

List of On Going R and D Projects- Discipline wise

<i>Specialisation</i>	<i>Company Code</i>	<i>Project Description</i>
<i>Consumers' Item</i>		
CNIT		
	1001	Performance Comparison of Compact Fluorescent Lamps
	1043	Development of UPS based super conducting magnetic energy storage
	1076	Design & Development Of Simple Invertor 2.5/3.0 KVA
	1053	Development of New series HT AC generators
	1053	Development of New series LV AC generators
	1076	Design & Development Of 4"x4" Water Pump
	1032	Battires Automotive/Tubular / Traction (For UPS and invertors)
	1076	Development Of New Model EBK 1200 S
	1035	Development of intelligent and high efficient grid interactive UPS system
	1020	Microprocessor based low cost energy saving industrial drives(Phase-II)
	1053	Development of Top terminal box series motors upto 200Kw
	1033	Determination of rating factor for house wiring for various configuration
	1061	Development of 100A power plant
	1053	Development of New Series HT Motor upto 600HP , 4.16KV
	1032	Batteries Automotive/Tubular/Traction(For Ups And Invertors)
	1053	Development of new flame proof series HV motors upto 800Kw
	1088	Development of thin walled winding wire for use in submersible pumps
	1076	Design & Development Of 0.5 Kva Economy Model

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<i>Specialisation Code</i>	<i>Company Code</i>	<i>Project Description</i>
	1091	Various Methods Of Extension Of Supply To Multistoried Complexes
	1019	Conversion of GLS to CL
<i>Distribution-Cables</i>		
DCBL		
	1094	Feasibility Study Of Aerial Bunched Conductor On 11 Kv Distribution Network
	1069	Development of cost effective sheath formulation for Elastomeric cables
<i>Distribution-Equipmen</i>		
DEQP		
	1026	Definite purpose contacter development
	1092	Development of amorphous core metal distribution transformers
	1003	Vacuum/SF6 insulated ring main unit
	1095	Study of development of right type of MOCB as a specific protection to distribution transformer
	1033	Signature analysis of distribution transformer under S/C condition
	1068	MVA X -Ducer for balance load
	1021	Beneficial utilization of discarded 11 & 33 kV breakers in Sub stations released under renovation and augmentation and up-gradation
	1095	Study of performance of 33KV medium voltage SF6 CB
	1003	12KV,1250A,20KA/50KA Fault make earth switch
	1036	Development of automatic voltage regulation relay
	1003	12KV,400A,12.5KA Oil filled vacuum autocloser of insulation level of 50KV/110KV peak
	1092	Energy conservation through lower frequency vacuum drying of distribution transformer with regulated input voltage
	1021	Study and development of right type of MCCB as a specific protection to distribution transformers and its effectiveness compared to
	1016	Rural Starters

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	1026	Reliability of contactor for transportation application
	1098	Assessing the suitability of premoulded equipment connectors and cable joints (11&33KV) for quick and reliable
	1091	Reclamation Of Transformer Oil Using The Method Developed In-House
	1078	Development of transformer turns ratio meter
	1035	Development of indigenous SCADA software package with specific features for electrical energy management
	1003	12KV,400A,12.5KA Oil filled vacuum autocloser
	1035	Automation of 11KV distribution network of Thiruvanthapuram
	1016	Switch disconnecter fuse (low voltage) rating 125A AC23 to IEC 60947-3
	1003	SCADA Compatibility with autocloser
	1028	Development of single shaft operated changeover switches in the entire range from 125A to 6300A
	1098	Beneficial utilization of discarded 11KV and 33KV breakers in sub station
	1093	Design of suitable DOLO units to substitute the existing DOLO units with fuse links
	1065	Out door resin impregnated 11 and 33 kV series layer wound reactor coils
	1092	Energy conservation through lower frequency vacuum drying through LT short circuit and regulative input voltage of distribution
	1016	Capacitor switching contactors above 20KVAR and improved varieties
	1097	Enhance the power transformer capability and improve the dynamic performance of the power system through fast control
 <i>Distribution-Metering</i>		
DMTR	1011	New concepts for automatic meter reading
	1061	Development of single phase & three phase energy meter
	1003	12KV,1250A,25KA Compact VCB Panel
	1067	Development of single phase 2 wire static watt hour meter upto 40Amp (Discrete)

