



Confederation of Indian Industry
Since 1895



Report on

Interactive Session on National Mission for Enhanced Energy Efficiency

18 February 2011: Bangalore

Introduction

The confederation of Indian Industry in partnership with Bureau of Energy Efficiency and Ministry of Power organized national level PAT Consultation workshops at New Delhi, Kolkata & Bangalore.

Government of India has launched National Mission on Enhanced Energy Efficiency (NMEEE) which is one of the eight missions planned under the National Action Plan on Climate Change. One of the initiatives under NMEEE is the development of a market based mechanism to drive delivery of additional energy savings on a cost effective basis. Following on from this, the Ministry of Power (MoP) has outlined a proposed "Perform, Achieve and Trade (PAT)" scheme. The scheme will mandate energy efficiency targets for large energy consuming industrial units in the country which are notified as Designated Consumers under the Energy Conservation Act of 2001.

The MoP has notified 563 Designated Consumers (DCs) in eight industrial sectors thermal power plants, fertilizer, cement, pulp and paper, textiles, chlor-alkali, iron and steel and aluminium. DCs have to comply with the energy conservation norms and prescribed standards as per the EC Act 2001 and need to furnish the reports on their respective total energy consumptions and Specific Energy Consumption (SEC) based on Gate to Gate concept. The mechanism will further call for a setting up of baseline for individual target for saving at plant level and the issuance of Energy Saving Certificates (ESCerts) which will be traded over the counter as well in the energy exchanges and in the event case of default or non-compliance will attract a heavy penalty. He also mentioned that the energy efficiency improvement targets would be unit-specific; this means that each DC would be required to reduce its SEC by a fixed percentage, based on its current SEC (or baseline SEC).

BEE is designated as the overall regulator and dispute resolution agency and Energy Efficiency Service Ltd. (EESL) as the process manager in this entire mechanism. The scheme aims to provide incentives to industry to achieve better energy efficiency, beyond the specific energy consumption (SEC) stipulated for each DC. The first cycle of PAT which is going to be started from April 2011 aims to cover eight industrial sectors to achieve higher energy efficiency in a span of three years. The subsequent PAT cycle will include more sectors in addition to these eight. It sets in place a monitoring and verification mechanism for the SEC (including auditing by an accredited verification agency), and the processes for issuing and trading in ESCerts as well as the use of ESCerts across sectors and their synergy with renewable energy certificates.

With the objective of creating awareness for the NMEEE and PAT mechanism, the Ministry of Power and the Bureau of Energy Efficiency in partnership with Confederation of Indian Industry conducted an Interactive Session in Bangalore on Friday, 18 February 2011 at Magnolia Hall, Hotel ITC Royal Gardenia to deliberate and discuss an overview of NMEEE and the PAT methodology.

Following were the excerpts from the Interactive Session:

Ms Shamim Banu, IAS, Additional Chief Secretary to the Government, Energy Department, Government of Karnataka stated that PAT will bring a win-win situation for both Industry and people in Karnataka. She also added that this is the best time to introduce the NMEEE and PAT mechanism though the per capita consumption of energy in Karnataka is 750 unit, which is certainly not at the higher side as our main objective is to save the planet.



Mr S Chandrasekhar, Vice Chairman, CII Karnataka appealed for no penalty for the initial three years as the industry will invest a lot for implementing the process. He made the statement while discussing the heavy penalty due to default or non compliance for NMEEE and PAT mechanism.

Mr Aroon Raman, Chairman CII, Karnataka described this event highly relevant and important as this is creating awareness for the NMEEE & PAT. He also stated that this seminar will give us a clear picture on how to use energy in a clean and efficient manner.



