



# उच्च प्रौद्योगिकी केन्द्र

(पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय, भारत सरकार)

Centre for High Technology

(Ministry of Petroleum & Natural Gas, Govt. of India)

No. CHT/EC/91/263

10<sup>th</sup> November, 2017

To,

कार्यकारी समिति के सभी सदस्यगण (संलग्न सूची अनुसार)

All Members of the Executive Committee of CHT (As per list enclosed)

महोदय,

Dear Sir,

विषय: उच्च प्रौद्योगिकी केन्द्र की 23वीं कार्यकारी समिति का कार्यवृत

Sub: Minutes of 23<sup>rd</sup> Meeting of the Executive Committee (EC) of Centre fo High Technology

दिनांक 30 अक्तूबर, 2017 को स्कोप कनवेंशन सेंटर, लोधी रोड, नई दिल्ली में संयुक्त सचिव (रिफाइनरीज) की अध्यक्षता में हुई उच्च प्रौद्योगिकी केन्द्र की 23वीं कार्यकारी समिति की बैठक का कार्यवृत आपकी सूचनार्थ एवं आवश्यक कार्रवाई हेतु संलग्न है।

Please find enclosed the duly approved Minutes of 23<sup>rd</sup> Meeting of the Executive Committee (EC) of Centre for High Technology held on 30<sup>th</sup> October, 2017 at SCOPE Convention Centre, Lodhi Road, New Delhi under the Chairmanship of Joint Secretary (Refineries), MoP&NG, for kind information and necessary action.

भवदीय,

Yours sincerely,

(बृजेश कुमार)

कार्यकारी निदेशक पदेन सचिव, कार्यकारी समिति- उ.प्रौ.के

(Brijesh Kumar)

Executive Director

Member-Secretary, Executive Committee - CHT

संलग्न यथोक्त

Encl: As above

स्चनार्थ प्रतिलिपि :

Copy for information to:

संयुक्त सचिव (रिफाइनरीज), पेट्रोलियम और प्राकृतिक गैस मंत्रालय के निजी सचिव PS to Joint Secretary (Refineries), MoP&NG

श्री पवन कुमार, अवर सचिव (रिफाइनरीज), पेट्रोलियम और प्राकृतिक गैस मंत्रालय Sh. Pawan Kumar, Under Secretary (Refineries), MoP&NG

#### Members of the Executive Committee of CHT

- Shri Sandeep Poundrik,
  Joint Secretary (Refineries),
  Ministry of Petroleum & Natural Gas,
  Shastri Bhavan,
  New Delhi-110 001
- Chairman

- Shri Ajit Kumar,
   Dy. Secretary (R),
   Ministry of Petroleum & Natural Gas,
   Shastri Bhavan
   New Delhi-110 001
- 3. Secretary,
  Oil Industry Development Board,
  OIDB Bhawan,
  Plot No. 2, Sector-73,
  Noida (U.P.) 201 301
- 4. Director (Refineries),
  Indian Oil Corporation Ltd.,
  SCOPE Complex, Core-2, 5th Floor,
  Lodhi Road,
  New Delhi 110 003
- 5. Shri V.S.Shenoy,
  Director (Refineries),
  Hindustan Petroleum Corporation Ltd.
  Petroleum House,
  17, Jamshedji Tata Road,
  Mumbai-400 020
- 6. Shri R.Ramachandran,
  Director (Refineries),
  Bharat Petroleum Corporation Ltd.
  Bharat Bhawan,
  4 & 5 Currimbhoy Road,
  Ballard Estate,
  Mumbai-400 001
- 7. Director (BD),
  GAIL (India) Ltd.,
  16, Bhikaji Cama Place,
  R.K.Puram,
  New Delhi 110 066

# Minutes of 23<sup>rd</sup> Meeting of the Executive Committee (EC) of Centre for High Technology (CHT) held on 30<sup>th</sup> October, 2017 at New Delhi

Shri Sandeep Poundrik, Joint Secretary (Refineries), MoP&NG and Chairman of the Executive Committee of CHT chaired the 23<sup>rd</sup> EC Meeting of CHT. The list of participants is enclosed as Annexure.

