



अशोक वरन चक्रवर्ती
महाप्रबंधक - मुख्य, कार्बन प्रबन्धन समूह
Ashok B. Chakraborty
GM - Head, Carbon Management Group

ऑयल एण्ड नेचुरल गैस कॉर्पोरेशन लिमिटेड
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Carbon Management Group
10th Floor, South Tower, SCOPE Minar, Laxmi Nagar,
Delhi-110092 (India)

Letter No ONGC/DLI/CMG/1/Review reply/2007

Oct 6, 2007

Dear Mr Schmidt,

With reference to your mail dated September 27, 2007, the ONGC response to the observations raised by the UNFCCC sectt., regarding the ONGC Uran FGR Project are as under & other documents as mentioned in the footnote enclosed.

Project Name: Flare gas recovery project at Uran plant, Oil and Natural Gas Corporation (ONGC) Ltd; Project activity 1220

Further Demonstration of the additionality:

The project being the first of its kind¹ faced various technical hurdles. The desired flare gas recovery system was required to handle the following widely variable parameters.

- To have the operating capacity of compressor ranging from 15,000 to 1,50,000 SCMD with turn down ratio of 10%.
- To recover gas containing molecular weights ranging from 19.45 to 35.48.
- With suction pressure ranging from 50 mmwc to 2750 mmwc.
- Necessity of continuous operation of compressor due to wide fluctuation of gas availability

Having no experience for such flare gas recovery system, ONGC Uran plant was unsure about the viability of the project activity². However a circular³ from Head Environment Management-ONGC made them aware about the possibility of availing carbon credit through Clean Development Mechanism (CDM) project for GHG abatement project activity. This awareness about CDM motivated them in taking the decision to implement

¹ Enclosure 6: Certificate of Recognition for being the first of its kind project in the sector

² Enclosure 3; Minutes of the meeting dated 22/01/2001

³ Enclosure 1: ONGC/CSHE/Misc/2000-01 dated 05.01.2001 from Head Environment Management

the project activity in spite of the existing technological barriers associated with the project activity.

Since no indigenous similar technology supplier was available during the commissioning of the project activity. Finally the suitable technology (the positive displacement, variable capacity, oil flooded, rotary screw compressor) was supplied by M/S Howden Compressors from United Kingdom.

The project was commissioned on 02/08/2003. However the project activity faced various operational/technical hurdles during the post commissioning phase due to the unfamiliarity with the new technology The PDD mentioned that "The unit had to face multiple shutdowns and had to face considerable stoppage time since ONGC was unfamiliar with the technology and had to depend on technology supplier for repair and maintenance." A total of 200 working days were lost since the commissioning of the project activity. The details for the same are provided below in a tabular form.

Shut down period	Duration	Cause
05.12.2003	19 days	Blades of gas cooler fan damaged
16.12.2003		Checking of axial displacement as alarm was actuating
24.12.03		Compressor started after replacement of blades and checking of axial displacement
25.12.2003	1 day	To check alignment as axial displacement alarm was still actuating
13.01.2004	½ day	To attain leakage from compressor shaft seal
12.02.2004 to 17.02.2004	5 days	Replacement of shaft seal and axial displacement cable
06.04.2004 to 08.04.2004	3 days	Oil cooler fan blades damaged
12.04.2004 to 15.04.2004	4 days	Oil cooler fan coupling damaged
17.07.2004 to 01.01.2005	168 days	Oil pump shaft seal failed causing loss of lube oil. No sufficient oil was available to run the compressor as oil was not readily available locally.

In addition the unit had to undergo multiple modifications to overcome various operational hurdles faced during the actual operation of FGRU which were hitherto unknown to project developer due to their unfamiliarity with the technology⁴.

Evidence of CDM influence in the decision to proceed with the project activity:

ONGC management at the corporate level was well aware of the Clean Development Mechanism (CDM). In addition, management at the plant level considered CDM as an important contributor in mitigating the risks and uncertainties associated with the project activity. Following internal communications during the time of decision making to implement the project activity demonstrates the same.

ONGC/CSHE/Misc/2000-01 dated 05/01/2001	This circular was released by Head Environment Management Corporate HSE to create awareness, inter alia, about Kyoto Protocol and Clean Development Mechanism(CDM)
Meeting Notice at Uran plant dated 19/01/2001 ⁵	This meeting was called by Chief Engineer (Production) of Uran Plant to identify possible projects at Uran Plant which may qualify as CDM project.
Minutes of the meeting at Uran plant dated 22/01/2001	In the meeting it was decided, inter alia, that Flare Gas Recovery project of Uran will be taken up as a CDM project.
Progress report dated 05/09/2002 ⁶	This progress report was sent to the Head, Corporate Health Safety Environment (HSE) of ONGC by Chief Engineer (Production) in response to Head HSE's query about the status of the Flare Gas Recovery project activity.

⁴ Please refer to section B.5 of the PDD for reference

⁵ Enclosure 2: Meeting notice dated 19/01/2001

⁶ Enclosure 5: Progress report dated 05/09/2002

These documents demonstrate that CDM was seriously considered to ensure the viability of the project activity at the time of decision making of the project activity.

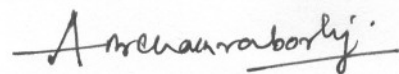
In view of the guidance as provided in paragraph 76 of EB-33 meeting report, the start date of the project activity has been revised from the commissioning date (02/08/2003) to the date of awarding of the contract⁷ (20/11/2001) to M/S Nicco Corporation Limited. Since the date of awarding of the contract is the earliest of the dates at which the implementation or construction or real action of the project activity begins.

Demonstration of additionality of the project using version 3 of the additionality tool

As per the request for review, the latest Version 3 of the "Tool for the demonstration and assessment of additionality" has to be used to demonstrate additionality. The PDD used version 2 of the additionality tool. The difference between additionality tool version 2 and version 3 is the absence of step 5 (Impact of CDM registration). As per the request for review, the version 3 of the additionality tool has been used and the step 5 has been deleted to follow the requirement of additionality tool version 3 in the revised PDD.

Hope all details have been covered. Other enclosures sent as separate attachment. Should you need more information please do ask.

Regards



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Mr. Kai-Uwe Barani Schmidt
Manager, CDM Section

⁷ Enclosure 4: Letter of Intent (LoI) of the contract