

**EXPIERIENCE LIST**

BELOW IS A COMPREHENSIVE LIST OF WORKS CARRIED OUT BY EERIGAL ENERGY AS A COMPANY OR CONTRACTOR OR WORKS CARRIED OUT BY ERRIGAL ENERGY CORE STAFF PRIOR TO JOINING THE COMPANY

Year	Job Type	Customer	Location		Scope
2022	Maintenance Inspections.	MASS Group ARB	Iraq	Engineering, Supervision and Manpower Services	Carried out several Major inspections and HGP inspection on GE Frame 9E gas turbines.
2020	Maintenance Inspections.	MASS Group ARB	Iraq	Engineering, Supervision and Manpower Services	Carried out several Major inspections and HGP inspection on GE Frame 9E gas turbines.
2020	Maintenance Inspections.	MASS Group ARB	Iraq	Engineering, Supervision and Manpower Services	Contracted directly to the owner to carry out complete Internal Casing Alignments on 2 Frame 9E Gas Turbines as a result of Casing Slippage as reported by the OEM. Errigal Energy mobilized on emergency basis to carry out the complete scope of taking the Internal alignment readings, Moving the casings to the correct locations, Drilling and redowelling and then to rebuild and recommission the units. All work was carried out successfully and the unit brought back into reliable operation without the need for any further attention.
2008/2019	Consultancy Services	Chairman of MGH	Iraq	Consultancy Services	Appointed directly to the Chairman (owner operator) and Vice Chairman to assist and guide them in all aspects of running and operating 3 large scale power Plants of maximum Capacity 4000mw (2 combine cycle 1 simple cycle plant). My major roles here were as follows. Reviewing of all Technical and Commercial Documentation pertaining to all contracts with OEM's and service providers and to be involved in all Contract negotiations with OEM's (GE, ABB, Enka, Sulzer, Wood group, Chromalloy, Brush etc. Full responsibility to follow all Contract Fulfilment once awarded. Provide technical Guidance and advice on a daily basis to all technical staff. Set up the complete O&M team and training of the same Set-up of Complete Central Maintenance Department to cover all 3 power plants. Frequent travel for F.A.T and Factory repair inspections. Coordination of all Maintenance and Commissioning staff during all Erection projects. Coordination of all Maintenance and Commissioning during maintenance outages. Set up and Management of all commissioning activities during installation of four different



					CCPP power plants. Training of Local staff personnel on a regular basis. Responsible for many design upgrades and plant improvements. Construction Site manager during erection, installation and Commissioning of Combined Cycle Power plant.
2019	Besmaya 3000MW CCPP	MASS Group Holding	Besmaya, Baghdad, Iraq	Consultancy Services	Reporting directly to the Chairman we were contracted to advise on some technical issues arising at site from an O&M perspective.
2015 /2018	Oilfield services ARAMCO	Business and construction Establishment	Saudi Arabia	Business Development services	Prequalification of the company at ARAMCO for civil works related to oilfields services. I build the HSE system for the company and supervised the prequalification process until passing all the requirements and got approved by ARAMCO.
2018	Benghazi Power Plant Libya Alstom GT13E2 and GT13D	Algec/GEECOL	Libya	Site and unit Assessments	Contracted through Algec to assist them in site and unit assessments to prepare the plan and logistics for the future outage requirements required at site
2017/ 2018	4 x Siemens STG (400MW) 1,600 MW	GE/MOE Baghdad	Mussaib Thermal Power Plant	EPC Contract	Leading below mentioned activities as EPC company owner and fully authorized SITE MANAGER; Operation of 400 MW turbine of power plant during maintenance works, Assessment and refurbishment (reverse engineering, as built drawings, manufacturing required pieces/components, machining, repairing) of exploded generator and its auxiliaries, performing 30 different purchase orders from contractor (GE) and ensured the successful operation of an above-mentioned exploded generator. Camp management, Lifeline services (security, transportation, medic, firefighting, kitchen & restaurant, IT management, pest control etc.)
2017	Natural Gas Investment	MBR Group from Sudan in collaboration with His Royal Highness Prince Faisal Bin Musaed Al Saud	Sudan	Consultancy Services	Senior Consultancy Services in charge of preparing the techno commercial study for natural gas investment by the group in Sudan to lead for a Final Investment Decision (FID) scenario. At the same time, I was key negotiator for the group with the government for the investment process.