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	1003	Out door metering unit with out door resin cast (Cycloaliphatic Resin System) instrument Transformer
	1011	Microcontroller based 3 phase Bivector/Trivector meters
	1033	Development of digital power meter
	1007	Design and development of 3 Phase Electronic Energy meter with radio frequency interface
	1007	Design and development of Transformer Production cum metering unit for LT Transformer
	1068	Development of microprocessor based kWh pulse output
	1035	Development of 3 phase ASIC based energy meter
	1089	Data processing and historic events logging systems
	1026	IC card operating energy meter
	1031	Power factor Corrected switching Power Supplies range from 250W-650W
	1011	Scheme for non technical loss reduction through operator based restructured Distribution System
	1011	Scheme for technical loss reduction through apparent energy measurement / Metering
	1011	Development of static single phase apparent energy (KVAh) Meters
	1067	Single phase 2 wire static watt hour meter upto 40Amp (SMD)
	1009	Combined 3 Phase KW/PF Digital Meter in 96 Sq. Housing
	1067	Three phase 4 wire static watt hour meter upto 40 Amp
	1007	Development of network power supply ranging from 100KW to 300 kW
	1060	Development of integrated system for electrical energy conservation and management with mixed solar, micro hydel , wind and Bio mass
	1074	Development of static energy meters and systems , whole current , LT /CT, HT types for utilities and industries
	1011	Development of multi channel meter
	1009	3 Phase Energy Meter with RS 485 output

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<i>Gen-Hydro-P.Plant-El</i>		
GHPE		
	1023	Failure analysis of shorting ring of large size induction motors
	1091	Effects Of Under Frequency On Turbine Rotor Blades And Bearings
	1082	Development of computer software for dynamic behaviour of framed foundations for high speed rotating machinery in power plants
	1033	Development of New material for hydro turbine
<i>Gen-Hydro-P.Plant-Me</i>		
GHPM		
	1003	High efficiency aerofoil bladed flat shroud impeller FSA-24 series
	1003	High efficiency aerofoil bladed flat shroud impeller FSA-11 series
	1096	Prediction of residual life of hydro turbine runners(Pelton wheel)
	1039	Stress analysis of turbine components
	1015	Computational fluid dynamics
	1023	Consultancy on rotor fault analysis and damage minimization in large size turbines for thermal power stations
	1003	High efficiency laminar bladed flat shroud impeller FSB-11 series
	1021	Development of erosion resistant coatings for Hydro turbine under water parts
	1039	Development of 25MW indigenous turbine
	1059	Development of methods for removal colloidal silica by ultrafiltration
<i>Gen-Th-Coal-Environ</i>		
GTCN		
	1059	Study of effect of moisture and ash content on GCV and UHV
	1013	Fuel Gas Conditioning Using Amonnia As Conditioning Agent
	1021	Ground water quality management in the areas around ash ponds of two thermal power stations

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	1097	Study the effect of atmospheric pollution on insulator flashover and remedial measures thereof
	1046	Study of energy efficient technologies and their role in reducing GHG emissions
	1047	Utilization of fly ash towards building materials
	1047	Utilization of FGD gypsum wherever high sulphur are used
	1046	Study of way and means to reduce GHG emissions in power sector
	1026	Study on Marble waste powder utilization for environmental protection
	1085	Utilization of fly ash for soil amendment to increase forest productivity
	1026	Fabrication of fly ash gypsum light weight boards
	1026	Synthesis of fly ash based controlled release composite fertilizer
	1033	Durability study of fly ash bricks
	1045	Feasibility Study For Dust suppression & Improved Flu Gas Quality
	1045	Morphological Investigations Of Flyash Using Sem/Tem/Sem-Edx
	1045	Study On Possibility Of Utilising Solid Waste & Fly Ash For Backfilling & Reclamation In Opencast Mines
	1045	Study Of Coal Washability Characteristics Of Purewa East Seam Of Amlohri
	1045	Face Sampling And Washability Studie On Purewa East Seam Of Amlorhi Coal
	1098	Beneficial utilization of Fly ash produced in TPS
	1077	Analysis of Air,water,effluents,soil & solid waste,Emission Samples & Monitoring of Environments
	1059	Study of slagging problem at RSTPS
	1076	Reduction In Noise Level Of Gensets Design & Development Of Acoustic Enclosure For Models Ebk 1200/Ebk 2000/Ebk 2800
	1015	Development of low Nox technologies for PC fired boilers
	1022	Bulk utilization of fly ash for : - 1. Soil amendment , 2.waste land reclamation, 3.Restortion of biological system, 4.Brick/block