PROGRAMME

0900 - 1000 Hrs:		Registration
1000 - 1110 Hrs		INAUGURAL SESSION
1000 - 1005 Hrs	<i>Invocation & Lighting of lamp</i>	
1005 - 1010 Hrs	Welcome Address	Mr Aroon Raman Chairman CII Karnataka State Council & Managing Director, Raman Fibrescience Pvt Ltd
1010 - 1020 Hrs	Opening Remarks	Mr Kapil Mohan Deputy Director General Bureau of Energy Efficiency
1020 - 1035 Hrs	Presentation on Industry Perspective on PAT Scheme	Mr P V Kiran Ananth Senior Counsellor CII-Sohrabji Godrej Green Business Centre
1035 - 1050 Hrs	Address	Mr S Chandrasekhar Vice Chairman CII Karnataka State Council & Managing Director, Boruka Power Corporation
1050 - 1105 Hrs	Address	Ms Shamim Banu, IAS Additional Chief Secretary to the Government Energy Department Government of Karnataka
1105 - 1110 Hrs	Concluding Remarks	Dr R Raju, IFS General Manager Karnataka Renewable Energy Development Ltd
1110 - 1130 Hrs	Tea / Coffee Break	
1130 - 1330 Hrs :		Technical Session
1130 - 1150 Hrs	Presentation on Overview of National Mission on Enhanced Energy Efficiency	Mr K K Chakarvarti Energy Economist Bureau of Energy Efficiency
1150 - 1210 Hrs	Presentation on PAT Methodology	Mr S P Garmaik Energy Economist Bureau of Energy Efficiency
1210 - 1230 Hrs	Presentation on Designated Consumers	Mr Saurav Diddi Energy Economist Bureau of Energy Efficiency
1230 - 1320 Hrs	Interactions over the PAT consultation Document	
1320 - 1330 Hrs	Summing up & Concluding Remarks	Mr Kapil Mohan Deputy Director General Bureau of Energy Efficiency
1330 Hrs	Lunch & Close	

Interactions

Question & Answer

Type- General

Question from Venkateswara, L&T Kamatsu

BEE is coming out with a lot of innovative ideas saying how to bring the amendments how to bring efficiency on the industry, all this is fine. But all the electricity boards where these CFL lamps were issued first of all we have to bring a ban on these incandescent bulb manufacturing. The other one is by addition of CFL into the market, and giving as a replacement you are adding mercury into the environment. Even this has to be cut down and you have to come out with LED lighting fittings which consume very less power. Then I think the demand and supply can also cut down drastically. We have to work in this direction and see that things will be better. KRADEL and all has to think in this direction and do the best.

Question

...designated consumers. Are you extending this to other types of consumers?

Answer

I like your words preserved. You have taken a positive spin to this. We propose to expand this. Another 7 sectors we will take up.

There will be addition to the new plants to the existing sectors as well and there will be additional new sectors as well.

Question from Radhakrishnan

In the morning presentation there was a mention about tax and fiscal incentives. Would you just elaborate on that?

Answer

We have given study to the national Institute of Public Finance and Policy to see if there is a possibility for accelerating investments in the energy efficiency sector by giving some fiscal and monetary breaks to the industry which should be in sync with our existing fiscal and monetary framework. As part of the reference the National Institute of Public Finance policy (part of ministry of finance) will be having industry interaction, seeking your suggestion, they will examine.

Question from Ambuj Kalra, Madura Coats.

My industry is a designated consumer but I don't know whether my plant is because I have got several plants. I don't know which plant is and which plant is not. How do I check that? (2) We are working a lot on energy efficiency. If I do not have a designated plant and I want to get on the band wagon and I want the incentives how do I go about?

Answer

You can go to the website and a list of DCs are given there. Voluntary compliance is there or not is an open question because you would be trading with other people.

Question

One of my plants is not part of 563 and I want it to be 564th. Can I approach you?

Answer

Yes, it can be provided it has a more than 3000 tons of oil equivalent.

Question

Our data is based on the last 3 or 5 years. This year new plant has been added to this. So next PAT cycle will consist of total production and total consumption?

Answer

Yes, of course.

Type- Power Plants

Question from Karnataka Power Corporation

We have seven units at one place and another 500 megawatt two units at different location. I will be considered as a single designated consumer or will it be each unit base which is a vintage of 22 years and the last one year. Will each of those be evaluated separately and a given separate baselines?

Answer

You have different designate consumers. It would be definitely separate. It will be unique voice. In a single station if you have different units and you have different information period we are in this case taking the net station in heat rate which is coming from gross design heat rate and the auxiliary power consumption. But we are not taking the separate units. Eight is a different station all together and it would be declared as a separate designated consumer and taken separately. Now all these eight units are taken as only one consumer.

