

Corporate Sustainability

Tata Business Excellence Model



Safety

Environment

Ethical Governance

Responsive Change

Consensus

Engineering

a better tomorrow

Culture

Legacy

Biodiversity



TCE Consulting Engineers Limited



TCE Consulting Engineers Limited
A TATA Enterprise

Vision

“To be an internationally respected engineering consultant
offering comprehensive solutions”

Board of Directors



Syamal Gupta
Chairman



F N Subedar
Director



A K Vora
Director



R P Singh
Director



A P Mull
Executive Director & CEO



R Srinivasan
Executive Director & COO

“ The kaleidoscopic nature of the market keeps throwing challenges ”



Chairman's Message

The financial year has been rewarding and fulfilling in many areas: performance, achievements, corporate social responsibility, etc.

TCE has been growing over the years; resources wise as well as financially and the year ended with a good order book. The work in hand is enriching the minds of the engineers and, with TCE currently engineering over 20,000 MW of power plants, it is helping the nation to narrow the deficit; thereby enabling the country to progress. TCE is now engineering the country's first 4000 MW Ultra Mega Power Plant in Kutch, Gujarat which will use the 'Supercritical cycle technology', for the first time in India for an 800 MW unit.

TCE is also helping in achieving the country's mission of water for all. TCE has done commendable work on several water supply projects and waste water projects, including the additions for Mumbai water supply and that for the cities / towns of Madhya Pradesh - Bhopal, Gwalior and Jabalpur.

On the oil front, TCE was with the Essar Oil's Refinery in Jamnagar, Gujarat which commenced production.

TCE's progress is encouraging. It has expanded operations in the eastern region of India to cater to the development and industrial programme for the region.

In keeping with the Founding Father, Jamsetji's principle, the Company continues to give opportunities and training to the workforce for the individual growth, for the growth of the Company and the Country.

On the Corporate Social Responsibility front, TCE's contribution by way of deputing engineers to supervise the Rehabilitation work for the Tsunami affected villages, deputing engineers to lecture in technical colleges, etc continues.

TCE played host to four women trainees from South Africa as a part of the Tata Group's initiative to help South Africa women to acquire and develop skills. TCE also played host to two students from Singapore.

The kaleidoscopic nature of the market keeps throwing challenges. Thus, although it was a good year overall, complacency is not a part of TCE. There is much to look forward to and much to be done for TCE to meet all challenges, take all opportunities and excel.

Mumbai
April 2007


Syamal Gupta

CEO 's Message



Progressing from Green Engineering and CSR, we at TCE are committed to Corporate Sustainability. The impact on nature and society gets weighed and incorporated in what we conceptualize and engineer to make it materialize.

A.P. Murthy
A P Mull

Events ... Happenings ... Participations



TCE at Turbomachinery 2006

R Srinivasan, ED & COO, Chairman for the Turbomachinery 2006, is seen delivering the keynote address during the inaugural session of International Seminar on Turbo Machinery, organized by CII-Sohrabji Godrej Green Business Centre, in Hyderabad, in May 2006.

Paper Published

R Srinivasan, ED & COO, presented a paper titled "India's Coal Situation and Tata's Role in its Use & Development" in International Pittsburgh Coal Conference in Pittsburgh, Pa, USA, on 27 Sep 2006. The Paper was authored by A Bhattacharya and P K Murthy.

Conclave on India-Africa Project Partnership - 2006



Trainees from South Africa with Tata Group Chairman, Ratan Tata (center, back) and coordinator TCE's Rakesh Gautama (right)



India - US Civil Nuclear Co-operation - Session in Progress

TCE at Cement Expo 2006



TCE AT PUNE EXPO 2007



Visit to Germany as part of CII Delegation

S Vidyanand visited Germany as part of CII delegation for carrying out benchmarking of best practices in Power Generation. A report was published by CII highlighting the findings.

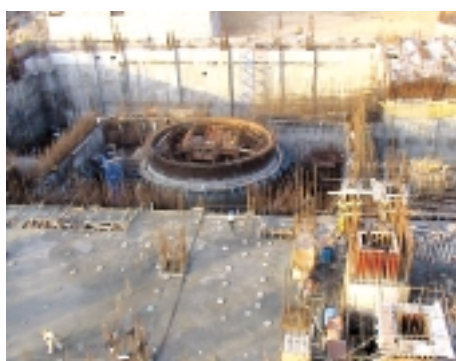
"It worked!"