Shri Brijesh Kumar, ED, CHT welcomed the Chairman and Members of the EC and other participants to the Meeting.

Thereafter ED, CHT made a detailed presentation on the Agenda Items.

The following points emerged out of discussions:

- 1.0 Review of Action Points of 22<sup>nd</sup> Meeting of Executive Committee held on 20<sup>th</sup> July 2017 (Agenda Item No. 1)
- 1.1 Energy Efficiency Improvement Study and Performance Audit of PSU Refineries (Point No. 1.1 of MOM)

ED, CHT presented the following status with regard to the Energy Efficiency Improvement Study and Performance Audit of 15 PSU Refineries being carried out by EIL.

Refinery	Initial Findings	Remarks
All refineries other than IOCL-DR, GR and BGR IOCL-DR, GR and BGR	Jointly signed by EIL and refineries	<ul> <li>Final Draft Report for 5 refineries         (BPC-M, BPC-K, IOC-MR, PR &amp; NRL)</li> <li>Balance Draft Reports by Jan 2018         in phases</li> <li>Report finalization by March, 2018</li> </ul>

EC advised refineries to quickly analyse the recommendations proposed by EIL and also identify the quick-wins that can be implemented within the next 3 months along with EIL.

### Action: EIL/Refineries/CHT

ED, CHT also informed that an Umbrella Agreement with EIL for TSA has been finalised in consultation with refineries for detailing of energy saving schemes at  $\pm$  30% cost for obtaining in-principle approval. The Agreement enables simplified and quick work order from refinery on single page format with only scheme specific details like objective, deliverable, time lines, etc. The Agreement was signed jointly by CHT & EIL on 15<sup>th</sup> September, 2017 and circulated to all refineries.

## Mandatory Energy Audit (MEA) by PCRA

ED, CHT informed that the MEA of 12 PSU refineries (excluding IOCL-Guwahati, Digboi and Paradip, who are not part of PAT, and BPCL-Kochi who have already completed MEA) at a cost of Rs 5.44 crore (excluding taxes) has been completed by PCRA.

The estimated fuel savings identified by PCRA is as under:

Cycle	Refinery	Estimated Fuel Savings MTOE/Year
1 <sup>st</sup>	IOCL-JR	11,423
1	IOCL-PR	10,801
	IOCL-HR	7,562
	CPCL	8,859
2 <sup>nd</sup>	MRPL	23,427
	HPCL-M	11,529
	IOCL-BR	9,665
	IOCL-MR	12,883
3 <sup>rd</sup>	BPCL-M	5,890
	HPCL-V	8,772
	NRL	6,424
	IOCL-BGR	4,562

PCRA made a detailed presentation on the MEA study carried out by them. EC advised PCRA to provide a summary of all the schemes with their analysis in terms of savings under various categories along with time frame for implementation.

Action: PCRA

#### MBN Gap Analysis

Based on the estimated savings identified by EIL, PCRA and refineries (in-house) so far, ED, CHT presented refinery-wise MBN gap analysis upto 2020-21 w.r.t. PAT target for 2018-19 as well as target for 2020-21 as decided in the 19<sup>th</sup> ECM held on 24<sup>th</sup> May 2016.

EC was of the view that the MBN targets set for 2020-21 may be reviewed after receiving EIL's detailed recommendations of the on-going Energy Efficiency Improvement Study and their implementation schedule.

Action: EIL/Refineries/CHT

## 1.2 Benchmarking Study by Solomon Associates for 2016 Cycle (Point No. 1.2 of MOM)

ED, CHT informed that the benchmarking study of PSU refineries by Solomon has been completed and the Final Study Results have been submitted by Solomon in September 2017. The 2-day Study Presentation and Workshop by Solomon on 30<sup>th</sup> and 31<sup>st</sup> Oct 2017 is currently being held in CHT. ED, CHT also presented the following schedule for presentation by Solomon to MoP&NG and oil companies:

