

**Department of Heavy Industry
(HE&MT Section)**

Subject: Minutes of the 4th Meeting of the Apex Committee to consider proposals received under the Scheme on Enhancement of Competitiveness in the Indian Capital Goods Sector- regarding.

The 4th Meeting of the Apex Committee to consider proposals received under the Scheme on Enhancement of Competitiveness in the Indian Capital Goods Sector (CG Scheme) was held on 8.9.2016 under the chairmanship of Shri Girish Shankar, Secretary, Department of Heavy Industry. List of participants is annexed.

2. In his opening remarks in the Meeting, JS (HE&MT), DHI and Member Secretary stated that one proposal each under Centre of Excellence(CoE) for Technology Development Component and Common Engineering Facility Centre (CEFC) component of the CG Scheme has been recommended by the Screening Committee. In addition to the above, 4 proposals under Technology Acquisition Fund Programme (TAFP) component of the CG Scheme, received through M/s. GITA were also considered and recommended by the Screening Committee. A total of six proposals have been placed for the consideration of the Apex Committee. It was further stated that AS&FA, a member of the Apex Committee is unable to attend the meeting but he has been briefed about the agenda and he has lent his 'in principle' support to these cases.

3. Proposal of Center of Excellence by Coimbatore pump cluster for development and manufacture of state of art six inch submersible pump.

3.1 A presentation was made by the representatives of Coimbatore pump cluster for setting up the Centre of Excellence. Under the proposal, Si'Tarc, IISc Bangalore, IIT-Madras, Central Manufacturing Engineering Research Institute (CMERI), PSG CT and Southern India Engineering Manufacturers' Association (SIEMA) have joined hands to develop smart six inch submersible pump of 4000 RPM at a project cost of Rs.8.41 crores in 12 months. It was informed that under the guidance of Department of Commerce, a consortium of pump manufacturers from Coimbatore was made few months back. The objective was to develop futuristic smart pump as a strategy to substantially boost export of the smart pumps. 12 Coimbatore based units have joined hands for commercialization of this technology.

3.2 JS, Department of Commerce endorsed the submission and stated that Department of Commerce supports the proposal as a part of their wider strategy to boost exports by developing technologies for futuristic products.

3.3 On enquiry by Chairman, it was informed by the applicant that the technology upgradation is proposed by increasing RPM of the pump, flow and improving other parameters. These parameters will be controllable through a central processor, making it smart. The increase in RPM of 4000 will require entirely new type of motor namely

BLDC which will be developed. The pump and its numerous components will have to be completely designed. The smart pumps will be energy efficient and will consume at least 20% less energy because of higher efficiencies of the motor and pump. These parameters have been pre defined and targeted to be developed by the COE. It was further informed that this technology is not available with Indian companies and globally also, there are only 4 to 5 pumps manufacturers in this category.

3.4 JS, Department of Commerce further mentioned that unless we improve the technology, exports will not improve. It was informed that the Size of Indian market is Rs.5000 crore. At present, share of export of submersible pumps is 1% ; with the development of this technology the share of exports in this category is expected to increase to 5 to 6%. It was confirmed that initially 12 project partners who have contributed will hold the IPR along with the respective institutes; however after 2 years IPR will be opened to all other Indian manufacturers, free of cost.

3.5 For developing various technologies, role of each participating institute i.e. IIT Madras, CMERI Durgapur, PSG CT Coimbatore, IISc Bangalore and SiTarc Coimbatore has been defined.

3.6 The project cost of Rs.8.41 crore will be raised through contribution of Rs.1.682 crore by the industry and proposed grant of Rs.6.728 crore by DHI.

3.7 The applicant has projected at least 10% increase in turn over through this technology development which is likely to fetch the central exchequer substantially more returns, estimated to be Rs.50 crores in first five years. The applicant has also projected revenue earnings through technical services, which will be sufficient to cover the working capital requirements. After completion of this project, applicants have informed that they will try to develop the technology for higher ranges of smart pumps.

3.8 Economic Adviser, Ministry of Textiles enquired about the global market where the products would be exported. It was informed that the major markets are North America, South Africa, North Africa.