Question

Karnataka has got a very peculiar situation of having a highest hydro potential. We have got nearly 4000 megawatts of hydro which will be backed down from the month of June up to November in the nights so I am asked to come to a technical minimum and I lose 500-600 million units in a year. It is generation. Are you going to add it to the denominator when you are calculating SEC.

Answer

You have filed your ARR with the SERC. The way they have treated that for your ARR purposes the same shall be treated for the purposes of target setting.

Question

I consume nearly 9 million tons of coal at Raichur. Considering roughly 30% of ash I generate nearly 3 million tons of ash. In our recent tender the ash was purchased at Rs. 400 per metric ton. This would amount to nearly Rs. 120 crores year. What kind of credit you are going to give it to us? We are selling this ash to cement industry as a raw material. We are reducing the carbon foot print because cement industry is using that much less power not to grind the clinker. It is reducing its power consumption because I am helping him fine dry fly ash. In what way you are going to compensate me for that?

Answer

No discount for that.

In case of this kind of situation where you have cement also and cement means you have the product of OPC and TPC then you must have a conversion factor from clinker to PPC and clinker to OPC. Some conversion factors must be there. We will be using that to convert to a equivalent of clinker to find out the final product.

Question

This total thing is generally for the existing plants which are operating. But when the new plants will come into PAT cycle? In case I already have a plant say, of .3 or .4 million tons and I am expanding it to 1.8 and by the end of the first cycle some units are commissioned wherein I need to have more energy. Whether it will be considered or not?

Answer

You are not going to put up a unit which is going to be more energy inefficient than what it is there. It is a hypothetical question basically. If you want me to say, I won't let you put it, there is no provision for that. But if you think that if you can put a new energy inefficient unit and it makes a business sense to you go ahead.

For the full target setting the base is this year's target production. That denominator will remain.

Question from Dipti from Arcelor Mittal

If we set up a plant and we have not included in this we don't have any baseline. At least a year of production after that only be considered?

Answer

If a new plant is coming up that would come to the next cycle but you should have at least two years of stable operation.

Question

We are totally on grid power now. Is there any normalization factor like in case of coal quality in thermal plant you are doing a normalization factor. In case of grid supply there are interruptions

which will lead to start up time is very much higher for chemical industry whether normalization factor has been considered. Like in case of thermal plant you are giving a normalization factor of quality of coal and all.

Answer

Normalization factor for any gauges which is uncontrollable, beyond the controllable factor would be definitely considered. We are working with CERC.

Three years average has been taken. Do you think that grid power has actually improved or worsened?

But the case of coal and your industry is different actually.

Type- Iron & Steel

Question from Mishra

We have got an integrated steel plant where captive power plant is there and a steel plant. How do you calculate the specific energy consumption?

Answer

For the iron and steel sector we are taking the final product as the tons of crude steel. If you are selling power as a different product principally speaking it should not be considered as a product at all. As for as sector is concerned the business purpose is for steel only. We will be taking that only as the product.

Question

If I am able to export power for that export of power can I reduce from my specific consumption?

Answer

I think we would have to give a look to it. As of now we have not considered this because as far as the sector product is concerned we are taking as per the definition of the sector and the product what we have defined. If it is a secondary product like electricity and you are selling to the grid and it can be accounted for, we have to look into that.

