

 <p style="text-align: center;"><b>CDM: Proposed New Methodology</b>  <b>Meth Panel summary recommendation to the Executive Board</b>  <b>(version 01)</b>  <i>(To be used by the Meth Panel in addition to the full recommendation to the Board regarding a proposed new methodology (F-CDM-NMmp))</i></p>	
<i>Date and number of Meth Panel meeting:</i>	6 - 9 September 2005 Meth Panel 17
<i>Related F-CDM-NM document ID number (electronically available to EB members)</i>	<b>F-CDM-NM0122:</b> “Shell Cogeneration Project”
<i>Title of proposed new baseline methodology:</i>	Cogeneration at an Industrial Facility
<i>Title of underlying project activity:</i>	Shell Cogeneration Project
<i>History of submission: (new section)</i>	First submission (Round 11, 01 June 2005) Final recommendation at Meth Panel 17
1. One sentence describing the purpose of the methodology. (new section)	
>> The methodology objective is to account for emission reductions for a project activity that involves the installation of a gas turbine generation system at a refinery in order to generate electricity, whereby waste heat from the gas turbine would also be used to supply part of the demand for steam at the power plant, resulting in improvement of plant efficiency in a thermodynamic sense, and generating excess electricity to be supplied to the power grid.	
2. Suggested applicability of methodology (former section A.I and B.I)	
>> Applicability conditions provided were inadequate, and those suggested by the Meth Panel include:	
<ul style="list-style-type: none"> <li>• Partial or full replacement of cogeneration equipment at an industrial facility without extension of capacity and lifetime of the industrial facility.</li> <li>• Project activities could involve the installation of new cogeneration capacity or increase in existing cogeneration capacity. The project activity may involve fuel switching because of the cogeneration technology used.</li> <li>• The plant may purchase electricity from the grid in order to meet on-site demand or sell electricity to the grid when electricity generation exceeds on-site demand.</li> <li>• This methodology is applicable to projects that are not limited to fuel switching only for equipment generating thermal energy or electricity.</li> <li>• The methodology is applicable to industries with existing generation equipment for steam and electricity, whereby overall output of steam does not change.</li> <li>• This methodology is applicable to industrial cogeneration without increase in end-use energy efficiency, such that industrial facility use of steam and electricity from cogeneration facility per unit output remains constant.</li> <li>• The remaining lifetime of the project equipment should be longer than the crediting period chosen for the project.</li> </ul>	
3. Summary description of baseline methodology. Short statements on each on how the proposed methodology: <i>(chooses the baseline scenario, demonstrates additionality, calculates baseline emissions, calculates project emissions, calculates leakage, calculates emission reductions)</i> (former section B.I.)	
>> Baseline scenario is determined by analysis of options available to project participants and using elements of the tool for the demonstration and assessment of additionality. Additionality is analysed using the “Tool for	

the Demonstration and Assessment of Additionality”. Baseline emissions are related to use of fuel and grid electricity. Project emissions include emissions due to fuel use in the project case and natural gas pipeline supply, which have been termed as leakage emissions. Emission reductions are computed on the basis change in fuel type and consumption rate due to the installation of the natural-gas-fired gas turbine, whereby more carbon intensive petroleum fuels are replaced by natural gas. For combined margin emission factors the methodology incorporates ACM0002 “Consolidated methodology for grid-connected electricity generation from renewable sources”, and contemplates using as an alternative the small-scale methodology I. D. The methodology also uses equations from AM0008 “Industrial fuel switching from coal and petroleum fuels to natural gas without extension of capacity and lifetime of the facility” for determining emissions at an industrial facility.

The methodology also considers determining ex-ante baseline emissions either by thermodynamic analysis. No mathematical formulation is provided for this approach.

4. Suggested “recommendation level” for the baseline and monitoring methodologies (A, B or C).  
(former section A.I and A.II.)

>> C. Not to be approved.

5. Major reasons for B/C choice from the proposed baseline methodology: (outline the major reasons for needing revision/rejection)

(former section A.I.)

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- The methodology does not clearly explain how emission reductions will be computed. Two different approaches for baseline emission determination seem to be proposed and it is not clear how these approaches relate to each other. Thermodynamic analysis is used for calculating ex ante and ex post baseline emissions, but this approach is not associated with mathematical formulas. Use of absolute emissions due to fuel consumption in the baseline and project scenario is not a correct approach. This is a fundamental issue to the methodology and resolving it will lead to a requirement of a full review.
- The methodology is not adequately independent of the draft CDM-PDD.
- Fuel consumptions are related to activity level of the industry without giving details of how this would apply to the methodology. A statistical relationship between baseline fuel consumption and activity level is indicated, but no clear details are given.
- Applicability conditions in relation to effects on project emissions due to changes at the industrial facility. Supply of steam to the industrial facility is assumed, and it is not clear how the interrupted supply of steam to the facility would affect project emissions, or how the output efficiency of the industrial facility would impact the emission reductions.
- Methodology needs to explain how legal and regulatory issues as well as national and/or sectoral policies and circumstances are taken into account rather than quoting the guidelines on this section.
- The methodology lacks explanations on assumptions and uncertainties.
- Leakage has not been adequately described.

6. Any major issues arising from the assessment of the proposed monitoring methodology (if different to those already raised above).

(former section A.II.)

>> None

7. Any other issues arising to be stated, if necessary (e.g. cross-cutting, general or precedent-setting issues raised by the proposed new baseline or monitoring methodology).

>> None



Signature of Meth Panel Chair .....

Date: 14/09/2005

(Jean-Jacques Becker)



Signature of Meth Panel Vice-Chair .....

Date: 14/09/2005

(José Miguez)

**Information to be completed by the secretariat**

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