Besmaya Power Plant



2017	Derwent CCPP UK GE gas and steam turbines and Nooter Eriksen Boilers.	REM Engineering	Derwent UK	Relocation of CCPP and reengineering of Boilers to operate on Crude oil.	Rem Engineering had contracted us to provide consultancy and managerial service for the complete relocation of this Combined Cycle Power Plant located in North England and to assess the possibilities to convert the existing Boilers to operate continuously on Crude oil instead of Natural Gas.
2017	BHEL Frame 9E	MGH	Sulaymaniyah Iraq	Major Inspection	Major inspection of main Gas Turbine and Compressor. Removal of all components including Rotors, inspect all components and replace as required. Carry out all maintenance to auxiliary systems such as Torque convertors, fuel pumps, Atomizing Air Compressor, Stop Valves etc.
2017	BHEL 9E Generator and Exciter	MGH	Sulaymaniyah Iraq	High Vibration of Generator	Generator was opened and the field removed to identify the cause of high vibration.
2017	BHEL 9E Generator and Exciter	MGH	Sulaymaniyah Iraq	Electrical Testing	Complete Electrical Testing of Generator Field and Stator and Exciter and life assessment report given to Customer. Tests included Insulation test, Winding Resistance, DC Hi-Pot, Tan Delta, Wedge Deflection, Partial Discharge and Core ring test.
2017	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Combustion inspection	GT2, Combustion Inspection of main Gas Turbine and annual maintenance of Auxiliaries
2017	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	CI to HGP	GT2, Complete HGP and associated Auxiliary work scope. This unit was only due a CI but when we inspected the 1st stage nozzle it was found to be in need of urgent replacing
2017	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Hot Gas Path Inspection	GT3, Major Inspection including annual maintenance of Auxiliaries.
2017	GE 9E Generator and Exciter	MGH	Sulaymaniyah Iraq	Electrical Testing	Complete Electrical Testing of Generator Field and Stator and Exciter and life assessment report given to Customer. Tests included Insulation test, Winding Resistance, DC Hi-Pot, Tan Delta, Wedge Deflection, Partial Discharge and Core ring test.
2017	Technical Services	Haveli Bahadur Shah Power Plant.	Pakistan	Installation	Supervision on the installation of Alstom LT45/49AS Steam Turbine and Alstom Type 50WT 21 H-120 Hydrogen Generator



AL KHAYRAT POWER PLANT



2017	Brush Generator	MGH	Erbil, Iraq	Minor Inspection	GT3, Brush Generator testing carried out and health assessment report given to customer
2017	4 x GE 9E (125 MW) open cycle 500 MW, HFO conversion project	GE/MOE	Diwaniyah Power Plant	EPC Contract	Leading below mentioned activities as EPC company owner and fully authorized SITE MANAGER; Providing whole required engineering (as EPC contractor), Whole Procurement and transportation works, Administration of construction (installation, erection etc.) and commissioning works, Budget control and providing budgetary equilibrium according to contract. To Follow and organize required engineering revisions. Administration of Contractor (GE), Owner (MOE) and subcontractor (CMS) relations, Progress tracking and monitoring tools management, Progress payment management, Administration of collecting and payments through correspondent bank, To establish – maintain – improve the relations with local (surrounded) tribes & facts, Camp and lifeline activities management, Guidance for preparation of HSE procedures & policies, Definition of the procedures for BOP/switchgear/switchyard, Operation of ongoing HFO treatment plant, water treatment plant and HFO unloading area.
2016/2017	2 x 300MW Thermal, Coal Fired Boilers	Thang Lang Power Company	Vietnam	Customer Support Engineering	Design review of new plant, Construction, Commissioning supervision over the EPC Contractor on behalf of owner.
2016	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Major Inspection	Major overhaul of main turbine and compressor including rotor removal. All Auxiliary maintenance carried out.
2016	Rotring Fuel Gas Reducing station	MGH	Sulaymaniyah Iraq	Major Inspection	Complete Overhaul of all devices associated with the fuel gas Reducing station. All devices calibrated and the system recommissioned.
2016	BHEL Fuel forwarding skid.	MGH	Sulaymaniyah Iraq	Major Inspection	Pumps, Motors and all associated equipment overhauled, calibrated and recommissioned. Control upgrades and some logic changes also added.
2016	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Combustion inspection	GT4, Combustion inspection and Auxiliary work carried out.
2016	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Major Inspection	GT5, Assisting with customer and GE on a major inspection of main equipment auxiliary work scope.
2016	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Combustion inspection	GT7, combustion inspection including all Speedtronic Control system calibrations