Venue Purpose		Refineries covered	Date		
CHT, Noida	How to use data workshop	All DCI I C			
	Thow to use data workshop	All PSU refineries & BORL	30-31 Oct 2017		
New Delhi	Presentation on findings	IOCL & CPCL	1 <sup>st</sup> Nov 2017		
Mumbai	Presentation on findings	BPCL & NRL	2 <sup>nd</sup> Nov 2017		
		HPCL & MRPL	2 1/00/2017		
BORL, Bina	Presentation on findings	BORL	3 <sup>rd</sup> Nov 2017		
MoP&NG	Presentation on findings		7 <sup>th</sup> Nov 2017		
<b>Additional Pres</b>	sentations		7 1007 2017		
Mumbai		HPCL-M	10 <sup>th</sup> Nov 2017		
Visakh		HPCL-V	8 <sup>th</sup> Nov 2017		
Mangalore		MRPL			
Kochi		BPCL-K	Jan 2018		
	<del></del>	DI CL-IX	Jan 2018 .		

#### EC took note of the above.

# 1.3 Performance Improvement Programme of PSU Refineries (Point No. 1.4 of MOM)

ED, CHT informed that as discussed in the 35<sup>th</sup> meeting of Governing Council of CHT on 9<sup>th</sup> February, 2017, WGM on Refineries on 22<sup>nd</sup> February, 2017 and EC meeting of CHT on 20<sup>th</sup> July 2017, the refinery-wise schedule has been compressed to award the study as under:

Year of Award/ Baseline	Number of Refineries	Refinery
2017-18	9	IOCL: Guwahati, Digboi, Mathura, Panipat & Paradip Refineries BPCL: Mumbai & Kochi Refineries HPCL: Mumbai & Visakh Refineries
2018-19	6	IOCL: Barauni, Gujarat, Haldia & Bongaigaon Refineries  CPCL: Manali Refinery  NRL: Numaligarh Refinery

As regards MRPL, they have already awarded the job separately and the study is in progress.

Subsequent to the discussions in the  $22^{nd}$  ECM of CHT in July, 2017 and meeting with the Industry at BPCL, Mumbai on  $1^{st}$  August, 2017, the tender document has been finalised and circulated to refineries for incorporating refinery-specific information.

CHT also presented the following broad methodology that has been adopted in line with the guidelines of GFR 2017:

- EOI (Expression of Interest) hosted by CHT on CPP portal/ CHT website on 10<sup>th</sup> October, 2017 for Pre-qualification of potential bidders. The list of consultants meeting the prequalification criteria shall be finalized by a team of CHT/ refinery representatives by 10<sup>th</sup> December, 2017. The copy of the EOI is enclosed as Attachment "B".
- 2. Refinery wise separate tenders shall be hosted on CHT website for inviting bid from pre-qualified consultants. The consultants shall be free to select refineries for which they wish to quote.
- 3. Pre-bid meeting at CHT among refineries and consultants.
- 4. Consultants shall quote guaranteed benefit as well as their Fee in % of benefit. Consultant for each refinery shall be selected by a team of CHT/ nominated representative of group refineries based on highest net benefit to the refinery.
- 5. Work order shall be issued by the concerned refinery to the selected consultant.
- 6. Kick-off Meeting with the consultant at refinery for finalizing base line.

The EOI as well as the tender document was circulated along with the Agenda Folder.

Milestones for Award of Job for 2017-18						
Hosting EOI on CPP and CHT website	10 <sup>th</sup> October, 2017					
Shortlisting of Consultants meeting the PQC by the Committee of CHT and Refineries	10 <sup>th</sup> December, 2017					
Tender sale / download from CHT website	15 <sup>th</sup> December, 2017					
Pre-bid Meeting in CHT	2 <sup>nd</sup> January, 2018					
Bid Submission	15 <sup>th</sup> February, 2018					
Un-priced bid opening	16 <sup>th</sup> February, 2018					
Priced bid opening	15 <sup>th</sup> March, 2018					
Finalisation of refinery-wise consultant by the Committee of CHT and Refineries	1 <sup>st</sup> April, 2018					

Action: Refineries/CHT

# 1.4 Refinery Performance Improvement Programme (RPIP-Phase II) by Shell Global at BPCL-Mumbai, HPCL-Mumbai and MRPL (Point No. 2.0 of MOM)