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<i>Gen-Th-Coal-P.Plant- GTCE</i>	1045	The Phenomena Of High SO ₂ Emission Of Ramagundam Super Thermal Power Plant
	1059	Characterization and feasibility of recovery of gallium from fly ash
<i>Gen-Th-Coal-P.Plant- GTCE</i>	1032	Switched Reluctance Drives
	1098	Reduction of auxiliary consumption using high voltage capacitors
	1091	Conservation Of Energy
	1033	Study the effect of electrical surges on rotating machines
	1038	Development of process to reduce overall fuel consumption through escaping flue gases at melting and holding stage
	1012	Microprocessor based protection of alternators
	1012	Generalized robust controllers for MIMO system
	1057	AI Based Protection Systems For Power Generations
	1032	Chopper control / both thyristorised and MOSFET
	1033	On line condition monitoring of electric motor through stator current
	1012	Microprocessor based protection of alternators
	1032	Chopper Control/both Thyristorised and MOSFET
	1095	Evaluation of effective method for assessment of capacity of induction motor at the consumer premises
	1012	Condition monitoring of electrical equipments in power plants
	<i>Gen-Th-Coal-P.Plant- GTCM</i>	1089
1082		Development of expert system for design of natural draught hyperboloid cooling towers

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	1098	Elimination of colloidal silica in raw water
	1082	Development of program for dynamic response of cooling towers
	1082	Development of software for non linear and dynamic response of hyperboloid cooling towers and pressure vessels subjected to wind
	1015	Field evaluation of co-firing petcoke with coal
	1070	Suitable materials for condenser tubes
	1021	Ways & means to remove colloidal silica from raw water and D.M. Water
	1066	Study and implementation of various fan drive control systems for cooling tower energy optimization
	1021	Development of suitable material to combat excessive abrasive wear in coal grinding mix components
	1070	Prevention of corrosion and de-scaling in cooling systems
	1022	Utilization of coal pond feed stock for coal water slurry as co-firing in power plants
	1023	Balancing of reconditioned rotor in situ - 25 ton rotor of synchronous condenser for KEB
	1066	Design and development of cooling towers with pultruded FRP structure
	1066	Design and development of drive shafts for power transmission in cooling towers
	1022	To know the combustion characteristics of pulverized coal by Drop Tube Furnace
	1066	Evaluation and application of various grades of steel for cooling tower structure, hardwares and components
	1029	Thermodynamic and Kinetic studies on the fire side corrosion of boilers fired with fuels rich in sulphur, vanadium and sodium chloride
	1066	Upgradation of FRP technology for improving quality and productivity of cooling tower components
	1066	Design and development of various types of fills for efficient air water contacts in cooling towers
	1027	Optimal blade angle for energy maximization
	1026	Optimization of boiler efficiency and heat utilization of industrial boiler through fuzzy logic controller
	1066	Basic heat transfer study for improving cooling tower design

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	1022	Development of Pressurized Fluid Bed Combustion (PFBC) Systems for high ash Indian coals
	1048	Illumination Re design of thermal power plants
	1070	Power control system in high pressure heaters of thermal power plants
	1066	Determination of performance characteristics of various types of fans blades profiles in wind tunnel
	1015	Pressurized fluidized bed gasification combined cycle demonstration plant
	1070	Metallurgical / mechanical investigation of boiler tubes like creep testing and failure investigation
	1015	Demonstration of vacuum residue fuel for boilers
	1012	Condition Monitoring of electrical equipments in power plants
	1066	Design and development of high efficiency nozzles for cooling towers
	1098	Estimation of organic matter in raw water
	1025	Development of 25KW industrial power generator using high ash coal in a oscillatory combuster
	1089	Development of smart scavenging process
	1015	Hot gas filter system
	1057	Torsional Stresses In Turbine Generators
	1024	Metallurgical investigation into the cause of in-service failure of thermal power plant components
	1015	Field demonstration of smart wall blowing system for PC fired boilers
	1015	Evaluation of firing of blends of imported and Indian coals on boiler performance
	1013	Sludge Lancing Equipment For Removal Of Deposited Sludge On Tubes & Bottom Tube Sheet Of Steem Generators
	1066	Design and development of high efficiency axial flow fans for cooling tower applications
	1023	Chemical and metallurgical investigations in to materials and heat treatment problems in motors and related electrical equipment
	1090	Development of high efficient vertical mixed flow pumps for condensor cooling water application for power plant