2016	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion inspection	GT1, combustion inspection including all Speedtronic Control system calibrations
2016	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion inspection	GT2, combustion inspection including all Speedtronic Control system calibrations
2016	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Combustion inspection	GT8, combustion inspection including all Speedtronic Control system calibrations
2016	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion inspection	GT4, combustion inspection including all Speedtronic Control system calibrations
2016	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion inspection	GT6, combustion inspection including all Speedtronic Control system calibrations
2015	Oilfield Exploitation study	Petrocon	Chad	Engineering Study	Sedigui remote oilfield resources exploitation study
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Hot Gas Path Inspection	GT1, Complete HGP and associated Auxiliary work scope.
2015	Brush Generator	MGH	Erbil, Iraq	Major Inspection	Field removal and complete electrical testing carried out and life assessment report given to customer. Some minor winding repair carried out. Tests included Insulation test, Winding Resistance, DC Hi-Pot, Tan Delta, Wedge Deflection, Partial Discharge and Core ring test.
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Combustion inspection	GT3, combustion inspection including all Speedtronic Control system calibrations
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Combustion inspection	gt4, Combustion Inspection
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Combustion inspection	GT5 Combustion Inspection



SULAYMANIYAH POWER PLANT



2015	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Combustion inspection	GT7 Combustion Inspection and all annual auxiliary work scope carried out including Mk vi Speedtronic software upgrades.
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Major Inspection	Rotor out Major Inspection of main equipment. All auxiliary overhaul, calibration and recommissioning
2015	Brush Generator	MGH	Sulaymaniyah Iraq	Major Inspection	Field removal and complete electrical testing carried out and life assessment report given to customer. Some minor winding repair carried out. Tests included Insulation test, Winding Resistance, DC Hi-Pot, Tan Delta, Wedge Deflection, Partial Discharge and Core ring test.
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Combustion inspection	GT5 Combustion Inspection
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Major Inspection	GT4, Rotor out Major Inspection of main equipment. All auxiliary overhaul, calibration and recommissioning
2015	Brush Generator	MGH	Dohuk	Major Inspection	Field removal and complete electrical testing carried out and life assessment report given to customer. Tests included Insulation test, Winding Resistance, DC Hi-Pot, Tan Delta, Wedge Deflection, Partial Discharge and Core ring test.
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion inspection	GT3 Combustion Inspection and all annual auxiliary work scope carried out including Mk vi Speedtronic software upgrades.
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Hot Gas Path Inspection	GT5, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Hot Gas Path Inspection	GT6, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out
2015	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Hot Gas Path Inspection	GT7, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out



2015/2016	GE Frame 9E Gas Turbine and Compressor	Qaiwan Group	Bazyan Sulaymaniyah Iraq	Installation and Commissioning	Technical Site Management services for the complete installation of all GE equipment on site.
2014/2015	10X GE Frame 9001E	GE	Shat Al Basra	Installation and Commissioning	Subcontracted to Manage all site activities from Construction through to Commissioning
2014	Iron Ore Mining	ALBAJRAWIYA Mining Company	Sudan	Engineering Study	ALBAJRAWIYA iron ores exploitation study.
2014	500MW power plant Sulaymaniyah Iraq.	ABB Mannheim	Dohuk 2	Mechanical installation	Under contract to ABB Mannheim to support them with the installation, Erection and Commissioning of all mechanical equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment. Including DCS and Speedtronic control system integration.
2014	500MW power plant Sulaymaniyah Iraq.	ABB Mannheim	Dohuk 2	Electrical and Control Installation/Commissioning	Under contract to ABB Mannheim to support them with the installation, Erection and Commissioning of all Electrical and Control equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Major Inspection	GT1, Complete rotor out major inspection and all associated auxiliary and control system checks, tests calibrations and recommissioning. Torque convertor replaced
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Combustion inspection	GT2 Combustion Inspection
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Major Inspection	GT3, Major Overhaul of main equipment and all associated Auxiliaries including Speedtronic control system upgrades



ERBIL POWER PLANT



2014	Brush Generator	MGH	Erbil, Iraq	Major Inspection	Field removal and complete electrical testing carried out and life assessment report given to customer. Tests included Insulation test, Winding Resistance, DC Hi-Pot, Tan Delta, Wedge Deflection, Partial Discharge and Core ring test.
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Hot Gas Path Inspection	GT5, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Combustion inspection	GT3 Combustion Inspection
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Hot Gas Path Inspection	GT6, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Hot Gas Path Inspection	GT7, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Hot Gas Path Inspection	GT8, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out
2014	Brush Generator	MGH	Erbil, Iraq	Major Inspection	Field removal and complete electrical testing carried out and life assessment report given to customer. Tests included Insulation test, Winding Resistance, DC Hi-Pot, Tan Delta, Wedge Deflection, Partial Discharge and Core ring test.
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Major Inspection	GT4 Major inspection. Assisting General Electric with complete overhaul of main equipment. All control system checks carried out
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah Iraq	Hot Gas Path Inspection	GT6, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion inspection	GT3, combustion inspection including all Speedtronic Control system calibrations



