


### Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Idle running	Sector : CEMENT			
Year to be filled by BEE		Technology : INHOUSE			
Description of the energy conservation measure:					
Cement mill – 1 girth gear grease pump running continuously even if grease pressure is healthy or Mill stopped. To avoid idle running of motor Grease pump running interlock with grease pressure and mill running. After incorporating this interlock life of grease nozzle and Non return valve increased. Mill stoppages are also eliminated.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 2500.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	0.25kw	NA	NA	NA	NA
Energy consumption after	0	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature	
				Date 01.10.08	

**Note: Please submit this sheet separately for each Energy Conservation Measure implemented in 2007-2008 and a CD containing the above information may be please be enclosed.**

## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Idle running	Sector : CEMENT			
Year to be filled by BEE		Technology : INHOUSE			
Description of the energy conservation measure:					
Cement mill – 2 girth gear grease pump running continuously even if grease pressure is healthy or Mill stopped. To avoid idle running of motor Grease pump running interlock with grease pressure and mill running. After incorporating this interlock life of grease nozzle and Non return valve increased. Mill stoppages are also eliminated.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 2500.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	0.25kw	NA	NA	NA	NA
Energy consumption after	0	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature	
				Date 01.10.08	

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## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Idle running	Sector : CEMENT			
Year to be filled by BEE		Technology : INHOUSE			
Description of the energy conservation measure:  Cement mill – 1 gear box oil pumps running continuously after mill stopped also. To avoid idle running of oil pump motor, oil pump interlocked with mill running. Now oil pump trips after 30minutes of cement mill stoppage.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 2500.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	1.5kw*2nos	NA	NA	NA	NA
Energy consumption after	0	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature	
				Date 01.10.08	

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## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Idle running		Sector : CEMENT		
Year to be filled by BEE			Technology : INHOUSE		
Description of the energy conservation measure:  Cement mill – 2 gear box oil pumps running continuously after mill stopped also. To avoid idle running of oil pump motor, oil pump interlocked with mill running. Now oil pump trips after 30minutes of cement mill stoppage.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 2500.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	1.5kw*2nos	NA	NA	NA	NA
Energy consumption after	0	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination  Signature  Date 01.10.08	
Contact person who could be contacted for more information: T.V.Rao					

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## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Idle running		Sector : CEMENT		
Year to be filled by BEE			Technology : INHOUSE		
Description of the energy conservation measure:  One number coal firing blower running instead of two blowers at the time of kiln starting. Normally, two blowers are required for coal firing during kiln operation. During starting time, since one blower can meet the requirement, the other blower can be stopped.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 3260.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	55kw	NA	NA	NA	NA
Energy consumption after	0	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature	
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## Energy Conservation Measure implemented in 2007-2008

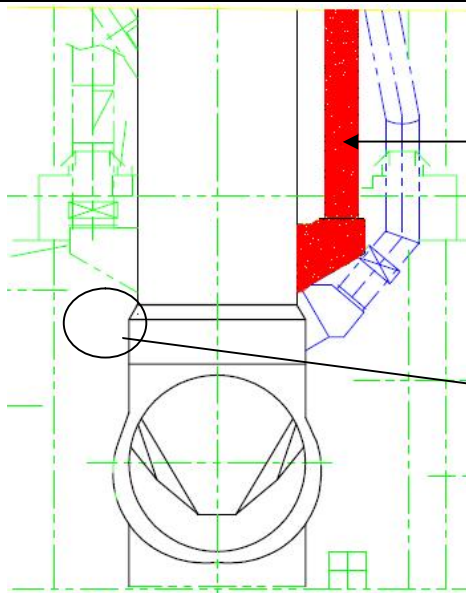
(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure Capacity enhancement	Sector : CEMENT			
Year to be filled by BEE		Technology : INHOUSE			
Description of the energy conservation measure:  Enhancement of Raw Mills output from 342 Tph to 410 Tph by suitable modifications in the operations, optimizing the circuit and incorporating changes in the product design.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 3,04,41,286.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	18.92kw/ T.mat	NA	NA	NA	NA
Energy consumption after	15.65kw/ T.mat	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature	
				Date 01.10.08	