3.9 JS(HE&MT) & Member Secretary stated that with so many institutions involved, it is necessary to appoint a coordinating agency. It was confirmed that SiTarc Coimbatore would be the coordinating agency and JS, Department of Commerce confirmed that DoC itself will be monitoring the progress.

3.10 The Apex Committee noted that independent domain expert, DHI internal scrutiny group and the Screening Committee have recommended the project.

3.11 Members opined that the COE has the potential of improving global competitiveness in the sector and therefore, the Apex Committee decided to approve the proposal as applied for namely a grant of Rs.6.728 crores for technology

development of six inch submersible smart pump at the proposed Centre of Excellence in SiTarc Coimbatore and other institutes.

4. CEFC proposal from Science Engineering and Technological Upliftment (SETU) near Surat.

4.1 Apex Committee then took up the proposal from Science Engineering and Technological Upliftment Foundation (SETU) for CEFC for Textile Machinery at Bardoli near Surat. It was informed that SETU is a not for profit Section 25 company with Textile Machinery Manufacturers' Associations, India (TMMA), Surat Engineering Vikas Association (SEVA) and Sardar Vallabhbhai Patel Education Society (SVPES). The facility proposes to provide support and offer services for designing and manufacturing of small and medium size textile machinery components. Two associations SEVA and TMMA have come together along with SVPES to set up a CEFC for Textile machinery and light engineering. CEFC aims to serve Industrial Estates in various region of South Gujarat -Surat, Bardoli, Navsari, Valsad, Vapi, Ankleshvar, Dahej, Bharuch, Vadodara and Vyara. At present there is no CEFC in this region and the proposed CEFC aims to address the Technological gap due to lack of awareness on technical textiles, technology obsolescence, poor infrastructure, lack of skilled workforce, need for standardization of components and processes, harmonize different segments and components and improve global competitiveness. The proposal will also lead to enhancement of employability.

4.2 Representative of SETU informed that as per the 12th Plan Working Group on Textile Machines, sector is technologically lagging behind by 15-20 years. The gap is particularly prominent in weaving sector, technical textiles, high technological components, knitting sector and advanced textile machines. The Working Group had recommended number of steps including setting up Common Engineering Facility Centre at textile machinery clusters at Surat, Coimbatore, Panipat and Ludhiana. The Department drafted a scheme for global competitiveness based on DPRs of 10 projects, including CEFC at Surat. This scheme was notified in November, 2014. TMMA made a proposal with updated DPR in 2015. The Apex Committee, at that time, required some more information. When the information was being collected, the partner educational institute providing the land, backed out. TMMA restarted search for land. Ultimately they were able to tie up with SVPES for land at Bardoli, in their engineering college premises. The DPR was revised again and presented to the Department for consideration and the same has been recommended by Screening Committee.

4.3 The representatives of SETU stated that the project has been designed based on a need survey of units in South Gujarat. The major demand from industry, as emerged from the survey, is that of product / component development and training. Industry representatives explained that CEFC is needed to catch up through design, development, testing and certification and training to upgrade their operations and processes and also learn use of latest manufacturing technologies / machines. It was informed that the CEFC will be promoted as Centre of Manufacturing and Testing

Excellence by emphasizing on prototype development, manufacturing, testing, validation and skill development. The CEFC will focus on Production (including production of prototype, design of critical components and machine, production of moulds, dies and tools and machine components), training, consultancy and testing. Total Project cost is Rs.50.27 crore (including land and building) with DHI support envisaged amounting to Rs.27.81 crore, i.e., 80% of the machinery cost. Promoters contribution will be Rs.18.37 crore and the rest will be arranged by Term Loan amounting to Rs.4.09 crore.

4.4 Slated duration of the project is 18 months. However, applicants stated that efforts will be made to start the project in 12 months, using existing vacant building, of the engineering college on a temporary basis; without waiting for the construction of the new building.

4.5 Chairman enquired as to whether the project pertains only to the textile machinery. It was informed that this pertains to both Textile Engineering as well as general engineering machinery. It was confirmed by SETU that the project will begin to earn profit after first year. The CEFC will serve around 1200 units in the region of South Gujarat including cities like Surat, Hazira, Ankleshwar, Wapi. They have projected an earning of Rs.10 crores in the first year from technical services which is likely to go up to Rs.36 crores in the 10th year. The capacity utilisation is assumed to be 62% in the first year (after creation of all the facilities) to 90% in the 10th year. The rates of services have been proposed based on the rates being charged by tool rooms, CMTI and other institutes elsewhere in the country.