2014	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion inspection	GT6, combustion inspection including all Speedtronic Control system calibrations
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion inspection	GT4, combustion inspection including all Speedtronic Control system calibrations
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Major Inspection	GT2, Assisting with customer and GE on a major inspection of main equipment auxiliary work scope.
2014/ 2015	6 x GE 9E (125 MW) simple cycle 750 MW Qayyarah Power Plant project	MOE Baghdad	Qayyarah Power Plant project	EPC, (Engineer, Procure, Construct)	Leading below mentioned activities from a management position; Assisting and managing Procurement and transportation works, Administration of construction and commissioning works, Budgetary control and providing budgetary equilibrium according to contract. To Follow and organize required engineering revisions. Administration of Contractor supervisor (GE), Owner (MOE) and contractor (CALIK) & subcontractor relations, Progress tracking and monitoring tools management, Progress payment management, administration of collecting and payments through correspondent bank, To establish – maintain – improve the relations with local (surrounded) tribes & facts, Camp and lifeline activities management, Guidance for preparation of HSE procedures & policies, Definition of the procedures for BOP/switchgear/switchyard,
2014	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion inspection	GT5, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2009/ 2013	National Petroleum Company	Sudapet Co. Ltd. (The National Petroleum Company in Sudan)	Sudan.	Engineering Management	Appointed for the national petroleum company to establish the natural gas business and strategies for Sudan to exploit the newly discovered resources at that time. I made the following initiatives and strategies for the country: Block 8 remote field small gas exploitation strategy and proposal (in power generation or CNG). Red Sea discovered gas, in block 15, exploitation strategy and proposal through using natural marine platforms (islands). Flared Gas Utilization in Muglad Basin through unconventional technologies. Bentiu Mini refinery/topping plant as a developmental project for South Sudan (before recession of the country from the North)
2011/ 2013	4 x Frame 9 GE Gas Turbine power plant Installation	MOE Baghdad	Al Khairat	EPC	Leading below mentioned activities as fully authorized SITE MANAGER; Assisting and managing Procurement and transportation works, Administration of construction and commissioning works, Budgetary control and providing



	and Commissioning.				budgetary equilibrium according to contract. Administration of QA/QC procedures and whole needed documentation, To Follow and organize required engineering revisions. Administration of Contractor supervisor (GE), Owner (MOE) and contractor (CALIK) & subcontractor relations, Progress tracking and monitoring tools management, Progress payment management, Administration of collecting and payments through correspondent bank, To establish – maintain – improve the relations with local (surrounded) tribes & facts, Camp and lifeline activities management, Operation and maintenance set up for establishing O&M team training schedules, Preparation of procedures for maintenance, Guidance for preparation of HSE procedures & policies, Definition of critical spare parts based on FMEA (Failure Mode Effect Analysis), Definition of the procedures for BOP/switchgear/switchyard, Definition of maintenance program plans activities for daily maintenance and schedules outages, Establishment of reactive and proactive maintenance programs, Upgrade of operations and maintenance procedures and the operation team to fulfill combined cycle requirements, operation for 6 month before hand over to owner (MOE).
2013	4 x Frame 9 GE Gas Turbine power plant Installation and Commissioning for HFO Operation	Calik Enerji	Al Khairat	Installation and Commissioning.	Contracted to Calik Enerji to manage and direct Power Plant Erection, Commissioning and Start-up. Errigal Energy Staff took the direct role from a technical aspect.
2013	500MW power plant Dohuk 2 Iraq.	ABB Manheim	Dohuk 2	Mechanical installation	Under contract to ABB Manheim to support them with the installation, Erection and Commissioning of all mechanical equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment. Including DCS and Speedtronic control system integration.