- J Robert Oppenheimer, Nuclear Scientist
(After witnessing the first atomic detonation)

Nuclear Projects



- ◆ BHAVINI : Prototype Fast Breeder Reactor (PFBR) - All Design Notes and Design Reports reviewed by IGCAR and cleared by AERB, construction is moving at a fast pace. The foundation of NICB, Construction of Peripheral Wall, Walls and floors up to grade level is completed. Work is in progress for construction of inner walls, slabs and columns above grade level.
- ◆ Kaiga Atomic Power Project Unit 3 became critical and was synchronised with the grid in the first fortnight of April 2007. TCE has been associated with Kaiga Atomic Power Project Units 3 & 4 and Rajasthan Atomic Power Project Units 5 & 6 as a post tender engineering services consultant for electrical system to EPC contractor Reliance Energy Ltd.
- ◆ Tarapur Unit 3 has become critical and synchronised with the grid. TCE was associated for detailed design and engineering of Tarapur Unit 3 & 4 of NPCIL.
- ◆ TCE is providing Engineering Consultancy Services for preparation of Intelligent P & IDs, Development of Layouts and 3-D Modelling for KAPP 3 & 4 - 2 x 700 MW PHWRs Units at Kakrapar, Gujarat.
- ◆ Gammon India has received contract for construction of Turbine Building and BOP Structures for the PFBR project. TCE is providing detailed design and engineering services for these structures.
- ◆ Design and engineering services for DG foundation for the PFBR project to BHAVINI
- ◆ Bhabha Atomic Research Centre - Additional work for detailed engineering, inspection and expediting for PREFRE - 3A (P3A) project at Kalpakkam



500 MWe PFBR

Thermal / Combined Cycle Power Projects

"Wheresoever you go, go with all your heart"
- Confucius

TCE was engaged for carrying out various activities like detail designing, report writing etc on power plants for various clients across India and abroad. The capacity of the units totals to about 20000 MW. The following is a partial list of the plants.

- The Tata Power Company Limited's 4000 MW supercritical technology based coal fired Ultra Mega Power Project at Mundra, District Kutch, Gujarat. The configuration is 5 x 800 MW Supercritical Coal fired units. The Cooling Water System is a once through system using sea water for cooling with about 6 km long intake and outfall channels.
- Andhra Pradesh Power Development Company Limited (APPDCL), a joint venture company of APGENCO and IL & FS is putting up a 2 x 800 MW coal fired supercritical power plant near Krishnapatnam. TCE is currently providing the consultancy services up to award of EPC contract. The plant configuration is 2 x 800 MW Supercritical Coal fired units.
- IFFCO Chhattisgarh Power Limited (ICPL), a joint venture company of IFFCO and Chhattisgarh State Electricity Board (CSEB) putting up 2 x 500/600 MW coal fired supercritical power plant near Premnagar in Chhattisgarh. Plant configuration is 2 x 500/600/660 MW Supercritical Coal fired units.
- JSW Energy (Ratnagiri) Limited is putting up 4 x 300 MW coal fired power plant near Jaigad, Ratnagiri district Karnataka. TCE is providing design engineering and procurement assistance services.
- GVK proposes to install 2 x 300 MW coal based power project at Goindwal Sahib Village, Tarn Taran District, Punjab. TCE has been engaged for doing the procurement of the eight packages of the project.
- Post EPC review for 1100 MW SUGEN combined cycle power plant at Akhakhol, Surat for Torrent. Plant configuration : 3 single shaft combined cycle unit with advanced class gas turbines of Siemens make. Fuel is natural gas.



