

RENOVATION & MODERNIZATION SERVICES

L&T-Sargent & Lundy Limited



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L&T-SARGENT & LUNDY LIMITED

Over 25 years of global power industry experience

Operating from Vadodara in India

Professional strength > 450

>29,000 MW of Gas Power Projects experience

>35,000 MW of Coal Power Projects experience

>25,000 MW of Renewable Projects experience



L&T-SARGENT & LUNDY LIMITED

L&T-Sargent & Lundy Limited is a joint venture between Larsen & Toubro, India and Sargent & Lundy L.L.C., USA. Established in 1995, it provides consultancy and engineering design services in the field of Power and affiliated sectors. With a professional staff consisting about 450 engineers and designers, it has grown from strength to strength in gathering extensive experience in the power plant engineering and consulting assignments. The company's value system is guided by the Vision and Mission statements which are an integral part of its work culture and ethos.





VISION

To become a leading integrated engineering solutions provider in the global power sector, continuously creating value for our stakeholders

MISSION

- Be responsive to customer needs, delivering optimal solutions and value added services
- Ensure sustainable growth and professional excellence using state-of-the art technology, process-driven approaches, eco-friendly solutions and IT enabled tools
- Foster a culture of mutual trust, respect, teamwork, continuous learning, innovation, challenge and employee empowerment to provide a growth oriented workplace
- Adhere to fair, transparent and ethical practices in interactions with all stakeholders, in keeping the tenets of good corporate citizenship
- Remain flexible and agile, continually adapting to the changing business Environment

PROFESSIONAL STRENGTH

L&T-S&L has presently an overall strength about 450 professionals dedicated to consultancy services in the field of Power Plant engineering and Power Sector in general, based at Vadodara, Gujarat, India. Our professionals have extensive experience in successful delivery of various prestigious power projects. Our strength is further enhanced with the application of state of the art software as well as various in-house developed software's deployed for engineering projects.



R&M CAPABILITIES

Capitalizing on its strength in core engineering services related to power projects, which include feasibility studies, basic and detail engineering services, review engineering, site support services, L&T-S&L offers consulting services Renovation and Modernization Services for utilities, IPPs and private power companies.

Need for R&M Services:

- Deterioration of Original Performance
- Reduced Output
- Lower Efficiency
- Frequent and longer forced outages
- Loss of plant availability

Benefits of R&M:-

- Reduction of capital and operating expenses
- Reduction in fuel costs due to increased efficiency
- Increased revenue due to higher output
- Improved reliability and availability
- Reduced outages
- Significant environmental benefits through reduced emissions
- Shorter payback period





SERVICES OFFERED

Objective of Consultancy

- Identify inherent O&M problems from historical data and records as well as plant walk-throughs
- Identify sources of loss in efficiency due to aging through Energy Audit
- Assess health of plant and machinery through Residual Life Assessment and Steam Path Audit

Based on study the Consultant shall

- Identify measures to recapture or exceed original plant performance in terms of capacity and heat rate level by refurbishment/ rehabilitation, retrofitting & upgrading of plant and machinery
- Demonstrate economic and environmental improvements possible in the performance
- Improve availability/reliability
- Increase operational flexibility
- Increase plant life

R&M Consultancy Services

- Energy Audits including Boiler Performance Evaluation Test
- Steam Path Audits
- Remaining Life Assessment (RLA)
- Detailed Project Report
- Preparation of Techno-commercial Specification
- Evaluation of EPC Bids and Order Finalization
- Supervision of EPC Work as OE