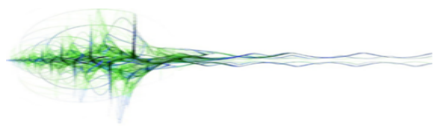
2013	500MW power plant Dohuk 2 Iraq.	ABB Manheim	Dohuk 2	Electrical and Control Installation/Commissioning	Under contract to ABB Manheim to support them with the installation, Erection and Commissioning of all Electrical and Control equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Major Inspection	GT4, Major Overhaul of main equipment and all associated Auxiliaries including Speedtronic control system upgrades
2013	Brush Generator	MGH	Dohuk	Major Inspection	Field removal and complete electrical testing carried out and life assessment report given to customer. Tests included Insulation test, Winding Resistance, DC Hi-Pot, Tan Delta, Wedge Deflection, Partial Discharge and Core ring test.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah	Hot Gas Path Inspection	GT2, Complete HGP and associated Auxiliary work scope. This unit was only due a CI but when we inspected the 1st stage nozzle it was found to be in need of urgent replacing
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Hot Gas Path Inspection	GT1, Complete HGP and associated Auxiliary work scope.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Combustion Inspection	GT7, Complete CI and associated Auxiliary work scope.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Erbil, Iraq	Combustion Inspection	GT8, Complete CI and associated Auxiliary work scope.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah	Hot Gas Path Inspection	GT1, Complete HGP and associated Auxiliary work scope. This unit was only due a CI but when we inspected the 1st stage nozzle it was found to be in need of urgent replacing
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah	Hot Gas Path Inspection	GT2, Complete HGP and associated Auxiliary work scope.



2013	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah	Hot Gas Path Inspection	GT5, Complete HGP and associated Auxiliary work scope.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah	Hot Gas Path Inspection	GT6, Complete HGP and associated Auxiliary work scope.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah	Combustion Inspection	GT7, Complete CI and associated Auxiliary work scope.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Sulaymaniyah	Combustion Inspection	GT8, Complete CI and associated Auxiliary work scope.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion Inspection	GT1, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Combustion Inspection	GT2, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Hot Gas Path Inspection	GT3, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out
2013	GE Frame 9E Gas Turbine and Compressor	MGH	Dohuk	Hot Gas Path Inspection	GT4, Complete HGP and associated Auxiliary work scope. All control system checks and calibration carried out
2012	500MW power plant Sulaymaniyah 2 Iraq.	ABB Manheim	Sulaymaniyah 2	Mechanical installation	Under contract to ABB Manheim to support them with the installation, Erection and Commissioning of all mechanical equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment. Including DCS and Speedtronic control system integration.



STATOIL KARSTO REFINERY



2012	500MW power plant Sulaymaniyah 2 Iraq.	ABB Manheim	Sulaymaniyah 2	Electrical and Control Installation/Commissioning	Under contract to ABB Manheim to support them with the installation, Erection and Commissioning of all Electrical and Control equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment
2012	GE Frame 9E Gas Turbine	MGH	Sulaymaniyah	Hot Gas Path Inspection	GT1, Complete HGP and associated Auxiliary work scope.
2012	GE Frame 9E Gas Turbine	MGH	Sulaymaniyah	Hot Gas Path Inspection	GT2, Complete HGP and associated Auxiliary work scope.
2012	GE Frame 9E Gas Turbine	MGH	Erbil	Combustion Inspection	GT3, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2012	GE Frame 9E Gas Turbine	MGH	Erbil	Combustion Inspection	GT4, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2012	GE Frame 9E Gas Turbine	MGH	Erbil	Combustion Inspection	GT5, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2012	GE Frame 9E Gas Turbine	MGH	Erbil	Combustion Inspection	GT6, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2012	GE Frame 9E Gas Turbine	MGH	Sulaymaniyah	Hot Gas Path Inspection	GT2, Complete HGP and associated Auxiliary work scope.
2012	GE Frame 9E Gas Turbine	MGH	Sulaymaniyah	Combustion Inspection	GT5, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2012	GE Frame 9E Gas Turbine	MGH	Sulaymaniyah	Combustion Inspection	GT6, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2012	GE Frame 9E Gas Turbine	MGH	Dohuk	Hot Gas Path Inspection	GT1, Complete HGP and associated Auxiliary work scope.
2012	GE Frame 9E Gas Turbine	MGH	Dohuk	Hot Gas Path Inspection	GT2, Complete HGP and associated Auxiliary work scope.
2012	GE Frame 9E Gas Turbine	MGH	Dohuk	Combustion Inspection	GT3, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.
2012	GE Frame 9E Gas Turbine	MGH	Dohuk	Combustion Inspection	GT4, Combustion Inspection along with all Auxiliary work scope including control system testing and calibration.