4.6 Chairman enquired that why this much funding is required. Only viability gap funding should be sufficient. At this point, Shri Rajendran, President TMMMA informed that without Government support, this CEFC will not be possible as large units have their own R&D units while SMEs have to face obsolescence due to lack of such a platform. Shri. Ajay Pandit, Office of Textile Commissioner, Mumbai emphasised that we need such a facility in the country and as such the proposal needs to be supported. Economic Adviser, Ministry of Textiles mentioned that the CEFC should focus on processing, weaving, garmenting instead of spinning. SETU confirmed that they are proposing the CEFC as per the projected requirements of the sector such as Stenter machine blower fan, servo motor of embroidery machine, improving speed of looms, flat bed printing machine process improvement, recirculation of waste water of processing house, equipment for technical textiles. They have already had detailed discussion with Textile Commissioner, Mumbai in this regard.

4.7 Broad list of machinery/ equipments worth Rs 34.76 crores for which the grant is being sought was provided, wherein around Rs. 16.62 crores worth of equipment will be imported and Rs 18.14 crore worth of equipment will be indigenous. Members explained that imported machineries being procured are new and have to be imported because machines of such high precision are not available domestically. It was

clarified that pre-operative expenses pertain to installation/transportation and other such charges related to equipment.

4.8 Members observed that the proposal has the potential to increase the global competitiveness of the Textile Machinery Units and provides a strong skill upgradation opportunity (besides additional tax collection) and therefore, **committee approved the grant of Rs.27.8104 crores towards 80% cost of the equipment of the CEFC for Textile Machinery.**

TAFP PROPOSALS

5. Following 4 proposals from GITA, as per their recommendations, deliberated and recommended by the Screening Committee were discussed. GITA has got conducted the onsite due diligence completed and these projects have been strongly recommended by GITA and the experts. Chairman remarked that GITA should make all efforts to bring the proposal within the sector so that we need not stretch our rules for products outside the sector. CEO, GITA, Dr Ganguly explained the mechanism adapted by GITA in marketing and developing proposals. He explained that they have already developed the website for TAFP and they have been doing extensive marketing and have been motivating industry to participate in the scheme by visiting different industrial clusters. First cycle of request for proposal was issued and has been closed now. 14 proposals were received by them in this cycle, out of which they have found four proposals to be in proper shape. He stated that all these four projects are state-of-the-art and niche projects, strongly recommended by their technical and financial experts; import substitutes and to the best of their knowledge unique technology projects in India. These four proposals considered and recommended by Screening Committee for consideration by Apex Committee, were presented by the respective applicants.

5.1 The proposal from PTC Industries on Titanium, Zirconium Exotic Alloy Castings through Vacuum Melt and Powder Metallurgy HIP. The company proposes acquisition of technology through outright purchase from Castings Technology International with acquisition cost (inclusive of plant/machinery/knowhow) of Rs.51.01 crore. MD, PTC stated that PTC is a listed Company and the product technology is a very niche and comes under dual use technology. They have been trying for the last 5 years to get this technology which involves licensing from US, UK, Japan and Germany and at present less than 10 countries in the world have this technology. A brief presentation was given by PTC before the committee in which it was stated that average turnover of the company is **INR 120 Cr.** with a net worth of **INR 200 Cr.**

5.1.1 The committee appreciated the Screening Committee recommendation of supporting this project based on its technical merits. It was appreciated by the Apex Committee that the technology proposed by PTC included setting up of manufacturing facility for Titanium Castings through introduction of new technologies like, Additive

Manufacturing through 3D Printing, Erosion resistant Ceramic Shelling, Melting & Pouring in VAR, Hot Isostatic Pressurization (HIP) is highly niche technology.

5.1.2 Dr. S Biswas, Director BHEL, mentioned that the Titanium casting will have much relevance for various critical components of Gas and Steam Turbines and therefore would substantially reduce the import dependence of BHEL on Siemens and Alstom, and therefore should be supported.