ANNEXURE 1

LIST OF PARTICIPANTS

Sl. No.		Designation	Organisation
1	Mr Mohan Nair	Manager - Electrical Markets Division	3M India Ltd
2	Mr K K Rajeev Nambiar	Director - Plant, Thondebhavi Cement Works	ACC Ltd
3	Mr A R Venkatesh	Chairman	Aji Engineers
4	Mr Dwarakanath		Aji Engineers
5	Mr S S Hubli	Chairman	AVR Electronics Pvt Ltd
6	Mr Vijay S Hubli	Director	AVR Electronics Pvt Ltd
7	Mr T Mariappan	Dy General Manager (Elec & Inst)	Bagalkot Cement & Industries Ltd
8	Mr B K Shashikumar	Dy General Manager	Bharat Electronics Ltd
9	Mr T Satish Kumar	Sr Assistant Engineer	Bharat Electronics Ltd
10	Mr P Hari Kumar	Vice President - Engineering & Maintenance	BIAL
11	Mr Krishna Kumar	Dy Maintenance Manager - Power System	BIAL
12	Mr V V Kulkarni	Dy General Manager - Technical	Bosch Ltd
13	Mr Narayana Srinivasan	Principal Trainer	BSI Group India Pvt Ltd
14	Mr B S Pavan Kumar	Partner/CEO	BVS-Enterprises and Cleano
15	Mr Ambuj Kalra	President - GTSI	Coats India (Global Thread Supply India)
16	Mr Vinit Bhansali	Director	Copper Sprial RFID
17	Mr R H Sreenivasa Setty	Director (Technical)	Devkiran Paper Mills (P) Ltd
18	Mr K S Vijayakumar	Director	Entrust Engineers

19	Dr Uma Rajarathnam	Head - CEEP	Enzen Global Solutions Pvt Ltd
20	Mr Radhakrishnan Gopinathan	Sr. Vice President - Strategy & Planning	Enzen Global Solutions Pvt Ltd
21	Mr S D Jadhava	Sr. Manager - Engineering	Gokak Textiles Ltd
22	Mr M S Raveesh	General Manager HR	Gokak Textiles Ltd
23	Mr Sailesh Singh	Deputy Manager (Electrical & Instrumentation)	Hare Krishna Metallica Pvt Ltd
24	Mr K Sambath	Asst Manager (E&I)	Hare Krishna Metallica Pvt Ltd
25	Mr K S Dorai Arasu	Chief Executive Officer	Infosree Technologies Pvt Ltd
26	Mr B N Sridhar	Chief Engineer	Karnataka Power Corporation
27	Mr G A Purushotham	Executive Engineer	Karnataka Power Corporation
28	Mr J Ramanath	Executive Engineer	Karnataka Power Corporation
29	Mr K Radhakrishna	Executive Engineer	Karnataka Power Corporation
30	Mr M B Jayaram	General Manager	Karnataka Power Corporation
31	Mr R Balasubramanian	General Manager	Karnataka Power Corporation
32	Mr S Ramesh	Chief Engineer	Karnataka Power Corporation
33	Mr G Mohan	Head- Manufacturing	Kirloskar Toyoda Textile Machinery Pvt Ltd
34	Mr Venkatesh Puranik	Assistant Manager- Plant Engg	Kirloskar Toyoda Textile Machinery Pvt Ltd
35	Mr B Kishore Kumar	Dy General Manager - Plant Maintenance	L&T Komatsu Ltd
36	Mr D Venkateswara Rao	Manager - Plant Maintenance	L&T Komatsu Ltd
37	Mr Phani Shankar Krishnamurthy	Manager - Maintenance	LM Wind Power Blades (I) Pvt Ltd
38	Mr C V Ramana Murthy	General Manager	Madanapalli Spinning Mills




39	Mr H C Himanth Kumar	Senior Manager - Process Technology & Engineering	Mangalore Chemicals & Fertilizers Ltd
40	Mr Nagendra Rao	Chief Executive Officer	Newcast Die Casting
41	Mr N Srinivasa Rao	Vice President (Tech)	North Karnataka Power Pvt Ltd
42	Mr P N Karanth	Director	Prime-Tech Services Pvt. Ltd
43	Mr Jay Krishnan	Chairman	Radifinity
44	Mr Dan Shukla	CTO	Radifinity
45	Mr P G Kamalakar	Manager	Size Control Guages & Tools Pvt Ltd
46	Mr Rajaram	Partner	Standard Construction Company
47	Mr Moorthy	Partner	Standard Construction Company
48	Mr Manohar	Managing Director	Techline Green Pvt Ltd
49	Mr Sandhya	Project Manager	Techline Green Pvt Ltd
50	Mr V Ravindran	Director & COO	Udupi Power Corporation Ltd (Lanco)
51	Mr D S Murali	Executive Director (Engineering)	Udupi Power Corporation Ltd (Lanco)
52	Mr Manish Bhatnagar	Director Commercial	UL India Pvt Ltd
53	Mr Rajnikanth Umakanthan	Business Head-CEWAC	UL India Pvt Ltd
54	Mr Jibu Mathew	Business Head-Hit,HS and AHC	UL India Pvt Ltd
55	Mr T N V V Rao	Business Head- Life Sciences	UL India Pvt Ltd
56	Mr Sanjay Pawar	Manager	Ultra Tech Cement Ltd (Rajashree Cement Works)
57	Mr P V N Malleshwar Rao	Head - Electrical Dept	Vasavadatta Cements