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	1085	Thermal performance evaluation of tube type air to air heat exchangers for high rated electrical motors
<i>Gen-Th-Gas-Environm</i>		
GTGN	1048	Studies on impact of powers sector on human development index and environment
	1064	De sulphurisation and particulate removal from hot gases in an IGCC
<i>Gen-Th-Gas-P.Plant-E</i>		
GTGE	1085	Prediction of air flow in radial ventilated motors with and without heat exchangers
	1057	Expert-Systems For Condition Monitoring Of Turbo Generator
<i>Gen-Th-Gas-P.Plant-</i>		
GTGM	1064	Power cycle optimization of domestic coal fired IGCC plant
	1041	Design and development of gas engines working on 100% producer gas in G4 series
<i>Gen-Th-Liq</i>		
GTLN	1076	Exhaust Emission Control Of Portabl Gensets To Meet Emission Regulation
<i>Gen-Th-Liq</i>		
GTLE	1054	Development of new engines for DG sets with higher power per unit of swept volume (upto 30KVA per litre of swept volume)
	1054	Upgradation of existing engine model used for DG sets to meet US Tier 1 emission norms
<i>Gen-Th-Liq</i>		
GTLM	1041	Development of modified component of D3 series Diesel engine
	1028	Development of silent DG sets
	1027	Prototype development of a high penetration wind - Diesel Hybrid system
	1041	Indigenous development of casting D4 series diesel engines

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<i>Specialisation Code</i>	<i>Company Code</i>	<i>Project Description</i>
	1023	Investigation of excessive vibration in captive power generation units(DG sets) of KPTCL at Yehlanka, Bangalore
<i>Gen-Th-Others-P.Plan</i>		
GTOE		
	1045	Capacity Evaluation Of Induction Furnace
<i>Material Science</i>		
MTSC		
	1080	Development of hydrogen production technologies
	1029	Development of Electro slag cladding for dissimilar metals/bimetallic alloys and study of the bond interface
	1029	Hard coatings of Titanium/Zirconium Diboride and Carbon Nitride by sputtering
	1029	Textural development of AISI 316 Austenitic stainless steel during cold rolling and annealing
	1069	Development of PVC insulation compound with fire resistant low smoke (FRLS) properties for house wiring
	1029	Determination of Micro-mechanical parameters of piping Material
	1066	Study the change in behavior in chemical and physical properties of different cooling tower material under hot and humid atmospheric
	1033	Development of indigenous RTV coating for improving performance of outdoor insulator in polluted condition.
	1038	Development of 6-7mm dia solution treated and stabilized alloy rod of 6201/6101
	1038	Development of alluminium high conductivity alloy grade of 1120 having conductivity of 58-59% IASC
	1038	Development of 5000 series electrical and mechanical grade alloy rods in different diameters and heat treated conditions
	1059	Study of metallurgical degradation of hot gas casing material (Inconel-617) in gas turbine
	1069	Development of Ethlene Vinyl Acetate (EVA) rubber compound with high tensile and electrical properties
	1043	Development of state of art optical sensors for industrial applications
	1071	Development for storage of hydrogen in alloys and compounds of metal in bulk and thin film form
	1098	Study on corrosion in switch gear and isolators in the sub station situated in the coastal areas

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	1029	Mosbauer studies on Precipitation in steels
	1080	Development of hydrogen storage material
	1075	Preparation of cadmium ferrous Selenide thin films by electrodeposition technique and their use in rechargeable storage cells
	1088	Development of elastomeric compounds for high temperature application
	1038	Development of high speed (1300-1400 RPM) skip tranders to stand Al alloys wires in sizes 20,34,55 and 80 Sq mm
	1088	Development of high stress capacitor of more than sixty volts/micro design
	1088	Development of techniques for characterization of polymers
	1070	Corrosion protection-coating in metals and alloys in different environment
	1098	Estimation of unburnt carbon and suggestion for reduction
	1029	Micromagnetic techniques in ferromagnetic materials
	1080	Material research on specifically polymeric membranes , catalysist and nano materials
	1048	Development of an integrated method for 3D filed optimization using parametric CAD model
<i>Non NCFC</i>	1018	Environment impact assessment of fuel cell technology
	1007	Development of stand alone fuel cell system integrated to solar system
	1080	Development of PEM fuel cell technology and its application in portable,transport and other areas
	1037	Development of fuel cells
	1018	Study of solid polymer electrolyte fuel cell
	1040	Development of electrocatalysts for Methanol oxidation for use in fuel cells
	1040	Development of electrocatalysts for Oxygen reduction in fuel cells