PROJECT REFERENCES

PROJECT NAME	CLIENT	SCOPE OF WORK
156 MW CCPP Project at NTPC Faridabad	NTPC Limited	RLA Study and Steam Path Audit (SPA) of Steam Turbine
Steam Drum of Boiler #2 at Saurashtra Chemicals, Gujarat	Nirma Limited	Failure Analysis
110 TPH CFBC Thermax boiler for 25 MW CPP of Saurashtra Cement, Gujarat	Shree Bhavani Fabricators & Engineers	Conditional Assessment and Residual Life Analysis
20 TPH water tube boiler, Ahmedabad	Chiripal Industries Limited	Residual Life Analysis
CFBC Boiler No. 2 at Saurashtra Chemicals, Gujarat	Nirma Limited	Conditional Assessment and Residual Life Analysis
15 TPH FBC Boiler at Solaris Chemtech Industries Ltd , Gujarat	Shree Bhavani Fabricators & Engineers	Residual Life Analysis
120 TPH boiler, Porbandar, Gujarat	Nirma Limited	Condition assessment
CEHP-2 Boiler, Mithapur unit, Gujarat	Tata Chemicals Ltd.	Residual Life Analysis
3 nos, Bhuj, Gujarat	Ashapura Perfoclay Ltd.	Residual Life Analysis
Process boiler at Amm-III Plant, Gujarat	Gujarat State Fertilizers & Chemicals Ltd.	Residual Life Analysis

PROJECT REFERENCES

PROJECT NAME	CLIENT	SCOPE OF WORK
20 TPH Water Tube type boiler, Gujarat	Vishal Fabrics Limited	Residual Life Analysis
10 TPH CVL make 4 Nos. of Boilers at Kutch, Gujarat	Welspun India Limited	Residual Life Analysis
135 TPH CFBC Boiler at Veraval, Gujarat	Shree Bhavani Fabricators & Engineers	Residual Life Analysis
Boiler C at Reliance Patalganga, Maharashtra	Reliance Industries Limited	Residual Life Analysis
Steam & Water Drum at RIL Vadodara, Gujarat	GE Power India Ltd.	Residual Life Analysis
42 TPH AFBC Boiler at Vardhman Acrylics Limited, Gujarat	Shree Bhavani Fabricators & Engineers	Conditional Assessment and Residual Life Analysis
HRSB 1 CPP plant in Renuagar, India	Reliance Industries Limited	Residual Life Analysis
16 TPH Boiler at Jindal Saw, Karnataka, India	Jindal Saw Limited (IPU-CEMENT-COKE)	Residual Life Analysis
70 TPH Boiler for CPP at RIL Patalganga, Maharashtra	Reliance Industries Limited	Residual Life Analysis
LP motor of 200MW Turbine of Ukai TPS and 210 MW Turbine of Wanakbori TPS, India	Gujarat State Electricity Corporation Ltd	Residual Life Analysis
85 MVA Generator Transformer, Uttar Pradesh, India	Hindalco Industries Limited (Renuagar Power Division)	Residual Life Analysis and Efficiency Study

PROJECT REFERENCES

PROJECT NAME	CLIENT	SCOPE OF WORK
2x12 TPH Boiler for 5 MW Biomass Based Power Plant, Karnataka	Global Energy Pvt. Ltd.	Residual Life Analysis Study
Two (2) Nos. 92.5 MVA Generator Transformer	Hindalco Industries Limited (Renusagar Power Division)	Residual Life Analysis Study
2 x 210 MW Boiler at WTPS, Gujarat, India	Gujarat State Electricity Corporation Ltd	Residual Life Analysis
2x50 TPH CFBC boiler at Grasim Industries	Shree Bhavani Fabricators & Engineers	Conditional Assessment and Residual Life Analysis
3 X 200 MW NTPC Korba Stage-I, Chhattisgarh	NTPC Limited, India	Residual Life Assessment (RLA) of critical pipings, hangers and supports
445 MW CCPP Salalah 2 IPP in Oman	First National Company for Operation & Maintenance Services LLC	Residual Life Assessment (RLA)
HPB-4 Boiler at Mithapur, Gujarat ,India	Tata Chemicals Limited, India	Residual Life Assessment (RLA) and Condition Assessment
HRSG 2 & 3 of CPP-2 plant in Dahej, Gujarat, India	Reliance Industries Limited, India	Residual Life Assessment (RLA) and Condition Assessment
75 MW Boiler at KLTPS Plant, Gujarat, India	Gujarat State Electricity Corp. Ltd. India	Residual Life Assessment (RLA) and Condition Assessment
4x210 MW NTPC Dadri, Uttar Pradesh, India	NTPC GE Power Services Pvt. Ltd, India	Stress Analysis study of critical piping systems