58	Mr Yogendra Singh	General Manager - Energy	West Coast Paper Mills Pvt Ltd
59	Mr Vinay Raveendran	COO	Wifinity Tech
60	Mr Shekhar Narayanan	Business Development Head	Wifinity Tech
61	Mr H Ramesh Bhat	Head - MQ&EHS	Wipro Infrastructure Engineering
62	Mr C Somu	Deputy General Manager	Zircast Limited
63	Mr Sudhir A Kadam	Deputy Manager - Electrical	Solaris ChemTech Industries Ltd
64	Mr S A Manohar	Managing Director	Dyutim Infra Project Pvt Ltd
65	Mr Ashwin Raykundalia	General Manager (Business & Technical Co-ordinator)	Ambuja Cements Ltd
66	Mr N M Jai Bharath	Deputy General Manager - Plant Engineering	Kennametal India Ltd
67	Mr Gopi Ranganathan	General Manager - Operations	Zuari Cement Ltd
68	Mr A Vaidyanathan	Founder and Managing Director	HMX Systems Pvt Ltd

ANNEXURE 2
LIST OF MEDIA PARTICIPANTS

SI No	Name	Organisation
1	Venkat	DD News
2	Sanjeev	Chandana News
3	Chithra V Ramani	The Hindu
4	Sudhindra	AIR
5	Laxminarayan	Andhrajyoti
6		UNI
7	Raghavendra	Bangalore Beat
8	Nikhil Sivadas	ET Now
9	Senthahi	Times of India
10	LJ Ravi	NNA
11	Rajashekhar Hegde	Udayavani
12	Vineetha	CNBC TV 18
13	Aparajita Ray	DNA
14	Ramesh	Industrial Times
15	Jayshankar Jayaramiah	FE
16	Mahesh Kulkarni	BS
17	Adi	Vartha
18	V N Suresh	Bangalore Khadaga

ANNEXURE 3
ADVERTISEMENT

 Confederation of Indian Industry Since 1895	 Ministry of POWER GOVERNMENT OF INDIA	 ENERGY IS LIFE BEE CONSERVE IT
<p>Interactive Session on National Mission for Enhanced Energy Efficiency (NMEEE)</p> <p>Friday, 18 February 2011 Hotel ITC Royal Gardenia, Residency Road, Bangalore</p>		
Programme Brief	Programme Agenda	
<p>To create awareness about the National Mission for Enhanced Energy Efficiency (NMEEE) and Perform, Achieve and Trade (PAT) Mechanism, Ministry of Power and Bureau of Energy Efficiency (BEE) in partnership with Confederation of Indian Industry is organising an Interactive Session which will provide a platform for interaction between the CEOs & CMDs of Designated Consumers (DCs) with senior policy makers from Ministry of Power & Bureau of Energy Efficiency.</p>	<ul style="list-style-type: none">• Setting and Assigning differential specific energy conservation reduction targets for Designated Consumers (DCs) based upon their existing baseline• Verification & Certification of SEC reduction in the target year followed by issuance of Energy Saving Certificate (ES-Certs) to the over performing Designated Consumers (DCs)• Seeking opinion of various stakeholders on PAT consultation document	
Target Groups		
<p>Levels: CEOs/CMDs of various Designated Consumers (DCs) DCs: Aluminium, Chlor-alkali, Cement, Fertilizer, Textile, Power Plant, Iron & Steel, Pulp & Paper</p>		
Participation by invitation only		
<p>For Participation Please Contact: Ishita Mukherjee / Kareena Mathew Confederation of Indian Industry Phone: +91-80-42889595, Email: ishita.b@cii.in / kareena.mathew@cii.in</p>		