Artist's impression of The Tata Power Company's 4000 MW Ultra Mega Power Project, Gujarat



2 x 250 MW Thermal Power Station – II Expansion, Neyveli

- Design engineering, project management, for 2 x 250 MW thermal power station-II expansion of Neyveli Lignite Corporation. To meet MOEF requirement, Circulating Fluidized Bed Combustion type (CFBC) steam generator has been adopted. This will be the biggest CFBC steam generator in India when it is commissioned.
- Neyveli Lignite Power Corporation Ltd. is setting up lignite based 2 x 125 MW thermal power plant Barsingsar. GRP pipeline, 61 km, for water system was suggested by TCE and was accepted by NLC. This GRP pipeline use is being done for the first time in India.
- 3D modeling of 1 x 700 MW combined cycle power plant at South Bangkok in Thailand for MHI, Japan and Design engineering of civil works
- Owner's engineer services for tail gas fired 5.5 MW cogeneration plant at Cilegon, Indonesia for P T Cabot
- Engineering services for Tabouk open cycle expansion project for Saudi Electricity Company (W), Saudi Arabia
- 38 MW co-generation plant for Oman Refineries Limited
- Engineering and 3D modeling for 1 x 200 MW combined cycle Alinta Tamar Valley Power Plant in Australia



Laying of GRP Pipes, 2 x 125 MW, NLC

Hydropower Projects

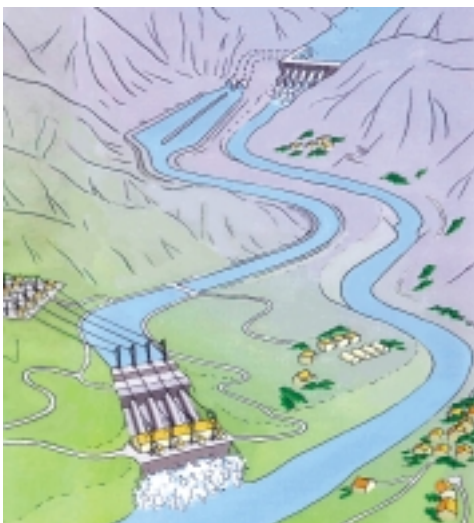
The capacity of the first hydropower plant in India, which came up towards the end of 19th century, at Sidrapong near Darjeeling, was 130 kW.

- Owner's consultants for 330 MW Srinagar Hydro Electric Project in Uttarakhand State for the Alaknanda Hydro Power Company Limited.

The project is a run off river scheme on Alaknanda River. The work comprises construction of 97 m high diversion dam, with a crest length of 245 m, Diversion tunnel, Head race tunnels with Intakes, Desilting basin, 3.05 km long Power Channel, Forebay, Bypass Channel, Power House (with tailrace) and the 400 kV Switchyard.

The scheme includes 4 units of 82.5 MW each. The TG machine has been ordered and the enabling civil works have started.

- Technical Due Diligence study on Bujagali HEP, Uganda for The Tata Power Company Limited
- Report preparation and review and commissioning services for performance testing as lender's engineer for 70 MW Budhi hydro project in Chamba, HP for ICICI
- Detailed engineering for 3 MW / 4.5 MW mini hydel scheme at Gokak falls, Belgaum dist., Karnataka for Gokak



Srinagar Hydropower Project - Schematic Layout



Suoi Sap, Vietnam

- Detailed engineering of civil and structural works for 2 x 5 MW Manjanadka mini hydel project for BPCL
- Daksrong Hydropower Project in Gia Lai Province, Vietnam for Tata International Limited
- Detailed project report for 96 MW Dik Chu minihydel power project, Sikkim for Sneha
- Detailed project report for 4.5 MW Nekkiladi minihydel scheme for SPPL
- Detailed project report for Dudh Ganga minihydel scheme, Dudh Ganga river, Nipani taluk, Belgaum dist., Karnataka for RGPPL
- Preparation of reconnaissance reports on two major hydro projects in Himachal Pradesh for The Tata Power Company Limited
- Detailed project report for Netravati minihydel project for PPCL
- Feasibility study for design of new transmission system from Pawana dam for PCMC

*"Genius is one per cent inspiration and
ninety-nine per cent perspiration"*

- Thomas Alva Edison



Transmission & Distribution Projects



Bhutan Transmission & Distribution Works



TCE successfully completed the engineering and construction supervision of power transmission system at 220 kV from Semtokha to Rurichhu in western Bhutan. The hydro power generated at Rurichhu is evacuated at 220 kV to western Bhutan.

Further extension of the 220 kV network to the western provinces of Bhutan namely Tsirang and Dagana is also presently being implemented by TCE. The 220 kV line from Rurichhu substation is extended to Tsirang and on to Dagana.