PROJECT REFERENCES

PROJECT NAME	CLIENT	SCOPE OF WORK
2x210 MW NTPC Unchahar, Uttar Pradesh, India	NTPC GE Power Services Pvt. Ltd, India	Stress Analysis study of critical piping systems
3x200 MW NTPC Farakka, West Bengal ,India	NTPC GE Power Services Pvt. Ltd, India	Stress Analysis study of critical piping systems
3x200 MW NTPC Ramagundam, Telangana ,India	NTPC GE Power Services Pvt. Ltd, India	Stress Analysis study of critical piping systems
6x210 MW NTPC Vindhyanchal STPP, 2x500 MW NTPC Rihand STP and 2x500 MW NTPC Shaktinagar STP, India	IRC Engineering Services India Pvt. Ltd.	Stress Analysis study of critical piping systems
UB-1 Boiler of CPP plant in Dahej, Gujarat, India	Reliance Industries Limited, India	Residual Life Assessment (RLA) and Condition Assessment
Furnaces in Manufacturing Complex at RIL Nagothane, Maharashtra, India	Reliance Industries Limited, India	Residual Life Assessment (RLA) and Condition Assessment
50V01, 50R01 IBR Loop & Connected Lines 50V01, 50R01 IBR Loop & Connected Lines in EO/EG at RIL, Nagothane, Maharashtra, India	Reliance Industries Limited, India	Residual Life Assessment (RLA) and Condition Assessment

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PROJECT NAME	CLIENT	SCOPE OF WORK
UB2 boiler of CPP plant, RIL, Gujarat, India	Reliance Industries Limited, India	Residual Life Assessment (RLA) and Condition Assessment
Civil Design and NDT test work for NTPC TPP India	NTPC Alstom Power Services Pvt. Ltd, India	Civil Design Consultancy along with NDT test work
35 & 50 TPH Processed Boilers at Unit CPM, Tapi (Dist), Gujarat India	JK Paper Ltd, India	Residual Life Assessment (RLA) and Condition Assessment
4x135 MW SWPL TPP at Warora, Maharashtra India	Sai Wardha Power Limited (KSK Group), India	Residual Life Assessment (RLA), Condition Assessment & Performance Audit / Energy Audit
4x125 MW Surat Lignite Power Plant (SLPP) at Mangrol, Surat, Gujarat, India	GIPCL, India	Performance Audit, Residual Life Assessment (RLA) & Steam Path Audit (SPA), Borosonic and Baroscopic Tests
1x135 MW VSLP TPP at Chhattisgarh & 2x43 MW ACPCPL TPP at Rajasthan India	KSK Energy Venture Limited, India	Residual Life Assessment (RLA) & Condition Assessment Study
8x135 MW Lignite Base Power Plant at Barmer Rajasthan, India	Raj West Power Limited (JSW Group), India	Residual Life Assessment (RLA) for Condensing Cooling Water (CCW) Pipe

PROJECT REFERENCES

PROJECT NAME	CLIENT	SCOPE OF WORK
2x70 MW Kutch Lignite Thermal power Station, Gujarat, India	Gujarat Electricity Board thru L&T R&M Power, India	Renovation & Modernization Basic Design: <ul style="list-style-type: none">• Steam water flow diagram,• Heat balance diagram Detail Design: <ul style="list-style-type: none">• Lignite pulverizer mills & fuel feeding• Boiler mounting & accessories• Turbine cycle piping including cooling tower• Rotary air heater• Air & flue gas duct• SCAPH, HP/LP Heaters• Dynamic separators• Insulation
2x60 MW & 1x110 MW Units	Tamil Nadu Electricity Board/ L&T R&M Power, India	Complete Refurbishment Engineering and Condition Assessment for Ennore Thermal Power Plant
120 MW each Ukai TPS Units 1 & 2 , Gyharat, India	Gujarat Electricity Board, India	Complete Refurbishment Engineering and Condition Assessment of Unit 1 & 2 – 120 MW each