5.1.3 Addl Secy, DHI enquired as to how it would be confirmed that the technology being imported is not obsolete. It was assured by the applicant that this technology is latest and is available with very few countries and there is no question of obsolete technology being provided.

5.1.4 Chairman wanted to know that when additional revenue from the technology is so high in the coming years, what is the difficulty in getting the entire amount of loan from Banks or getting only the viability gap funding from DHI while the remaining can be funded by the Banks. Shri. Sajid Mubashir, DST mentioned that for high end projects of National importance and critical technologies, the success depends upon several parameters such as manpower, experience in related fields and mechanisms for high end investments. Applicant stated that he has prepared the project cost assuming that Rs. 10 crore of grants can be sanctioned by DHI and for the remaining amount loan of Rs. 30 crore has been sanctioned in principle by the bank but not yet disbursed.

5.1.5 Additional Secretary enquired that how the price of different items mentioned in cost break up arrived through negotiations/bargaining and in which currency payment is to be made and who would benefit from the exchange rate variation? Applicant replied that since machines are imported from US, UK, Japan and Germany, payments are to be made in the respective currency. He mentioned that any reduction in price of machine cost would lead to the overall reduction in project cost and the reduction in amount would result in proportionate reduction in DHI funding also.

5.1.6 The issue of IPR was discussed extensively. Shri. Sajid Mubashir, DST observed that since IPR is coming from outside the country and is as per an agreement between M/s PTC and their principal, therefore it will be difficult for PTC to adhere to IPR clause as per the guidelines. He further mentioned that this is a high risk project and there will not be many players in this field. He opined that IPR in such cases should be given freely to the Company. It was explained by Director, CMTI that the project involves extensive efforts wherein equipments with embedded technology are being imported and then different technologies are being integrated. He opined that the IPR guidelines may have to be relaxed else technology will not come to the country. The applicant expressed serious reservation about sharing the technology, this being a high risk project. It was clarified by PTC Industries that, the proposed technology is a 'Protected Technology' and for the first time such a Technology is being licensed to India by Govt. of multiple countries – US, UK, Japan. CTI being the Technology Integrator have already concluded agreement with PTC for non-disclosure of IPR and therefore the know-how cannot be opened after 2 years as per the

guidelines. Therefore, PTC requested to extend the IPR for at least 5 years. The total project cost was explained as **INR 51 Cr. + INR 19 Cr.** (already invested by PTC) and the funding request from DHI is of **INR 10 Cr.**

5.1.7 Additional Secretary desired that the complete details of Non-Disclosure Agreement be shared. Chairman asked the applicant to come back and submit a more acceptable proposal on the IPR conditions, so that final view can be taken.

5.1.8 The Apex Committee, while appreciating the technical importance of the project, desired that following documents should be submitted by PTC for further action :

- The complete budget break-up of the project including sources of fund flow.
- Bank tie-up letter for infusion of funds for the project apart from industry contribution & fund requested from DHI
- Specific proposal in respect of IPR and the openness of the company to disclose the knowhow of the above process to any company/central government R&D institute of related field at a mutually agreeable nominal technology transfer cost. A justification letter also to be submitted by PTC to be submitted.
- Share the list of services along with activities & timelines which is being provided by Technology provider as per the agreement signed with the applicant, and terms and conditions of the agreement. IPR/ Detailed knowhow proposed to be shared on completion of the project.

5.2 The proposal from Motif Capacitors Pvt. Ltd. For Segmented Film Industrial Capacitor to acquire technology from Germany. Project pertains to designing of FAIL-SAFE High reliable Capacitor with a life expectancy of 30000 hours from MOTIF Capacitors Pvt. Ltd., Delhi pertains to Electrical Systems and Equipment Component/Sub Assembly. Project involves Technology Acquisition and Development to manufacture FAIL-SAFE capacitor with customized Segmented Film which will improvise the Phenomenon of self healing with a life expectancy of 30000 hours, by acquiring technologies like Special Vacuum metaliser for metalizing high crystalline BOPP, High Precision Slitter with Line follower, Capacitor winding machine with automatic torque control, Testing lab as per IEC compliance. The project cost is Rs 21.67 crores.