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<i>Specialisation Code</i>	<i>Company Code</i>	<i>Project Description</i>
<i>Non</i>		
NCOT		
	1073	Large biomass gasifiers of capacity 100 kW to 1 MW for power generation
	1041	Design and Development of 100% Bio gas engines developing 300KVA
	1008	Conversion of Natural Gas Engine to run on Producer gas generated from Biomass gasifier of capacity 62.5KVA
	1008	Development of 0.5MW Rice Husk gasifier for power Generation using Dual fuel Diesel Gensets
	1046	Study of barriers to adoption of renewable energy technologies
	1062	Gas hydrate physical modeling and simulation studies to develop exploration and exploitation concepts
	1056	Bio mass based power generation
	1026	Development of solar still for better distillation rate
	1015	Field evaluation of co-firing different biomass with bagasse in stokers
	1026	Biological Effects of magnetic fields
	1072	To substitute bulk volume petro-fuel base energy by presently unutilized generation capacity of power plants during lean/off peak
	1048	Studies on power generation from gasification of rice husk
	1062	Identification of drillable CBM prospects of PEL area of Jharia Basin
	1023	Fine balancing "in-situ" of 2.5 MW reactor coolant motors for atomic energy applications
	1083	0.5 MW high rate biomethanisation demonstration project for recovery of energy from industry waste water
	1023	Development of special purpose machinery for energy sector
	1073	Large scale generation of methane rich gas through anaerobic decomposition of surplus crop residues
	1071	Development of hydrogen run water pump

Non

NCSL

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<i>Specialisation Code</i>	<i>Company Code</i>	<i>Project Description</i>
	1064	Solar flat plate collector test facility
	1018	Integrated energy supply to Indian domestic sector,utilising conventional and renewable energy sources-Study of issues and
	1048	Development of contacting for thin film solar cells
	1018	Study of performance reliability evaluation of solar water heating system
	1001	Improving Solar Distillation in Basin Solar Still
	1064	Performance evaluation of photovoltaic water pumping system
	1018	Experimental investigation and econometric modeling of parabolic solar cookers
	1073	Development and studies on 3 kW stand alone solar photovoltaic diesel power system
	1048	Study on embedded power generation using photovoltaic technology
	1018	Power conditioning system for integrating 1KW Solar Photovoltaic System with utility Grid
<i>Non</i>		
NCWD		
	1027	Grid related problems of wind farms
	1002	Active Static VAR Compensator for Wind Mills
	1035	Development of 250KW four quadrant power converter for wind electric generators
	1027	Study on wake losses at Kayathar Wind Farm
	1064	Development of wind electric water pumping system
	1018	Reactive power control of Wind Systems
	1001	Wind Resource Assessment Program
	1027	Failure analysis of gear box of Wind Electric Generators
	1043	Optimal siting of wind turbine
	1073	Operational research on stand alone wind-diesel hybrid system of 3.6 kW capacity

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<i>Residual Life RLAS</i>	1081	Development of wind turbine (model Niharika-ishan)
	1017	Solution of Unit Commitment problem
	1024	Assessment of present state of health and service suitability of old thermal power plant components
	1098	Life Assessment of 6.6 kV switch gears
	1013	Residual Life Estimation And Life Extension ,Fitness For Purpose Evaluation And On Line Fatigue Monitoring System
	1085	Motor foot failure analysis
	1085	Aging studies on oil impregnated paper(OIP) insulation and parameter correlation for reliability evaluation
	1098	Effect of aging of transformer insulation and mineral insulating oil in service
	1043	Development of SAVE , ISIRD scheme
	1021	Improving Performance of VTPS stage II & III units
	1024	Residual life assessment of aged thermal power plant components
	1029	Fatigue crack propagation studies on PHT Nuclear Piping
	1026	Reactivity assessment of power station coals and impact on power plant performance
	1015	Residual life assessment
	1017	Solution of thermal unit maintenance scheduling problem
	1026	Enhancement of service reliability of MPT capacitors
	1018	Evaluation of techno-economic barriers and evolution of strategies for commercialization of solar water systems in India
	1015	Study of plant and site support
	1029	Physically based constitutive equation for design and life prediction at elevated temperature - modeling and validation