- Electrical design engineering services for switchgear ancillary equipment for Samra 400 kV substation extension for Siemens
- Preparation of scope of work/technical specifications for Saudi Electricity Company's Southern Area 380 kV Integration - Phase II
- Insulation coordination study for new 220/132 kV substation at Shuweihat and new 132/11 kV substation at Delma island and associated works for ETA
- DEWA 132 kV/11 kV Oasis substation for Danway
- Improvement & Upgradation of electrical infrastructure in Phuentsholing town & 33/11 kV substation at Samtse for Bhutan Power Corporation
- Load flow studies for Aweer gas turbine station "H" Phase III for ETA/DEWA

- Pearl Island, Qatar is a USD 2.5 billion offshore, Riviera-style man-made island, covering 400 hectares of reclaimed land offshore the Arabian Peninsula state of Qatar. The Pearl Island is Qatar's first international real estate venture. The Pearl Island is being developed and promoted by United Development Company (UDC). UDC has entrusted the development of primary power network to Tata Projects Limited for the design and construction of 132 kV/66 kV Gas Insulated Substations. TCE is rendering basic and detailed design engineering services which interalia cover associated control, protection, SCADA and telecommunication systems.



The Substations



Renewable Energy Projects



"Understand, just as the mighty wind blowing everywhere is always situated within space, similarly all created beings are thus situated in me."

- Bhagvad Gita Ch 9 - Verse 6

TCE has made proud contributions in this realm :

- 2x250kW (each) biomass based integrated gasification PPS for distributed power generation at village level, Madhugiri Taluk, Tumkur district, Karnataka for BERI
- Review of structural design foundations for wind turbine generators at wind farm at Khandke village near Ahmednagar district for The Tata Power Company Limited



Take care of the environment and the environment will take care of us.



Environment

- TCE made the Environmental Impact Assessment study for India's first 4000 MW, imported coal based, Ultra Mega Power Plant to be located near Mundra, Kutch District, Gujarat including Environmental Management Plan and Disaster Management Plan. Environmental clearances for the Project have been given by the Authorities based on the TCE Report.
- TCE studied the prefeasibility of developing the LFG (Land Fill Gas) Project at Gorai Waste Dump Site in Mumbai. The LFG project aims at capturing the Gas generated due to the decomposition of the waste and use it for producing electricity.
- HAZOP Study of Ranjitnagar Plant for Gujarat Fluorochemicals Limited
- Coastal Fumigation Study for Krishnapatnam UMPP in Andhra Pradesh for Coastal Andhra Power Limited
- Report on Environmental Regulations and Air Pollution Dispersion Modeling for power plant of CLP India Limited
- TCE participated in the Environmental Audit of Lord India Chemical Products (Pvt.) Limited, Nashik for Arcadis, UK.
- In the aftermath of deluge of 26 July 2005, the Government of Maharashtra assigned MMRDA to improve the carrying capacity of Mithi river, for a stretch of about 6 km. TCE is providing detailed engineering and project management services.

Special Projects

"Do the right thing. It will gratify some people and astonish the rest!" - Mark Twain

- Bhabha Atomic Research Centre (BARC) is developing a vertical pressure tube type reactor with light water as coolant and heavy water as moderator. Inclined Fuel Transfer Machine (IFTM) is a concept proposed to be used in Advanced Heavy Water Reactor (AHWR).

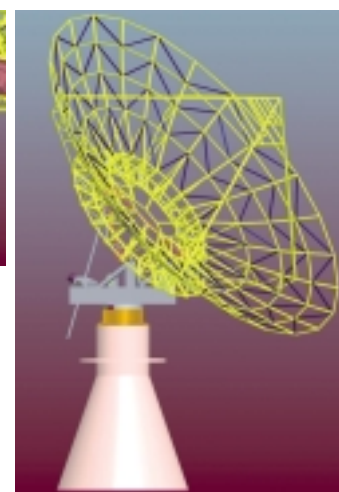
The prototype reactor machine will be built in BARC. Location of AHWR will be at Tarapur. The Reactor has several advanced passive safety features. The drive systems of IFTM are housed in a shielded area. TCE has developed the dual wall rope system for hoisting the fuel.