5.2.1 Shri. Mohit Goyal, MOTIF explained that this technology is not present in the Indian Industry but has been demonstrated worldwide. The technology involves outright purchase of specialised equipment. The technology will improve the phenomena of self-healing, thereby increasing the life of capacitors. He mentioned that

at present India imports 8 million USD worth of industrial capacitors per month for various applications in electrical and electronics manufacturing sectors, considering free import duty and raw material duty. Therefore, there is a significant market existing in the country. Currently, the segmented film capacitor is a new technology being imported from Germany at a very high cost. Recently an IEC standard on this technology has been written for worldwide usage, which is yet to come to India. At present we are primarily importing industrial capacitors primarily from China.

5.2.2 Dr. S Biswas, Director BHEL mentioned that segmented film capacitor manufacturing technology is presently being imported from Japan, Korea and China. To improve the reliability of the operations of Power sector equipment, segmented film capacitor will play a significant role. This can be considered for support considering the technology requirement has significant importance as an end use in CG sector especially for Power transmission as well as stakeholders like railways, BHEL, NTPC, SIEMENS, etc. will be the end customers.

5.2.3 Upon Chairman's observation that whether this sector falls under DHI's domain area, it was explained by JS (HE&MT), that as such this sector is DIPP's domain. The issue was also flagged during the Screening Committee wherein the representative from DIPP has expressed his support and a letter to this effect has also been received from DIPP recommending this project stating that these projects have good technology inflow and are innovative in nature and since DIPP do not have any such particular scheme to support these kinds of projects, DIPP extends its support to these proposals if DHI considers them under the scheme. Director MOTIF explained that in the present case the critical users are CG Sector (electrical systems and equipment component/sub assemblies). It was confirmed by the applicant and CEO GITA that it is futuristic technology and new to India.

5.2.4 Director (HE&MT) flagged that in the present case since the technology is embedded in the machines there is no technology transfer in strict sense and hence there will be no IPR generation. However, complete transfer know how needs to be detailed and shared after 2 years, without any price. Applicant agreed for the same. It was mentioned by Director CMTI and Shri Sajid Mubashir, DST that technology integration itself is a very difficult and complex process and small companies should be supported in their endeavour.

5.2.5 AS specifically raised the size of a small Company with turnover of Rs. 3.5 crore undertaking such a big project of Rs 21 crore. GITA explained that because of their initiative the Company has come forward with such a big project of Rs. 21 crores and applicant further mentioned that the company would perish in case they do not move to a better technology. AS further enquired about the sanction letter from the bank with respect to sanctioned loan of Rs. 7.3 crores from the bank. The applicant could not produce the letter during the meeting. However, it was assured that they would submit the same subsequently.

5.2.6 The Apex Committee, while appreciating the technical importance of the project, desired that following documents should be submitted by MOTIF Capacitors for further action :

- Evidence of capability of the firm to take up such a project which include bank tie-up letter for infusion of funds for the project, apart from its contribution & fund requested from DHI, along with project appraisal report from bank
- The complete budget break-up of the project including sources of fund flow.
- Consent for detailing of knowhow to be shared after two years

5.3 The Proposal from Allied Engineering Pvt. Ltd. Delhi for Manufacturing of Heavy Duty High Reliability Electrical Specialized Power Cables. The proposal is for Technology Acquisition and Development to manufacture heavy duty electrical cables of international standards, for power substations and specialized applications by acquiring complete cable design software, wire drawing with online annealing and specialised extrusion technologies.

5.3.1 It was explained by Shri. Ashutosh Goel, Allied Engineering, that Specialized Power Cables are highly reliable and premium priced product for various sectoral applications and at present largely imported from Europe and China. With the upcoming growth in Indian power sector, oil and refinery sector, railways etc., Specialized Power Cables will have a huge market potential. The technology proposed in this project is going to create a niche facility to manufacture state-of-the-art specialized cables which will be comparable with the imported quality and also be economically priced. The Online Annealing, Automatic Insulation and Integrated Software designing technology as proposed in the project will ensure very high quality and precision Specialized Cable manufacturing in the country which is not much available currently. The acquisition cost is Rs 14.98 crores.

