ch5_pg11.htm</a></p> <p>We have checked the web link mentioned in the PDD and found it is working.</p>		

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<p>industry is not a standard business practice- supporting published/publicly available documents</p> <p>Most financial institutions unwilling to finance such projects- proof of any rejections regarding project finance</p>			<p>It was not a standard practice when project was started April 2001 and started emission reduction from January 2003 by supplying power to grid.</p> <p>Refer: MNES Annual report 2001 – 2002, on web, which satisfy / supports for their claim.  <a href="http://www.mnes.nic.in/annualreport/2001_2002_English.pdf">http://www.mnes.nic.in/annualreport/2001_2002_English.pdf</a></p> <p>Supporting documents showing denial from the banks are not available in writing.</p>	Pending	
In the certified copy of the resolution passed on June 13, 2000 it is mentioned that the IRR before CDM consideration is 13.28% and IRR after CDM consideration is 15.32%. Increase of 2.16% is not a sufficient proof of CDM consideration!!	Pg. 15 PDD	Web site for conversion and supporting docs	<p>Annex L - 2</p> <p>(Caveat is being attached)</p> <p>As per the discussion during the site visit, the project proponent was of the opinion that IRR increases by 2.16 % annually,</p>	OK	OK

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			<p>the equity IRR Jumps by almost 6.83% from 11.72% to 18.55%.</p> <p>It is also important to note that they have considered conservative price of CER as \$ 4 Which is reasonably conservative as the current unit price of CER will not be less than 8.5 USD, considering 1 euro = 1.214 US dollars.</p>		
Check if the project uses Official Development Assistance (ODA) or there if there is any diversion of ODA	SV	supporting docs	<p>L Annex – 3</p> <p>No financial assistance sought from ODA / public funding to support this project, supporting docs enclosed.</p> <p>This is also confirmed from review of company financial statement</p>	OK	OK
The letter from the village panchayat also states that the project details should be made available to them. Were the same communicated? Was any response received? Is there a list of stakeholders consulted. Check from the state pollution control Board if there are any public complaints received on the project	PDD pg. 24 and Annexure-5	SV, docs review	<p>L Annex – 4, importantly L Annex – 8,</p> <p>During the discussion with</p>	OK	OK

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Check implementation of the project during the field visit			<p>Ganpati management, the management representatives revealed that they have not informed the villagers much about the financial benefits coming out of this project, as this information will instigate their greed. The Local Stake Holder (LSH) may expect employment and financial benefit from the industry.</p> <p>However, during LSH we met few people and they did not register any complaint about the project activity.</p>		
Information on media used to invite comments (Press adverts, public announcement, letters etc.)	PDD pg. 24	SV	Through interaction with the Panchayat officials (local public elected members / representatives) of villagers	OK	OK
<p>Is a EIA/stakeholder consultation process required by regulations/laws in India or the State Government</p> <p>If yes, has the stakeholder consultation process been carried out in accordance with such regulations/laws</p>	Section F, page. 23	SV, docs review	<p>Refer: <a href="http://envfor.nic.in/">http://envfor.nic.in/</a></p> <p>L Annex – 7</p> <p>No such requirement as per the law of the land. Sugar Industry is not classified among the 30</p>	OK	OK

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			<p>such industries or which an EIA is required.</p> <p>L Annex – 4 Letter received from management confirming that they are in touch with the LSH's about the development of the project activity.</p> <p>L Annex – 8  Local governing body representative wrote their happiness about the project activity.</p> <p>L Annex – 5 The consent to operate from Andhra Pradesh Pollution Control Board is an indicative that the industry is not among defaulters. Copy of consent and compliance to regulatory norms are enclosed as Annex.</p> <p>We did not receive any adverse comment during the site visit.</p>		
Proof of Staring date				OK	OK