- The National Centre for Radio Astrophysics (NCRA) of Tata Institute of Fundamental Research (TIFR), Pune, is planning to set up a cluster of 10-15 nos. 12 m / 15 m diameter parabolic dish antennas at the Giant Metrewave Radio Telescope site at Khodad near Pune.



TCE has been entrusted with assignment of carrying out a systematic engineering study to compare the merits and costs of different dish concepts and identify the dish concept best suited for the cluster antenna Project.

TCE, in coordination with the astronomers at NCRA has undertaken the study of various dish concepts.



Water Projects



Of all the water on this planet, the quantity of water that humans can use is 0.3 % only



- Lagos Water Supply Rehabilitation is a World Bank funded project for rehabilitation of two major water works and their raw water intake & pumping stations. These waterworks are part of the water supply system of the city of Lagos, Nigeria. Combined installed capacity of the water works and pumping system is 114 mgd. TCE's scope of services envisages identification of the components of rehabilitation, preparation of detailed design engineering report, estimation of cost, tender documents and bid evaluation.



Lagos Water Supply Rehabilitation



Nandurbar Water Supply Project

• Nandurbar Water Supply Project, is a rural water supply scheme for the Nandurbar Town, which is the administrative headquarter of the Nandurbar District, Maharashtra. The scheme envisages augmentation of water supply to the town by 12.50 Mld by the year 2021. Components of the scheme are: River Intake cum pump House, Water Treatment Plant, Storage reservoirs and pipelines. TCE services cover carrying out conceptual studies, preparation of tender, procurement assistance and detailed design engineering.

• Melamchi Water Supply Development Board - ADB-funded project Kathmandu Water Supply Distribution Demonstration Project. The Demonstration project has the objectives of detailed design engineering and preparation of bid documents for water distribution system serving the proposed demonstration area and an area of about 25,000 population each. Inception Report, Design Criteria Report, GIS Scoping Report have been submitted.

- Water and wastewater system study for Navi Mumbai SEZ
- Sasungaria Gram nullah water supply augmentation for Tata Steel Limited
- Water audit and upgradation of water supply and sewerage system in Nanded city for TWIC
- Revamping of existing drainage system for Baramati for DDIL
- Kalinganagar project, Orissa - 6 mtpa integrated steel plant - Water supply system for Tata Steel
- Review and update of service storage reservoirs in water distribution system of Municipal Corporation of Hyderabad area under JNNURM for HMWSSB
- Bisalpur - Jaipur water supply project (transfer system) for PHED
- P&G Water Conservation Project

Urban Development

*"Aanganiye avsar aanandno..." - A Gujarati song
("Time for rejoice at my home")*

Gujarat Earthquake Rehabilitation & Reconstruction Project for the Gujarat Urban Development Company Limited (GUDC) : TCE was the Infrastructure Design and Supervision Consultants for Package II, which covered eight towns including Anjar and Gandhidham. The infrastructure works were roads, water supply system, sewerage system, solid waste management and municipal buildings.



Newly Laid Road, Anjar

TCE scope included the Coordination with Town Planning Consultants and finalization of the Infrastructure Plan, detailed damage assessment through field surveys, submitting reports, project planning and implementation schedule, detailed structural and architectural designs, cost estimates, prequalification of contractors, preparation of tender documents and evaluation, inspection of materials, measurement of works, construction monitoring and giving on-the-job training to the client's candidates.



Town Hall, Gandhidham

Town Area and Population

The areas of the towns ranged from 9 to 32 sq. km and the population, as per 2001 census, was from 21,000 to 1,73,000. The towns are located in highly seismic zones. The structural design of all buildings and pumping stations considered the latest practices for seismic resistant design and detailing. TCE engineers supervised and ensured quality of construction.



New Municipal Office, Gandhidham

Challenges During Reconstruction

Land acquisition, shifting of religious structures along the proposed roads, protecting the unmapped underground utilities from damage, laying pipelines along narrow roads and obtaining permission from the Authorities wherever pipelines had to cross Railway tracks and National Highway were challenges, but well solved.



Town Hall, Anjar

Smile

TCE is proud to be associated with the Projects of immense need to people. The earth shook, but man responded bravely. The reconstruction work by GOG / GUDC and GSDMA gave benefits to the survivors. And a smile was back on the faces of the affected people.