5.3.2. Upon **Chairman's observation** that whether this sector falls under DHI's domain area, it was explained by **JS**, that as such this sector is DIPP's domain. The issue was also flagged during the Screening Committee wherein the representative from DIPP has expressed his support and a letter to this effect has also been received from DIPP recommending this project stating that these projects have good technology inflow and are innovative in nature and since DIPP do not have any such particular scheme to support these kinds of projects, DIPP extends its support to these proposals if DHI considers them under the scheme.

5.3.3 Chairman sought the opinion of Dr S Biswas, BHEL. He stated that the project has huge relevance for Indian Power and other energy consuming sectors as India is presently a net importer of Specialized Power Cables. In his view, the proposal merited support. While the technology is much required, BHEL itself is not a very big

user; oil, gas and railways, powergrid, NTPC are amongst the significant users. Once BHEL comes up in the solar photo voltaic field, they would be requiring this product.

5.3.4 It came out in the discussion that LAP Electrical Ltd., UK has set up its manufacturing plant in the country. It was stated by AS that when LAP has put up its manufacturing plant in the country, how can this technology be an import substitute. He also enquired whether economies of scale will be achieved. It was informed by the applicant that the demand is still not satiated and still a lot of imports is happening. Market size is to the tune of 4000-5000 crore. No Indian company can put this type of capital expenditure. They have estimated an additional turnover of Rs 50 crore in the first year with this technology and in 5 years they estimate to capture 15 to 20% of the market.

5.3.5 Director (HE&MT) flagged that in the present case since the technology is embedded in the machines there is no technology transfer in strict sense and hence there will be no IPR generation. However, complete transfer know how needs to be detailed and shared after 2 years without any price. Applicant agreed for the same.

5.3.6 Based on the Screening Committee recommendations, advice of experts and the deliberations of Apex Committee, Apex committee approved the project for a grant of Rs 3.745 crores, limited to 25% of the project cost, subject to applicant providing following documents:-

- Bank tie-up letter for infusion of funds for the project apart from its contribution & fund requested from DHI
- The complete budget break-up of the project including sources of fund flow.
- Consent for detailing of knowhow to be shared, after two years

5.4 The proposal from Industrial Processors & Metallizers Pvt. Ltd. on Cutting Edge Robotic Laser Cladding Technology for Hydro Turbines Indigenously using Tungsten Carbide Powder for the sector of Heavy Electrical & Power Plant Equipment. Shri. Rahul Sood, IPM presented that Laser Cladding is a high precision surface coating technology and has a tremendous relevance for various underwater components of hydropower sector, which can be coated with high deposition efficiency, better accuracy and at a lesser energy consumption. At present, India does not have much exposure to this technology and use of this technology to the Indian Hydropower sector will actually save significant downtime and damage of resources. Project involves technology acquisition of Robotic Laser Cladding to increase the lifespan of critical Hydro Turbine components by minimising erosion, corrosion and wear and tear with a strong metallurgical bond and high deposition rate as a substitute of present HP-HVOF technology. The project cost is Rs 4.97 crores.

5.4.1 Dr Biswas, Director BHEL confirmed that the technology is required in the country and they would benefit from the same. He mentioned that IPM is already

working with BHEL in the hydro turbine sector and significantly contributing towards saving of national resources.

5.4.2 It was observed by AS, DHI that 75% of the contribution for this project is being brought in by IPM through its internal resources. It was accordingly suggested that IPM should also explore the possibility of tying up around 25% of its contribution of funds from Bank for financial appraisal of the project.

5.4.3 Shri. Sajid, DST mentioned that the existing technology of HVOF has issues and any enhancement in technology should be supported.

5.4.4 Applicant mentioned that they are working extensively in Nepal and most of the NHPL projects are being supported by them.

5.4.5 Director (HE&MT) flagged that in the present case since the technology is embedded in the machines there is no technology transfer in strict sense and hence there will be no IPR generation. The applicant agreed to share the process know how and the IPR, if any generated in the process, free of cost, after 2 years. Director, CMTI and Shri. Sajid, DST opined that IPRs would be generated out of the project and the applicant agreed to share the same.