CHT presented the following latest status:

	Attributes	BPCL-M	HPCL-M	MRPL	Total
1	PFIs considered for Implementation	13	3	5	Total
2	Assessed Benefit				
	Million USD/year	14.230	2.466	19.902	35.587
	• cents/bbl	14.712	4.242	21.520	33.367
3	PFIs Implemented	13	1*	2 (Note-1)	
4	PFIs under implementation	-	1*	3	
	Completion by		Mechanically completed in Mar 2017. Commissioning pending.	2. Dec 2018	
5	PFIs to be implemented	-	1* (Note-2)	3. Sep 2018 *	
6	Actual Benefit#		, , , , , ,		
	Million USD/year	12.565	1.455	19.701	33.721
	• cents/bbl	12.990	2.503	21.300	33.721
	Consultant Fee – Million USD	2.511	0.973	3.146	6.630

<sup>\*</sup> Implementation by refinery on its own

EC took note of the above.

## 2.0 Status of On-going R&D Projects (Agenda Item No. 2)

ED, CHT presented the status of the 11 on-going R&D projects.

With regard to the CTL project, it was informed that the meeting of Expert Group constituted by Chairman SAC was held on 11<sup>th</sup> October 2017 at EIL R&D Centre to discuss operational issues and short term & long term forward plan prepared. Modifications as discussed in 80<sup>th</sup> SAC meeting were also agreed. ED, CHT also informed that EIL has proposed re-appropriation of grant out of unutilised CHT's contribution by BPCL for carrying out modifications. However, there is no additional financial implication to CHT.

With regard to Synthetic Aviation Lubricant (SAL) Phase-II Project of CSIR-IICT, HPCL & CEMILAC, it was informed that SAC, in its  $80^{th}$  meeting held on  $6^{th}$  September, 2017, approved extension of the project by one year upto September, 2018 and has recommended additional funding of Rs 42 lakh requested by CSIR-IICT.

EC considered the above and approved additional funding by CHT in proportion of its share in the original project cost.

Action: CHT

<sup>#</sup> Actual benefit is based on projected benefit for PFIs under implementation

Note-1: One PFI implemented in Sep 2017 as planned and is under Assessment Phase

Note-2: Kept under hold by HPCL. Not considered for actual benefit.

### 3.0 New R&D Proposals and Progress of EOI (Agenda Item No. 3)

ED, CHT informed that there is no new R&D proposal.

EOI has been issued 3 times since July 2016. In all 31 projects, including 4 projects in hydrogen research area have been received. The proposals are screened and modifications are advised by Steering Committee nominated by Chairman SAC. The last 3<sup>rd</sup> meeting of the Steering Committee was held on 3<sup>rd</sup> October 2017.

Overall, one project has been approved and is in progress. Two proposals, including one in Hydrogen research area, have been shortlisted by the Steering Committee for resubmission with suggested modification.

EC advised CHT to seek good project proposals that are of relevance to the oil industry from reputed academic institutes.

Action: CHT

### 4.0 RBE 2017-18 and BE 2018-19 (Agenda Item No. 4)

ED, CHT presented the Actual Expenditure upto September 2017, RBE for 2017-18 and BE for 2018-19 as under:

(Figs in Rs crore)

							1. 182 111	is citie;
	2016-17			2017-18				2018-19
Particulars	BE	RBE	Actual	BE	Actual	Estimated	Total	BE
a =			-		upto	Oct 17 to	(RBE)	
				1	Sep 17	Mar 18		
REVENUE EXPENDITURE				•				
Salary	9.00	7.67	8.48	8.05	3.53	6.77	10.30	11.50
Other than Salary *	2.10	1.94	1.82	2.20	0.92	1.34	2.26	2.50
Sub-total	11.10	9.61	10.30	10.25	4.45	8.11	12.56	14.00
CAPITAL EXPENDITURE	0.03	0.027	0.025	0.05	0.05	0.00	0.05	0.05
PROJECTS					0,00	0.00	0.03	0.05
Funding of R&D Projects	11.82	9.33	9.17	15.00	3.79	11.21	15.00	12.50
Special Studies	5.00	2.40	1.40	7.05	1.17	5.82		13.50
Sub-total	16.82	11.73	10.57	22.05	4.96		6.99	1.30
TOTAL EXPENDITURE	27.95	21.37				17.03	21.99	14.80
* oveluding OIDB contribu			20.88	32.35	9.46	25.14	34.60	28.85