"Ye re, ye re pavsa" - ("Rains, come, come")
- A Marathi rhyme popular with children

Rural Development

The 2005 monsoon was erratic for Maharashtra. Unusually heavy rains lashed the coastal areas and caused extensive flooding. Many towns and villages were under waters.

After the visits to the flood-affected areas and collection of data, TCE submitted the Inception Report to GOM (Government of Maharashtra) in the first week of June 2006. The work involves construction of about 9896 houses at 69 wadis / villages in 14 districts spread across Maharashtra. Five alternative designs for core houses have been prepared as per norms of GOM.

TCE carried out community participation in about 20 villages in District Ratnagiri where Owner Driven Program is being implemented. The construction has commenced in some villages.

The Government of MP, under the financial support of Asian Development Bank (ADB), is executing the "Urban Water Supply and Environmental Improvement Project in Madhya Pradesh (UWSEIP)" for four major cities Bhopal, Indore, Gwalior and Jabalpur. The project is now named 'PROJECT UDAY' (Urban Development Around You).

The Project is to meet the urban infrastructure requirements for the sustainable economic growth of the state. The focus is to reduce the poverty, target areas of improvement in urban infrastructure and services. In view of the limited funds available under UWSEIP, the priority is given to the optimization works, particularly in water supply sector.

TCE is appointed as the Design and Supervision Consultant for works under water supply, waste water, storm water drainage and solid waste management sectors in three cities : Bhopal, Gwalior and Jabalpur.



Project UDAY, MP

Industrial

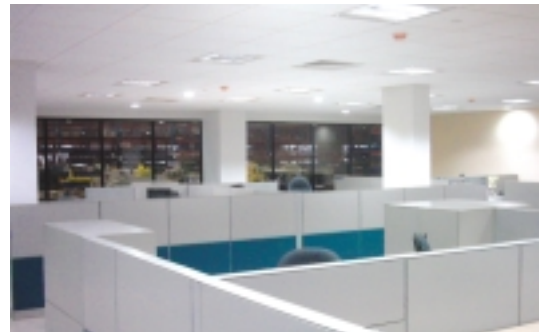
Eli Whitney's First



Cotton Gin Machine

In 1793, Eli Whitney made the first machine to clean cotton seeds and brought a revolution that would change the world. He brought the Industrial revolution.

- Atlas Copco India Limited (ACIL) intends to expand its facility at Nashik in phases. Phase 1 consists of modifications to existing buildings and construction of new industrial building of size 65 m x 26 m area and other ancilliary structures. TCE is carrying out pre-engineering, detailed engineering for civil, mechanical, electrical design engineering, general and project management services, inspection and construction supervision services.
- 3M India Limited is setting up a manufacturing plant in Ranjangaon MIDC near Pune. 3M has acquired land at MIDC Ranjangaon. Various structures and areas involved are the main plant building, warehousing, office block, utility area, cafeteria, security, guard, stores, LPG yard, UG tank and pumphouse, metering room etc. TCE is carrying out Rapid EIA study, engineering upto tender preparation, engineering for release of GFC drawings and floating of tenders, construction supervision and project management.



Atlas Copco Facility Expansion, Nashik



3M Manufacturing Plant, Near Pune

- Jotun India Private Limited is constructing a new green field project at Ranjangaon, The proposed project requires approximately 7.5 hectares of land and will be executed in two phases. TCE is carrying out pre-engineering study, detailed engineering, construction supervision and project management.



Jotun Green Field Project, Near Pune

- Tata Steel is augmenting the capacity of steel production at Jamshedpur from the existing 4 million tonnes per annum (MTPA) to 7.4 MTPA under the growth plan scheme. The existing LD#1 and LD#2 are being augmented and a new LD#3 will be added in the proposed growth plan. With the increase in steel production, the generation of slag from the LDs will increase. To cater for the increased generation of the LD slag, a new waste recycle plant of 2.5 MTPA was conceptualised. Total area required for this plant is around 22.0 acres. TCE scope was to provide project management services consisting of process philosophy, basic & detailed engineering, assistance in procurement, construction and project management, start up and commissioning and plant operation guidance.
- Owens Corning India Limited's expansion from 35000 TPA to 52000 TPA was completed. TCE had earlier provided engineering services for the fibre glass manufacturing company.
- Analysis and design of the Pipe Rack for Valero for URS Corporation
- Engineering and inspection services for car plant of TM-Fiat-joint-venture at Ranjangaon for FIAPL
- Proposed expansion of J K Tyre plant, Banmore for J K Industries Limited
- Route 3 project for URS
- Electrical, mechanical and civil engineering work for new Truck-Tractor line of SSWL-Truckline