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<i>Code</i>		
<i>Testing/Measuring</i>		
TEST		
	1068	Development of microprocessor based 32 PT - Alarm Annucitor
	1078	Development of Fully automatic PC based capacitance and TAN Delta Test set
	1018	Networking of Micro-controllers
	1051	Fuzzy systems and ANN based package for power system applications
	1018	PSPICE modeling of opto-electronic devices
	1021	Evaluation of outdoor insulating materials by service simulated lab testing methods
	1098	Study on effect of harmonics
	1066	Design and development of full scale test facility for testing various components of cooling towers
	1072	To mitigate peak-hrs. deficit by off-peak surplus
	1068	Development of microprocessor based 8 PT - Alarm Annucitor
	1021	Diagnostic studies & evaluation for frictional incendivity surface temperature rise of flame proof enclosures
	1058	Development of high temperature calibration system
	1068	Development of microprocessor based tachometer and line frequency indicator
	1021	On line computer control of Generators in a thermal power station
	1011	Development of microcontroller based low cost , highly tamper immune , static three phase active cum apparent energy and single phase
	1072	Development of off peak / midnight hours load on electricity system through DSM, nonconventional in nature
	1018	Fibre optic sensors for measurement of temperature
	1018	A study of modern electronics and instrumentation laboratory teaching and evaluation techniques
	1068	Development of Micro Processor based Tacho Meter
	1023	Evolution of measurement protocol and evaluation of noise levels (very low < 45 dB) of transformers for export as per international

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	1033	Transformer Winding Resistance Meter
	1018	Centralized control systems-Implementation by networking Microcontrollers
	1029	Development of magnetic sensor for material characterization
	1057	Power System Stability And Distribution Automation
	1026	Development of software for Data acquisition , Evaluation and generation of control signals
	1078	Development of transformer winding resistance meter
	1052	Solid Model / Rapid Prototype for accelerated product development
	1068	Development of 8 channel data logger
	1052	Fluid flow + heat transfer Studies
	1078	Development of Insulation resistance tester (Both hand cum motor operated as well battery operated)
	1018	Resonant DC-DC converter
	1026	Active power line conditioner
	1078	Development of digital surge comparison tester
	1013	Insitu Measurement For Detection Of Turbine Blade Vibration
	1017	Load forecasting
	1084	Development of In service eddy current inspection
	1086	Design development , prototype manufacturing and testing of transformers and switchgears for 800KV system(Mainly power transformers , CTs
	1089	Development of new generation gas,moisture and Tan Delta measurement apparatus
	1089	Development of computerized condensation pattern derivation packages
	1018	Design synthesis of operational amplifiers from user given specifications
	1009	Digital Voltage /Current/Frequency Indicator in 96 Sq housing for DG sets

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	1079	Development of innovative laboratory kits in frontier areas of electronics and instrumentation
	1052	Computational fluid dynamic studies of flow through fluid handling devices
	1068	Development of Universal calibrator
	1024	Condition monitoring of rotating machines of thermal power plant through vibration analysis
	1052	Computational / Experimental fluid flow studies in sumps
	1052	Stress analysis for mechanical components
		Vibration studies of pump installations
	1052	Seismic Analysis of mechanical assemblies
	1009	True RMS Portable 0.2 Class Multi Digital Meter Using Micro Controller
	1090	Development of CADD and engineering software to aid to the design a analysis of a new pumps for flow analysis and system
	1052	Model/prototype pump testing (Maximum Capacity 49000 Cu M/Hr)
	1043	Multi sensor based on line condition monitoring for intelligent manufacturing system
	1098	Study on methods of monitoring transformer insulation through tan delta testing
	1068	Development of Universal indicator
	1068	Development of microprocessor based P.F. Corrector
	1021	Study of voltage instability & collapse of Power System
	1021	Three phase Harmonic Analyzer
	1009	96 & 72 Sqmm Snap fit Moving Coil and Moving Iron Meter
	1048	Development Real time SCDA model for interconnected power system
	1026	Development of pollution monitoring equipment and measurement at site
	1098	Sound level measurement and analysis in thermal power stations
	1033	Application of genetic algorithm to power system optimization problems