5.4.6 Based on the Screening Committee recommendations, advice of experts and the deliberations of Apex Committee, Apex committee approved the project for a grant of Rs 1.24 crores, limited to 25% of the project cost , subject to applicant providing following documents:-

- Bank tie-up letter for infusion of funds for the project (for around 25% of its contribution of funds)
- The complete budget break-up of the project including sources of fund flow.
- Consent for detailing of knowhow to be shared after two years.

6.0 To summarize, following decisions were approved by Apex Committee:-

6.1 Grant of Rs.6.728 crore for technology development of six inch submersible smart pump at the proposed Centre of Excellence in SiTarc Coimbatore along with other institutes.

6.2 Grant of Rs.27.8104 crore towards 80% cost of the equipment of the Common Engineering Facility Center for Textile Machinery at Bardoli, near Surat.

6.3 PTC Industries' to come back with their proposal in respect of IPR Sharing for their project on Titanium Zirconium & Exotic Alloy Castings.

6.4 Motif Capacitors (for segmented film industrial capacitors) to come back with the proof of their capability and capacity to handle the project.

6.5 Grant of Rs 3.745 crore to Allied Cables (for specialized power cables), subject to submission of documents mentioned at Para 5.3.6 above.

6.6 Grant of Rs 1.2425 crore to Industrial Processors & Metallizers Pvt. Ltd. on Cutting Edge Robotic Laser Cladding Technology for Hydro Turbines, subject to submission of documents mentioned at Para 5.4.6 above.

7. The meeting ended with vote of thanks to the Chair.

ANNEXURE

List of Participants of the 4th Apex Committee Meeting on 08/09/2016 AT 1130 HRS

S.No.	NAME/DESIGNATION	ORGANISATION
1	Shri Girish Shankar, Secretary	Department of Heavy Industry
2	Shri Anshu Prakash, Addl. Secretary	Department of Heavy Industry
3	Shri Vishvajit Sahay, Joint Secretary	Department of Heavy Industry
4	Shri Sushil Lakra, Industrial Adviser	Department of Heavy Industry
5	Smt. Ritu Pande, Director	Department of Heavy Industry
6	Shri Sanjay Chavre, Sr. D.O.	Department of Heavy Industry
7	Shri N.L.Goswami, Sr. D.O.	Department of Heavy Industry
8	Shri B.S.Bhalla, Joint Secretary	Department of Commerce
9	Ms Babni Lal, EA	Ministry of Textile
10	Shri Ajay Pandle, Director	O/o Textile Commissioner, Mumbai
11	Ms Khashboo Kumari, Scientist-B	BIS
12	Shri S. Satish Kumari, Director	CMTI, DIPP
13	Shri R. Rajendran	TMMA (I)
14	Shri Subrata Biswas, Director (Engg. R&D)	BHEL
15	Shri Ashwani Gupta, Sc.'G' Adviser	DSIR M/o S&T
16	Dr. S. Ganguly, CEO,	GITA
17	Ms Sona Pradeep	GITA
18	Shri Samrat Ghatak	GITA
19	Shri Sachin Agarwal	PTC Industries
20	Shri Mohit Goyal	Motif Capecitors Pvt.Ltd.
21	Shri Ashutosh Goel	Allied Engineering Works Pvt.
22	Shri Rahul Sood	I P & M Pvt.Ltd.
23	Shri S. Mubashir	DST
24	Shri S/C Swamy	TMMA
25	Dr. Punit Singh	IISC Bangalore
26	Shri Sachin Kumar	TMMA (I) , Mumbai
27	Shri K.S.Arvind kumar	SETU Foundation
28	Shri Sambath Kumar E.M.	GNSI & ASSOCIATES
29	Shri K.V. Karthik	SiTARC
30	Shri M.Sundram	PSG TECH
31	Shri Hetal Mehta, Director	SETU Foundation
32	Shri Pankaj Trivedi, Member	SETU Foundation
33	Dr. Latesh Chaudhari	SETU Foundation
34	Shri Pankaj Kannaujiya	SETU Foundation
35	Shri B. Sankar, GM	SBI
36	Shri Narmal Yadav	SBI
37	Shri Ramesh Dharmaji	SIDBI
38	Shri Vimal Kumar, Deputy Director	GITA