2012	10 x Frame 9001E, HFO / Distillated Operation	MOE Iraq	Al Khairat Iraq	Installation and Commissioning	GE Site Management services for the installation of the 10 x Frame 9001E unit along with all related auxiliaries and HFO plant from Construction through to Commissioning.
2011	500MW power plant Erbil 2 Iraq.	ABB Manheim	Erbil	Mechanical installation	Under contract to ABB Manheim to support them with the installation, Erection and Commissioning of all mechanical Electrical and Control equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment. Including DCS and Speedtronic control system integration.
2011	500MW power plant Erbil 2 Iraq.	ABB Manheim	Erbil	Electrical and Control Installation/Commissioning	Under contract to ABB Manheim to support them with the installation, Erection and Commissioning of all Electrical and Control equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment
2011	500MW power plant Sulaymaniyah 2 Iraq.	ABB Manheim	Sulaymaniyah 2	Mechanical installation	Under contract to ABB Manheim to support them with the installation, Erection and Commissioning of all mechanical equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment. Including DCS and Speedtronic control system integration.
2011	500MW power plant Sulaymaniyah 2 Iraq.	ABB Manheim	Sulaymaniyah 2	Installation, Erection and Commissioning	Under contract to ABB Manheim to support them with the installation, Erection and Commissioning of all Mechanical, Electrical and Control equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment



2011	GE Frame 9E Gas Turbine	MGH	Sulaymaniyah	Combustion Inspection	GT3, Combustion Inspection on main Turbine along with all Auxiliary work scope including all Control system calibration and testing.
2011	GE Frame 9E Gas Turbine	MGH	Erbil	Combustion Inspection	GT2, Combustion Inspection on main Turbine along with all Auxiliary work scope including all Control system calibration and testing.
2011	GE Frame 9E Gas Turbine	MGH	Erbil	Hot Gas Path Inspection	GT3, HGP Inspection along with all Auxiliary work scope including control system testing and calibration.
2011	GE Frame 9E Gas Turbine	MGH	Erbil	Hot Gas Path Inspection	GT4, HGP Inspection along with all Auxiliary work scope including control system testing and calibration.
2011	GE Frame 9E Gas Turbine	MGH	Sulaymaniyah	Combustion Inspection	GT4 Combustion Inspection
2011	GE Frame 9E Gas Turbine	MGH	Dohuk	Combustion Inspection	GT1, Combustion Inspection on main Turbine along with all Auxiliary work scope including all Control system calibration and testing.
2011	GE Frame 9E Gas Turbine	MGH	Dohuk	Combustion Inspection	GT2, Combustion Inspection on main Turbine along with all Auxiliary work scope including all Control system calibration and testing.
2010	GE Frame 9E Gas Turbine	MGH	Erbil	Major Overhaul. Crashed unit	GT 1, Assisting customer with major inspection activities following a complete mechanical failure of one of the stage 3 turbine buckets. Writing all outage procedures and controlling Lock-out tag-out. Calibration of all control devices for main equipment and BOP and recommissioning through to start-up
2010	500MW power plant Dohuk 1 Iraq.	ABB Mannheim	Dohuk 1	Installation, Erection and Commissioning	Under contract to ABB Mannheim to support them with the installation, Erection and Commissioning of all mechanical equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment. Including DCS and Speedtronic control system integration.
2010	500MW power plant Dohuk 1 Iraq.	ABB Mannheim	Dohuk 1	Installation and Commissioning	Under contract to ABB Mannheim to support them with the installation, Erection and Commissioning of all Electrical and Control equipment. Gas turbine and Compressor, main Generator, Auxiliary Skid, Inlet filter house, Gas Pressure reducing Station, Fuel Forwarding. Main Gas Isolation skid, Atomizing air and plant Air systems, Fuel Tank and fuel farm, LV and MV panels, Excitation system, Battery charging systems, Isolated Phase Bus Ducts, Exhaust stacks, all major equipment alignments Testing and Commissioning of all equipment



2010	Sulaymaniyah 500MW gas power station	MASS Global	Kurdistan, Iraq	O&M	Following the completion and during the Commissioning of the first units, Errigal Energy was contracted by MASS Group to Assemble the complete Operation and Maintenance team for the plant. We hired and trained the very first team of local staff to operate the plant going forward.
2009/20 10	Frame 9FA01	GE	Emal Dubai	Technical Services	Technical Advisory services for GE for the complete mechanical Installation of 6 x Frame 9FA units.
2008/20 09	SGPS Gas Power station	MASS Global	Kurdistan, Iraq	Construction, Erection, Design, Commission.	Mass Global hired Errigal Energy to Manage the complete EPC project from Civil work right through Commissioning and handover to Operation, dealing directly with the OEM for all design changes and quality issues along with all other Erection and Commissioning activities.
2008	MAN, Engines B&W 18V 48/60 and 16V 32 160 MW - HFO/Distillate operation	Breitener Energetica	Manaus, Brazil	Operation and Maintenance	Operation and Maintenance kye persons, outages supervision, parts management, building operation, maintenances and HSE procedures, implementation of Preventive and Predictive Maintenance.
2007/ 2008	2x GE Frame 7E - Combined Cycle 340 MW 2x HRSG (Doosan) + 1x STG (Fuji) 4x Wartsila engines 18V46GD 64MW - HFO Operation	EIPaso Amazonas Energia Ltd - UTE TermoNorte	Porto Velho, Brazil	Operation and Maintenance	Operation and Maintenance kye persons, outages supervision, parts management, building operation, maintenances and HSE procedures, implementation of Preventive and Predictive Maintenance.
2006/ 2007	Relocation Project from Mexico to South Africa of complete power Plant.	Eskom South Africa	Kendal Power Station	Project Management, Engineering and Site management	Contracted to General Electric for the Complete relocation and refurbishment of 1 complete power plant through to final commissioning and hand-over to customer including provided the Engineering services to manufacture a completely new Intake system and a completely new Exhaust system. We also made redundant the old Excitation and Control panels along with all MV panels and installed and commissioned a complete new Packaged Electronic, Electrical and Control panel.