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	1009	3 phase powerline monitor with RS485 interface and SMPS for power supply to reduce the size and cost
	1026	Numerical modeling of thermo fluid flow processes in a typical Indian station Boiler
	1026	Automation of transformer loss measurement and impulse test measurement
	1013	In-Service Inspection Of Components Including Eddy Current Testing For Detection Of Annular Gaps & Surface Defects,Heat Exchanger Tube
	1026	Field test kit for current transformer
	1006	National policies on energy:Implications of and opportunities from the framework Convention on Climate Change
	1029	Small specimen testing and Ball Indentation Technique for Mechanical Property Determination
	1005	Frequency detectors for input power frequencies in various applications
	1013	Comprehensive Component Integrity Testing Programe Involving Fatigue & Fracture Testing Of Pipeline Product Such As Pipes & Elbows
	1001	Pulse charging technique for batteries -Experimentation
	1026	Condition Monitoring of stator core of HV rotating machine in services by Electromagnetic core imperfection detector
	1026	Development of test procedure for trace and ultra trace elemental analysis
	1018	Fluro optic temperature sensor
	1005	Microprocessor based sequence of event recorder for chronological identification of upto 512 critical events in power plants
	1009	Low cost DC to DC transducer with Galvanizing Isolation using Analogue optical Isolation
	1034	Time switch
	1005	Microprocessor based data acquisition for monitoring and controlling of motor speeds
	1091	Short Term Load Forecasting Of Ap-Grid Demand
	1043	Fault tolerant control system
	1034	A series low cost
	1005	Remote Telemetry Units - Ruggedised intelligent Microprocessor based systems ideal for whole range of SCADA and process control

List of On Going R and D Projects- Discipline wise

<i>Specialisation Code</i>	<i>Company Code</i>	<i>Project Description</i>
	1005	Dedicated systems for control and monitoring of heat processes
	1043	Integrated design of building automation system for energy optimization and supervisory control
	1098	Failure analysis of 11KV & 22KV metering set
	1034	Digital timer
	1052	Transient analysis of piping system
	1013	On Line Monitoring Of Turbine Vibrations And Process Parametrs
	1043	Study and development of real time intelligent controllers based on neuro fuzzy techniques
	1029	Cyclic J integral evaluation of various nuclear grade C-Mn steels
	1034	Sequential timer
<i>Transmission-Cables</i>		
TCBL		
	1026	Aging procedure for an RTV coated insulator
	1091	Failure Analysis Of Under Ground H.T/L.T Cables And Joints
	1026	Development of GIS cable termination
	1088	Development of special submarine cable
	1018	A theoretical study of the modal properties of A Tapered fiber
	1026	Evaluation of profile for DC insulators under polluted conditions
	1026	Technology development of Flame Retardant low smoke cable
<i>Transmission-Civil</i>		
TCWK		
	1094	Techno-Economic Feasibility Study And Design Of Concrete Embedded Earth Mat For EHV Substations
	1082	Development of dynamic analysis to survive shock loads due to blast and impact

List of On Going R and D Projects- Discipline wise

<i>Specialisation</i>	<i>Company Code</i>	<i>Project Description</i>
<i>Code</i>		
<i>Transmission-Commu</i>		
TCSW		
	1057	Ai-Based Protection Scheme For Power Systems
	1018	Design explorations of VLSI arithmetic circuits
	1018	Physical Model for inversion layer mobility in MOS transistor
	1044	PSS tuning in WREB
	1017	Network planning
	1048	Development of contingency plan of DVC power network
	1057	Resonant Converters And Active Filter For Power Quality Assurance
	1018	Optical Communication Networks simulation and Test facility
	1063	R&D on data acquisition
	1021	Techno - economic feasibility study of fibber optic communication with other communication system in MPEB
	1018	FIBRE-OPTIC
	1012	Investigation on tie line control and voltage instability of power grids in power system of developing countries
	1018	Radio Frequency Circuits for wireless communication
	1089	End point analysis system for optimization of process
	1035	Development of SMPS power plant of 25A rating for telecom application
	1026	Study of aging characteristics on cable termination
	1018	A comprehensive study of hot carrier effects in VLSI deign
<i>Transmission-Equipme</i>		
TEIT		
	1032	Switched Reluctance Drives