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The starting date of the project is mentioned as 29/04/2001, please check the supporting documentation, receipts of the equipment and proof of acquisition	Section B3 PDD page 5	SV, docs review	<p>L Annex – 9.1 (Synchronisation letter from AP Transco),</p> <p>L Annex – 9.2 (Synchronisation letter from AP Transco)</p> <p>L Annex – 9. 3 (Minutes of meeting with the equipment supplier “BHEL”)</p> <p>Supply schedule of the Turbo Generator from BHEL confirms that the project start date can never be earlier than 27<sup>th</sup> November 2001. However, the installation and trial run took time before the first PPA was signed with APTRANSCO and wheeling of the power to the grid actually started.</p>		
Projects operational lifetime- manufacturer’s specs. On the equipment to be confirmed (turbines etc.)	PDD	SV, docs review	<p>Yes, we have spoken to the suppliers and gathered information that Boilers and turbine have a life time of 25 – 30 years.</p> <p>The details of the contact person have been mentioned in AU4,</p>	OK	OK



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			<p>but they have made a request not to reveal their identity as this may cause problem for them from their own organisation.</p> <p>They also told us that the boiler efficiency decreases with the moisture content of bagasse as it varies from season to season and due to the influence of local weather factors.</p>		
<p>Need to check the designed capacity of the boiler</p> <p>Rated capacity of the system in terms of electrical output as defined by the system manufacturer</p> <p>Check whether steam output of the boiler is used only for generation of electricity or is also used in any other part of the plant</p> <p>What is the net thermal output from the boiler, also check from the records whether it fluctuates or not? If yes, what is the range of fluctuation?</p>	PDD page 7	SV	<p>Boiler specs : refer L Annex 10.0</p> <p>Supporting document from the project proponent giving details of steam generation capacity.</p> <p>Steam output of the boiler is used to generate electricity only.</p> <p>The net thermal output from the boiler is rated at 45MW thermal as per supplier letter (Thermax).</p>	OK	OK
Copy of Power Purchase Agreement with Andhra	PDD page 8	SV & supportin	L Annex 11 PPA 1 and	OK	OK

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<p>Pradesh transmission corporation of Andhra Pradesh Ltd. to be provided When was the agreement signed? Validity? What is happening currently to the extra generated power?</p> <p>Likelihood of sale of power to the grid in future, gather supporting documentation from other projects where power is sold to the grid</p>		g docs	<p>11 PPA 2</p> <p>Original seen, scan of agreement enclosed for reference</p> <p>The first PPA was signed on 14th May 2002 with validity up to 30<sup>th</sup> June 2004 and valid until the 20<sup>th</sup> year (till 01.01.2023) from the commercial operation date 01.01.2003.</p> <p>As per the agreement they can wheel 15 mw of power.</p> <p>The project proponent have two boilers each of capacity 32 tonnes, and 2 turbo alternator of 3 MW each., so that the extra Power generated will exclusively used for ancillaries as well as gap in requirement for running the plant.</p> <p>If we consider the heat value the project may not generate more</p>		

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			than 12 MW		
Have they used coal in the past/present? How is it being monitored?		SV & supporting docs	<p>No, they are not using coal</p> <p>L Annex – 12</p> <p>Coal was not being used; this can be checked and verified from the company expenditure statement / annual report.</p>	OK	OK
<p>Calculation of the operating margin to be checked (check whether the tables contain ALL the power plants involved)</p> <p>Check data source for calculations in the PDD. If data are not available through internet, please take a sample of the data provided in Annex 3 of the PDD and check those against the original source of the data</p> <p>Excel sheet for calculations should be provided</p>	2.2 & NIR 5 PDD page 33	SV & supporting docs	<p>L Annex 13</p> <p>Excel work sheet for OM and BM calculations enclosed</p> <p>L Annex 14</p> <p>Energy performance status report on region wise production of electricity with Generation capacity to prepare supporting excel sheet for OM and BM. The</p>	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			data was published by CEA		
<p>Calculation of the built margin to be checked</p> <p>(check whether the tables contain ALL the power plants involved)</p> <p>Excel sheet for calculations should be provided</p>	Annexure 3 PDD & CAR 7	SV & supportin g docs	<p>L Annex – 13</p> <p>Yes the excel sheets checked &amp; found correct</p>	OK	OK
<p>Monitoring plan to be checked.</p> <p>Are the plant's employees aware of the monitoring protocol? Do they know how to monitor and who is responsible? What kind of system do they use? How do they check their own procedures? Do they undertake internal audits?</p> <p>What kind of system is being used to collect the data?</p> <p>Who is responsible and who has access to these data?</p> <p>What happens if data are missing?</p>		SV & supportin g docs	<p>L Annex – 15</p> <p>Shows the management representative responsible for monitoring.</p>	OK	OK