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## Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)


ID to be filled by BEE	Title of the measure  D-box modification	Sector : CEMENT
Year to be filled by BEE		Technology : INHOUSE
Description of the energy conservation measure:		
<p><b>D - box modification in preheater-</b> As originally designed by FLS in pre-heater cyclones, material from Kiln string 5th stage (35-40% calcined cold meal) was introduced at kiln inlet very closer to smoke chamber. The idea was to cool down the smoke chamber gas with the 35-40% calcined cold meal from the 5th stage to prevent build up formation there. During the course of running it was observed that part of this material is falling directly entering into kiln instead of taking the upward path. This fall through of low calcined material from 5th stage caused drastic reduction in overall calcinations of material received by the kiln, which reflected in unstable operation of kiln and production loss.</p> <p>To surmount this problem, the distribution box at inlet of the smoke chamber was relocated and fixed in an area of high velocity zone in the riser. Thus the fall through from 5th stage was stopped and kiln operational stability got improved substantially. However, by relocating this D-box, the possibility of build up formation in smoke chamber would increase due to temperature rise in the absence of cold meal that was earlier taking this path. To overcome this, an additional feed line was connected from calciner 5th stage to the smoke chamber through a separate D-box. By feeding a regulated quantity of material through this line, the system was able to meet smoke chamber shoulder cooling and reduce smoke chamber turbulence and build up formation. Another level of this innovative initiative here is to introduce a dispersion blower for better dispersion of material in the hot stream of kiln riser at 5th stage.</p> <p><u>Summary of Benefits:</u></p> <ol style="list-style-type: none"> <li>1. Kiln operational stability</li> <li>2. Kiln output improvement</li> <li>3. Reduction in heat consumption by 2 Kcal resulting in annual savings of Rs.3.31 million</li> <li>4. Reduction in SPC by 1 unit resulting in annual savings of Rs. 6.48 million</li> <li>5. Enhancement in Kiln refractory lining due to stable operation</li> </ol>		
<b>Picture/ sketch/ drawing before modification</b> (if available)	<b>Picture/ sketch/ drawing after modification</b>	
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px; width: fit-content;">Dispersion blower is fixed in this modified D-box</div> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Here a separate D-box has been provided with a feed line with a regulated quantity</div>	

Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: 15,00,000.00			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 97,88,625.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	25.46kw/ T.mat	1158.0 T/day	NA	NA	NA
Energy consumption after	24.56kw/ T.mat	1155.0 T/day	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	3342	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature	
				Date 01.10.08	

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## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Idle running	Sector : CEMENT			
Year to be filled by BEE		Technology : INHOUSE			
Description of the energy conservation measure:  Solenoid valves purging time reduced from 300msec to 150msec. This was achieved by upgrading the present operating PLC. In old PLC scanning time was more than new PLC.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 40,97,730.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	3.0kw/day/valve	NA	NA	NA	NA
Energy consumption after	1.5kw/day/valve	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature	
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## Energy Conservation Measure implemented in 2007-2008

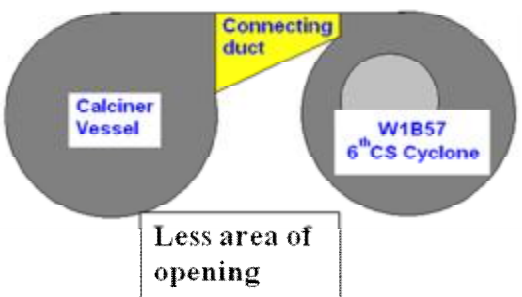
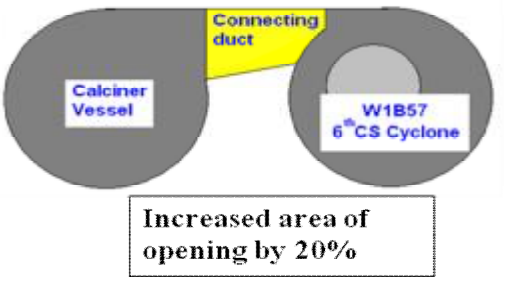
(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Solar heating	Sector : CEMENT
Year to be filled by BEE		Technology : EXTERNAL
Description of the energy conservation measure:  At our guest house we were using electrical power to water heating. Now we introduced Solar heating system to water heating. Totally 14nos units are installed.		
Picture/ sketch/ drawing before modification (if available)	Picture/ sketch/ drawing after modification	
		