excluding OIDB contribution of Rs 25 lakh for RTM

ED, CHT informed that based on project-wise monthly expenditure plan for R&D projects during Oct 2017 to Mar 2018, the BE target of Rs 15.00 crores for R&D projects is expected to be met.

EC advised CHT to closely follow-up with the concerned parties to meet the BE/RBE w.r.t. funding of R&D projects.

Action: CHT

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5.0 Appointment of Auditors to Audit the Accounts of CHT for the year 2017-18 (Agenda Item No. 5)

ED, CHT informed that M/s Y.K. Gupta & Co., Chartered Accountants, New Delhi have been carrying out the Audit of Accounts of CHT since FY 2013-14 and are not eligible for reappointment as per guidelines of CAG as they have already completed 4 years.

It is proposed to appoint M/s I.P. Pasricha & Co., Chartered Accountants, New Delhi for FY 2017-18 who were found to be L-1 against limited tender enquiry to CAG empanelled Chartered Accountants firms. The payment terms are: Audit Fee of Rs 25,000 p.a., and out-of-pocket expenses of Rs 8000 plus applicable GST.

EC considered and recommended the above proposal for approval of Governing Council of CHT.

6.0 CAG Audit of CHT for the period April 2016 to March 2017 (Agenda Item No. 6)

ED, CHT informed that Audit of CHT for the period April 2016 to March 2017 was carried out by CAG Auditors during 17-28 July, 2017. The Audit Observations and CHT's reply was circulated along with the Agenda Folder. There were no major observations made by CAG during the Audit.

EC took note of the above.

The meeting concluded with thanks to the Chair and the participants.

# 23<sup>rd</sup> Meeting of the Executive Committee (EC) of Centre for High Technology (CHT) held on 30<sup>th</sup> October, 2017 at SCOPE Convention Centre, New Delhi

#### **Participants**

#### MoP&NG

- 1. Shri Sandeep Poundrik, JS(R) Chair
- 2. Shri Ajit Kumar, Dy. Secretary (R)
- 3. Shri Pawan Kumar, US (R)

#### OIDB

4. Shri Ajay Srivastava, FA&CAO

#### IOCL

- 5. Shri Sanjiv Singh, Chairman
- 6. Shri S.M. Vaidya, ED (O), RHQ
- 7. Shri Brij Behari, CGM (T), RHQ

#### **BPCL**

- 8. Shri R. Ramachandran, Director (R)
- 9. Dr. V. Ravikumar, GM (R&D)

#### **HPCL**

- 10. Shri V.S. Shenoy, Director (R)
- 11. Shri G. Sriganesh, ED, Corp. R&D
- 12. Shri G.S Joshi, GM, RCD
- 13. Dr N.V. Choudary, Emeritus Scientist

#### **MRPL**

- 14. Shri H. Kumar, MD
- 15. Shri M. Venkatesh, Director (R)

#### <u>CPCL</u>

- 16. Shri Gautam Roy, MD
- 17. Shri Sriram, Chief Manager (PE)

#### NRL

18. Shri B.J. Phukan, Director (T)

#### GAIL

- 19. Shri M.R. Meshram, ED (PC-CO & R&D)
- 20. Shri Parivesh Chugh, GM (R&D)

#### EIL

- 21. Shri Ajay N. Deshpande, Director (T)
- 22. Ms Vartika Shukla, ED (T)

#### CSIR-IIP

23. Dr Anjan Ray, Director

#### **CHT**

- 24. Shri Brijesh Kumar, ED
- 25. Shri R. Krishnamurthy, Advisor (T)
- 26. Shri D. Thakur, Advisor (T)
- 27. Shri S.K. Varshney, Joint Director