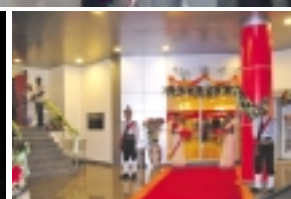
Waste Recycle Plant, Tata Steel Limited

"Atithi Devo Bhav" ("Guest is like God")
- A Sanskrit saying

Hotels



Ravikanth, MD - Tata Motors, Inaugurating Ginger Hotel, Pune



Ginger Hotels

TCE provided Project Management Services for construction of eight Ginger 'Smart Basic' Hotels for RCL. Six of these hotels located at Haridwar, Bhubaneshwar, Durgapur, Pune, Mysore and Trivandrum have been commissioned and inaugurated.

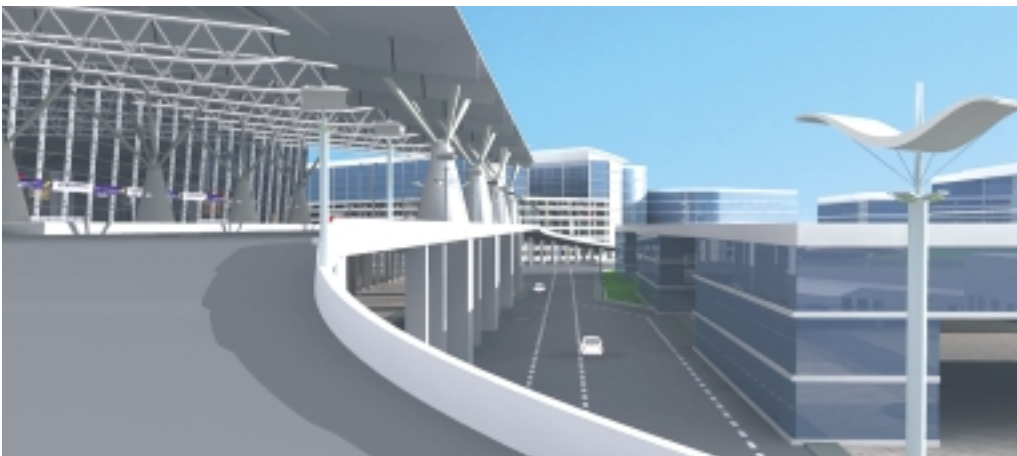


Airports



"When JRD landed on the Juhu mud flats that October day in 1932, India's first air service was inaugurated"

- R M Lala



- ◆ Owner's Engineers Services for Terminal 1 of Delhi International Airport, New Delhi. The project includes modernization and expansion of Delhi Airport. This includes revamping and construction of Terminal 1 (Domestic terminal), Administrative Buildings & associated systems like baggage handling, fire fighting & safety equipment, utilities, HVAC systems. The scope involves project management services for review of all the designs prepared by the consultants and other specialized agencies for civil, electrical, mechanical, fire fighting, IT and instrumentation works, construction supervision, co-ordination at all levels, cost and quality control and timely completion. GA and structural review of administration building, utility trenches, etc have been finalized and civil works at site have been initiated. Review of general arrangement drawings and structural review for foundations of new domestic terminal building has commenced. Contract for the terminal building works has been awarded to L & T.
- ◆ Owner's Engineers Services for immediate impact measures for modernization of Delhi airport for GIL

" There are two ways to live : you can live as if nothing is a miracle; you can live as if everything is a miracle." - Albert Einstein