Agency that executed the project (with complete address and email): TATA heating systems, Anantapur. Mobile: 9440292435		
Total investment, Rs.: 400000.00	Year of implementation: 2007-08	
First year energy cost savings, Rs.: 1,02,200.00		
First year other savings, Rs.: Nil		
On annual basis	kWh 000'	Coal (Tons)
Energy consumption before	5.0kw/day	NA
Energy consumption after	0	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA
Company complete address: Andhra Pradesh Cement Works, UltraTech cement Ltd, Tadpatri Anantapur, AP-515415		We authorise Bureau to use this information for dissemination
Contact person who could be contacted for more information: T.V.Rao		Signature  Date 01.10.08

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## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure Cyclone entry widening	Sector : CEMENT			
Year to be filled by BEE		Technology : INHOUSE			
Description of the energy conservation measure:					
6th cyclone entry is widened in calciner string of pre heater. Due to this modification load on CS fan reduced from 2100 to 1800kw per hour as the pressure drop has reduced by 100mm.					
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>		
<p><b>Before:</b></p> 			<p><b>After:</b></p> 		
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: 30,00,000.00			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 58,68,720.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	2100kw/ day	NA	NA	NA	NA
Energy consumption after	1800kw/ day	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature  Date 01.10.08	

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## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Idle running	Sector : CEMENT			
Year to be filled by BEE		Technology : INHOUSE			
Description of the energy conservation measure:					
R1P30 IBF fan (5.5KW) running continuously even if Raw mill stopped also. To avoid idle running of JPF fan, fan running interlocks with mill running. Now fan will stopped after 10minutes of mill stopping.					
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 39520.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	4.0kw/h	NA	NA	NA	NA
Energy consumption after	0	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
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## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Idle running	Sector : CEMENT			
Year to be filled by BEE		Technology : INHOUSE			
Description of the energy conservation measure:					
R2P45 JPF fan (37KW) running continuously even if Raw mill stopped also. To avoid idle running of JPF fan, fan running interlocks with mill running. Now fan will stopped after 10minutes of mill stopping. Due to this modification life of JPF bags, solenoid valves improved and purging air also saved.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 190190.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	22.0kw/h	NA	NA	NA	NA
Energy consumption after	0	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature	
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## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure  Process optimization	Sector : CEMENT			
Year to be filled by BEE		Technology : INHOUSE			
Description of the energy conservation measure:					
If any roller press tripping occurred, sepax fan damper is allowed to close up to 40% automatically to avoid mill stoppages and avoiding to Mill inlet fluxo slide getting jammed. After this modification mill tripping avoided and availability of cement mill improved.					
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: Nil			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 130416.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	2200.0k w/h	NA	NA	NA	NA
Energy consumption after	0	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature	
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(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure	Sector : CEMENT			
Year to be filled by BEE	Reduction of generation of high pressure air	Technology : INHOUSE			
<p>Description of the energy conservation measure:                  We are using high pressure air for our Waste heat recovery power plant. This air was to be tapped from existing plant air line which normally is operated at low pressure. To meet requirement of WHRPP, generation of high pressure air is required and which ultimately accounts for the entire plant. To avoid this high pressure air generation, Waste heat recovery power plant compressor air line was modified to operate WHRS at plant operating pressure.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Internal					
Total investment, Rs.: 5,00,000.00			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 16,30,200.00					
First year other savings, Rs.: Nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	5000.0k w/day	NA	NA	NA	NA
Energy consumption after	3000.0k w/day	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	2.47	NA	NA	NA	NA
Company complete address: Andhra Pradesh Cement Works,UltraTech cement Ltd,Tadpatri Anantapur,AP-515415				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: T.V.Rao				Signature  Date 01.10.08	

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