Ref no.	Title (full bibliographic reference if possible)	Brief note on content / significance	Hard copy (Y/n)
1	To check environmental clearances required for this kind of project we referred <a href="http://envfor.nic.in/">http://envfor.nic.in/</a> to check whether an EIA is required for this type of industry	Environmental and regulatory requirements	N
2	Central Electricity Authority web site referred <a href="http://cea.nic.in/">http://cea.nic.in/</a> and <a href="http://cea.nic.in/uc.html">http://cea.nic.in/uc.html</a> to check the operating and build margin calculations carried out for calculations of CERs	CEA website to check the data provided by the client	N
3	CEA data provided by the client (L Annex 14)	To check the OM & Build Margin calculations	Y
4	Pollution control board consent to operate (L Annex 5)	To check the regulatory requirement	Y
5	Power Purchase agreements (Annex L 11 PPA 1 & 2)	To check the wheeling to the grid	Y
6	Invoices and payments received from the AP TRANSCO	To check the realisation of wheeling contract	Y
7	Few pages of the Log book entries being made at site	To check power production and wheeling record	Y
8	Turbine specifications record	To check the capacity and trace out the date of supply of components etc	Y
9	Financial Statement of the company and Annual Report Of The Company for the financial year 2003 - 2004	To check no coal was purchased and also the date of start of the project	Y

Date met	Name & Position	Contact details	Brief note on subject of interview
Through telecom on 9 <sup>th</sup> December 2005	Mr. Y R Ranware Senior Manager Projects	Thermax Babcock and Wilcox limited Sagar complex, Kasarwadi, Pune -411 034 Email:tbw@vsnl.com Tel no: +91-9422088101, 91+20-51626451	Life expectancy of a boiler and its operational problem if run on bagasse.
Through telecom on 10 <sup>th</sup> December 2005	Mr. P Ashok Verma, DGM Power Plant Engineering	Bharat Heavy Electrical Limited Ramachandrapuram, Hyderabad – 500 032 Email: <a href="mailto:tsspr@bhelhyd.co.in">tsspr@bhelhyd.co.in</a> , alternate: <a href="mailto:ark@bhelhyd.co.in">ark@bhelhyd.co.in</a> Mobile: +91-9849184765, 91+ 40 – 2 3182217	Operational problems being faced on running the turbine through bagasse based boiler.
8 <sup>th</sup> - 10 December 2005	Mr. P M Nair, Director (Operation & Production)	Ganpati Sugar Industries Limited, Trident Sugars Limited, 8 – 2 – 438 / 5, Road No. 4, Banjara Hills, Hyderabad – 500 034 Phone + 91 – 40 – 233 55 212, / 3 / 4 Fax: + 91 – 40 – 233 50 959	To discuss the project ad demand the supporting documents

8 <sup>th</sup> December 2005	Mr. K Harinath, Executive Director	Ganpati Sugar Industries Limited, Fasalwadi Village, Sangareddy Mandal, District Medak – 502 294, Phone : + 91 – 8455 – 2744 22 / 3 Fax: + 91 – 8455 – 2744 25	To collect plant related information
8 <sup>th</sup> December 2005	Mr. S Nagraj, General Manager (Works)	Ganpati Sugar Industries Limited, Fasalwadi Village, Sangareddy Mandal, District Medak – 502 294, Phone : + 91 – 8455 – 2744 22 / 3 Fax: + 91 – 8455 – 2744 25	To collect plant related information & operations
8 <sup>th</sup> - 10 December 2005	Mr. A K Perumal, Senior Associate	Caron Management Consulting, Birla Carbon Management Consulting Private Limited, Birla Building, Ground Floor, 9 / 1, R N Mukherjee Road, Kolkata – 700 001 Mob Phone: + 91 – 9331 8877 48	Discussed the project and Emission Reduction calculations
8 <sup>th</sup> & 9th December 2005	Mr. Deepak Mawandia Managing Director	Caron Management Consulting, Birla Carbon Management Consulting Private Limited, Birla Building, Ground Floor,	Discussed the project and Emission Reduction calculations

		9 / 1, R N Mukherjee Road, Kolkata – 700 001 Phone: + 91 – 33 – 2231 7258 (D) Fax: + 91 – 33 – 2231 7259	
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