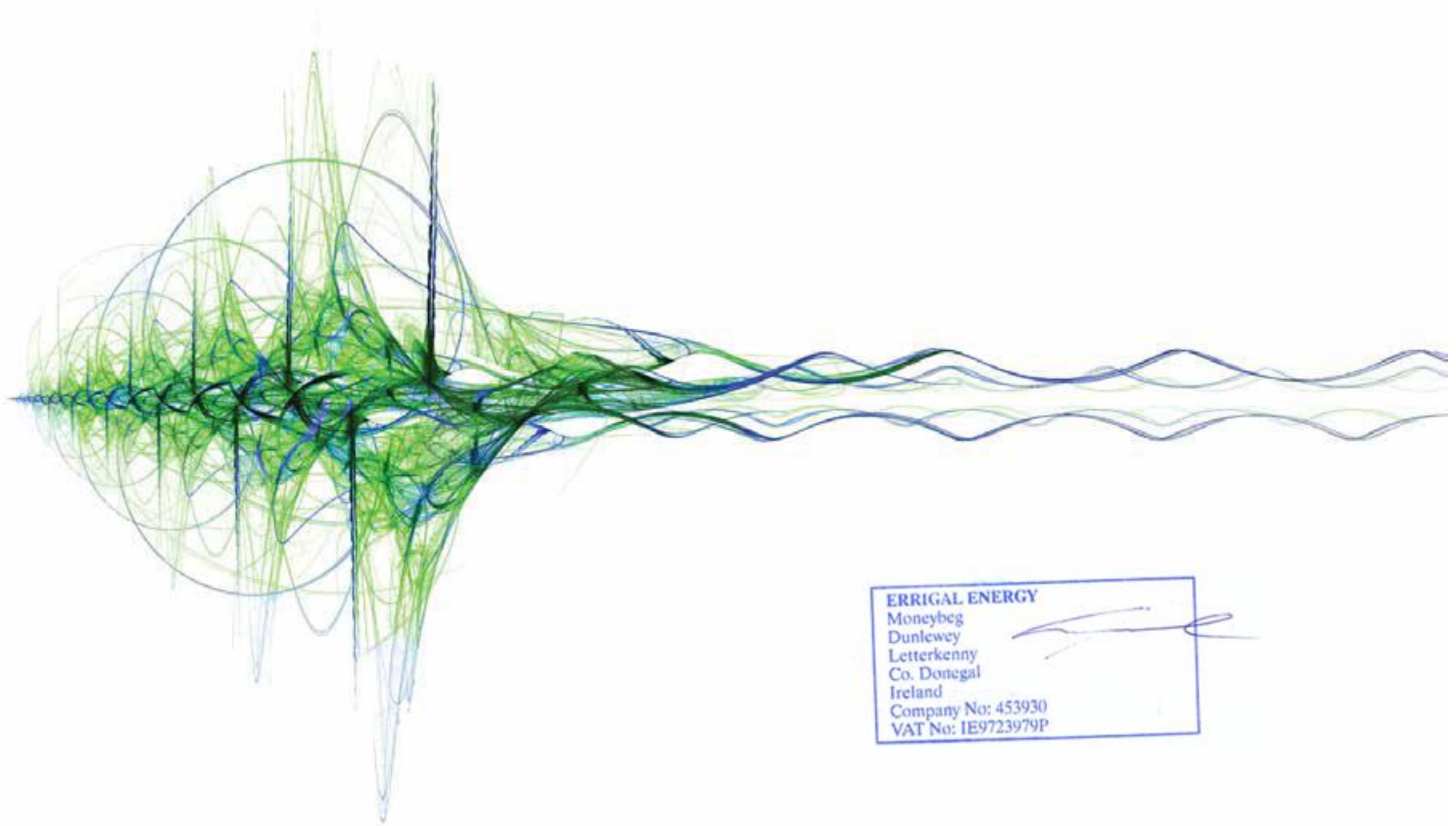
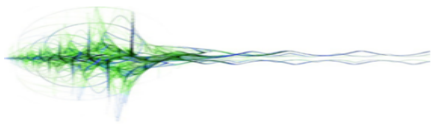
2005	Rehabilitation project Shauiba Iraq	Fluor Amec	Shauiba Power Station Iraq	Commissioning Management	Contracted Through GE to Fluor Amec to manage all commissioning activities on the rehabilitation project for Shauiba Power station.
2005	Major inspection Frame 5 single shaft	GE	Axzo Nobel Holland	Site management	Contracted to GE to manage the complete Frame 5 major overhaul activities.
2005/2008	2x GE Frame 7B 112MW - HFO / Distillated Fuel Pratt & Witney FT4 Twin Pac 44MW - Distillated fuel 2 x GE LM 6000 86MW - Distillated fuel 10 x Wartsila engines 18V46GD 160MW - HFO Operation	EIPaso Amazonas Energia Ltda	Manaus, Brazil	Operation and Maintenance	Operation and Maintenance kye persons, outages supervision, parts management, building operation, maintenances and HSE procedures, implementation of Preventive and Predictive Maintenance.
2004/2005	OLNG Plant	Shell Oman	Sur Oman	Outage Planning and Coordination	Contracted through GE to manage all outage activities for Shell on the first Major Outage programmed at the Oman LNG plant.
2004/2005	4 x GE Frame 6FA (DLN) - Natural Gas	Petrobras	Tres Lagoas, Brazil	Operation and Maintenance	Operation and Maintenance kye persons, outages supervision, parts management, building operation, maintenances and HSE procedures, implementation of Preventive and Predictive Maintenance. On site SpeedTronic Mark V and Ovation Specialist
2000/2004	4 x GE Frame 6FA (DLN) 240 MW - Natural Gas	Petrobras	Tres Lagoas, Brazil	Installation and Commissioning	Installation and Commissioning key person's support.
2004	FPSO vessel	GE Canada.	Newfoundland	Sales negotiations	Travelled to Newfoundland to assist GE Canada in the Technical aspects of the sales preparation for a new Contractual Service Agreement (CSA).
2004	GE Frame 9H	GE	Baglan Bay Wales	Technical Advisory Services	Contracted to GE to provide Technical Advisory Services on the first ever HGP to take place on the Frame 9H prototype unit in Baglan Bay.