List of On Going R and D Projects- Discipline wise

<i>Specialisation Code</i>	<i>Company Code</i>	<i>Project Description</i>
	1057	Augmentation Of Performance Of Modern Drives With Power Quality Consideration
	1066	Out door 25KV / 110KV cast coils transformers for railways
	1089	Development of SF6 liquefaction plant
	1017	Solution of capacitor placement
	1044	Design of TCSC controller
	1026	Corona performance of bundle conductors measured in Corona cage
	1026	Development of three source test circuit for single phase synthetic testing of EHV circuit breakers
	1026	Capacitive current switching capability of HV Vacuum circuit breaker
	1026	Evaluation of earth resistance of bentonite encased electrodes
	1021	Study on performance of 33KV medium voltage SF6 circuit breaker designed as maintenance free equipment
	1026	On line Conditioning / Monitoring of HT capacitors
	1028	Upgradation of low rating breakers of 1000A and 1600A to meet higher breaking capacity of 65KA
	1026	Flow Electrification and partial discharge phenomena in power transformers
	1057	ANN-Based Power System Protection
	1038	Study of fatigue analysis and vibration of AAA conductors in T&D system of APTRANSCO
	1095	Development of Insitu drying of power transformers from resistive heating method
	1094	Development Of IR Thermometer For Hot Spot Detection Of Distant Objects(In Collabrations With VSSC,TVM) In Substations And Lines
	1097	Upgradation of 132KV to 220 kV line using insulated cross arms
	1091	Study On Insulator Contamination
	1014	Development of Compact Vacuum interrupters in the medium voltage range of 6.6KV to 36KV for Vacuum Circuit Breakers
	1093	Imperfect grounding of neutral wire of distribution line performance with special reference to neutral to earth voltage

List of On Going R and D Projects- Discipline wise

<i>Specialisation Code</i>	<i>Company Code</i>	<i>Project Description</i>
	1002	Active Harmonic Filter
	1019	Study to convert regular ballasts to electronic ballast
	1093	Evolving design of earthmat of a substation site with limited area and high resistivity soil
	1021	Field trial of thermosyphon in power transformers in the GEB grid
	1098	Performance analysis and condition monitoring of SF6 and vacuum circuit breakers in sub station
	1014	Development of Vacuum interrupters for load break switch application
	1026	Polyol esters as dielectric liquids
	1048	Development of high performance electronic ballast for energy efficient illumination and improved DSM
	1026	Time synchronization of EHV sub station equipment using GPS receiver
	1026	Study of performance of Zinc Oxide/ Metal Oxide lightning arrester blocks under accelerated aging test
	1050	Pole-mounted Auto recloser
	1050	Different versions of Ring Main Unit
	1050	Magnetic Actuator based Vacuum Circuit Breaker
	1051	Incorporation of FACTS controllers for large integrated power system
	1023	Balancing (Flexible rotor protocol) of rotors of twin pole DC motors (about 1.2MW) for M/s Kirloskar Electric Co.
	1044	Development of control strategies and determination of optimal location for FACTS devices
	1055	Upgradation of LV switchgear
	1028	Development of mechanically interlock breakers for change-over requirement (for breakers from 400A to 6300A in four pole version)
	1021	Study on corrosion in switchgears and isolators in the sub stations situated in coastal areas
	1033	Condition monitoring of gapless lightning arrester
	1038	Development of ACAR and AACSR conductors

List of On Going R and D Projects- Discipline wise

<i>Specialisation Code</i>	<i>Company Code</i>	<i>Project Description</i>
	1035	Development of active VAR compensator of 350KVAR
	1048	Study of impulse fault diagnosis in HV transformer by pattern recognition technique
	1033	Study of breakdown phenomena in SF6 insulator system
	1021	Development of demonstration model for transformer oil reconditioning in remote areas
	1033	Development of polymer concrete based CT & PT
	1033	Field evaluation of non ceramic insulators
	1033	Active filter for harmonics elimination in Power system
	1053	Development of forced cool inverter series motors upto 1500Kw,690V
	1018	Study and design of switched capacitor filters
	1018	Design and stability analysis of HVDC resonant converter
	1021	Design and development of high performance digital relaying scheme using Digital Signal Processors (DSPs) based hardware platforms
	1033	Detection of partial discharges through acoustic emission signals of PT
<i>Transmission-Fabricat</i>		
TFER		
	1082	Development of knowledge based system for analysis and synthesis of transmission line towers(KASTLE)
	1026	Design , fabrication and development of dropout type expulsion fuse
	1026	Design of longitudinal anchor structure for improved loading system on broken wire condition
	1082	Development of software package Tower Analysis Program System(TAPS)
	1082	Development of expert tower analysis and design system(EXTASY)