Buildings

- ◆ Siporex India Ltd (SIL) is setting up a commercial complex for IT. The complex will be approximately 1,00,000 sq ft of useable area and two level basements of total 60,000 sq.ft for parking. SIL has appointed an architect for architectural planning and detailing of the project. TCE will be carrying out detailed engineering for civil, mechanical and electrical systems and construction supervision services for the project.
- ◆ Software Development Park Phase - IV, of Wipro Technology Limited is spread across 50 acres with a built-up area of 7 lakh sq ft. It includes 6 buildings i.e. Software Development Block -1 (G+4), Cafeteria (G+2), Utility Building (G+1), Software Development Block - 2 (G+9), Security Block (G+1) and External Services
- ◆ Review engineering services for Indoor Cricket Academy at Mumbai
- ◆ Project management consultancy for shopping mall at Raipur for GIPL
- ◆ Detailed Engineering for Tata Medical Centre, Kolkata for Tata Medical Centre Trust
- ◆ Proposed Wipro EC 4 phase-III campus at electronic city



Siporex Commercial Complex, Pune



Wipro Software Development Park, Near Pune

Chemical



"Nothing in life is to be feared. It is only to be understood!" - Marie Curie

- The petroleum refinery of Essar Oil Limited at Vadinar was successfully commissioned. The plant which started refining crude oil at a capacity of 7.5 million tons per annum will gradually go upto 10.5 MTPA. Spread over 4915 acres, it is one of the largest greenfield refinery projects. Due to the efforts of TCE, the project was commissioned in November 2006, four months ahead of schedule. Essar Oil Limited presented two safety awards to TCE.
- The Bhadrachalam Unit of ITC Paper Board and Speciality Papers Limited was set up in 1975 and is the largest single location integrated paper mill in India. The Fire Fighting System needed redesign, to comply with TAC regulations and have provisions for anticipated expansion
- Indocat Private Limited, a 50:50 joint venture company formed by Indian Oil Corporation Ltd, Faridabad and Intercat, USA is setting up a 10000 TPA FCC catalyst/additive plant. The facility is proposed to be set up at Dahej, Gujarat. Indocat has awarded TCE the project management services including detailed engineering, construction supervision and commissioning assistance.
- The 7.8 m wide BOPP film project of the Max Specialty Products Limited was commissioned. The project was set up at Ropar, Punjab. Max Specialty Products Limited is a division of Max India Limited. TCE designed - pneumatically operated two tier chill roll stands saved floor space.
- Detailed engineering for ethylene cracker plant of Shell at Singapore for Toyo Engineering India Limited
- Engineering of 20000 TPA Nylon film plant for Vacmet Packing India Limited at Chatta. Main plant building columns are connected by STRAP footings and the main plant equipment are supported on pile foundation. Main plant building is pre-engineered building structure, which has resulted in saving in civil cost and construction time



10.5 MTPA Essar Petroleum Refinery, Vadinar

- Project management consultancy services for 1,70,000 TPA paper machine and 200 tpd de-inking plant for the expansion cum diversification project for Hindustan Newsprint Limited
- Detailed engineering for offsite and utility facilities for PDH & PP project for UHDE India Limited
- Petrokemya VCM CFC phase out project for Saudi Basic Industries

'Give back to the society' is a Tata Group tradition and a Corporate Social Responsibility. TCE has played and is playing its role.



For the 'TCE - Day' function, visually disadvantaged artistes were invited to perform

TCE Volunteers for Tsunami Rebuilding

TCE responded to Tata Tsunami Committee's call and volunteered TCE Engineer's site supervision services.



❁ TCE is training the engineering community to meet the future needs of water sector, particularly 24 x 7 water supply and leakage control.

❁ TCE is giving Engineer's services free to Indian Water Works Association, as a member of the Technical Committee and the Coordinator of newsletter - "Midstream".





Raj Plaza
LBS Marg, Vikhroli (West)
Mumbai 400 083



Sheriff Centre
73/1, St Marks Road
Bangalore 560 001



Surya Bhavan, 3rd Floor
Fergusson College Road
Pune 411 005



Jigyasa Tower
111, SNP Area, Sakchi
Jamshedpur - 831 001



17-18, Zamrudpur Commercial Complex
Kailash Colony Extension
New Delhi 110 048



Technopolis Building
A Wing, 5th Floor
BP - 4, Sector V, Salt Lake City
Kolkata 700 091



K R Buildings
No. 124 A, Floors 4&5
L B Road, Adyar
Chennai 600 020



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