PROJECT REFERENCES

PROJECT NAME	CLIENT	SCOPE OF WORK
210 MW Boilers and Auxiliaries of Wanakbori Power Plant, Unit I- VI	Gujarat Electricity Board, India	Residual Life Assessment including Carrying out the required tests, Preparation and submission of study report and Recommendations
<ul style="list-style-type: none"> 3x50 MW Bokaro 'A' station Unit 1,2,3 1x140 MW Durgapur station Unit-3 1x140 MW Chandrapura station Unit-2 West Bengal, India	Damodar Valley Corporation (DVC) / L&T O&M Power, India	Residual Life assessment of TG auxiliaries, Balance of Plant equipment for Mechanical, Electrical and C&I system
Steam Generating Plant , Thal ,Rajasthan, India	RCF Thal, India	Residual Life Assessment for 3 nos. Boilers in
Steam Generating Plant of KRIBHCO, Hazira , Gujarat, India	KRIBHCO, India	Residual Life Assessment for Boiler – 1
Waster Heat Boiler and Stream Lines at IFFCO unit, Gujarat, India	IFFCO, India	Residual Life Assessment study of Waste Heat Boiler and Steam Lines
32 MW Dhuvaran TPS, Gujarat, India	Gujarat Electricity Board, India	Residual Life Assessment of Boiler and Auxiliaries Field investigation, Preparation and submission of study report.
(3x210 MW & 2x120 MW), Gandhidham (2x120 MW) , Sikka (4x63.4 MW & 2x140 MW), Dhuvaran TPS, Gujarat, India	GSPC Pipavav Power Company Ltd, India	Detailed Project Report for Repowering and Conversion from Coal based to Gas based power plants

PROJECT REFERENCES

PROJECT NAME	CLIENT	SCOPE OF WORK
494 MW Riverside Repowering Project, Minnesota, Minneapolis, USA	Sargent & Lundy, USA	Overall Engineering of power plant – Mechanical, Electrical, Instrumentation & Civil & Structural Engineering
Ukai TPS, Gujarat, India	Gujarat Electricity Board, India	Consultancy Service for Feasibility of Installing optimal capacity of coal or gas based unit
17 MW Waste heat recovery based power plant in India	BLA Industries Limited, India	<ul style="list-style-type: none">• Rendering advice and assistance during the collection of basic data to ensure accurate estimation of waste heat available in the flue gases• Studying and recommending us in detail about different schemes• Calculate the IRR and payback• Preparation of detailed feasibility report for power generation
63.783 MW Coal based TPS, Tamil Nadu, India	Tamil Nadu Chemical Products Limited , India	Unburnt Carbon Optimization Study of Fly Ash and Bottom Ash

PROJECT REFERENCES

PROJECT NAME	CLIENT	SCOPE OF WORK
2x30 MW Sabarmati TPS, Gujarat, India	Ahmedabad Electricity Co. Ltd., India	<p>Improvement in Existing Ash Disposal / Management System Preparation</p> <ul style="list-style-type: none">• DPR by studying ash handling system• Preparation of Detailed Specifications for the recommended scheme• Review of design & drawing and final approval of the vendor design and drawing
160 MW CCPP of GIPCL, Vadodara, Gujarat, India	GIPCL, Vadodara, India	<ul style="list-style-type: none">• Preparation of Test Procedures after receipt of all the necessary inputs from GIPCL• To witness the performance test carried out by GIPCL prior to shut down• To conduct a Performance test of CCPP Unit after shutdown• Preparation of Draft Test report as a preliminary submission to GIPCL• Preparation and Submission of Final Test report

CONTACT US



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