DUHOK POWER PLANT



2004	Frame 6001B	GE	Salt Union UK	Commissioning services	Carried out liquid fuel commissioning on 1 Frame 6001B dual fuel unit for Scottish and Southern Energy at their Salt Union Power station
2004	Frame 6001B	Statoil	Karsto Norway	Site management services	<i>Site Lead for GE</i> on a major inspection on 1 Frame 6001B DLN unit in Statoil Karsto Norway involving complete overhaul of the Renk Load Gear and inspection of the Accessory gearbox.
2003	Frame 5002 Twin Shaft	Exon Mobil	Beryl Alpha Platform North Sea	Technical Advisory Services	Site Lead on a major inspection of 1 Frame 5002 twin shaft unit for Exon Mobil on the Beryl Alpha Platform to perform all Mechanical Change out and Control system calibrations and Commissioning of the unit.
2003	Frame 9001E	Thames Power	Barking UK	Technical Advisory Services	Project Manager on the spring shutdown at Barking power station for GE Energy Services. Shutdown consisted of a Hot gas path inspection and Major inspection on 2x 9001E unit with DLN1 with a complete major work scope on auxiliary, controls and calibrations.
2002	Oil rigs	BP	BP ETAP Platform	Technical Advisory Services	<i>GE Site Manager</i> on the BP Etap Platform. This was a forced shutdown due to the failure of one of their load gearboxes and turbine bearings on a Thomassen Frame 6001 dual fuel unit.
2002	Oil rigs	BP	Magnus Platform North Sea	Technical Advisory Services	GE Project Manager on the BP Magnus Platform. We carried out 1 major overhaul on a frame 5001P and trouble-shooting temperature spreads on another.
2002	MLNG compressor trains	Nuovo Pignone	Malaysia	Commissioning services	Commissioning TA services on the installation through to start up and commissioning of 4 7001EA compressor and generator drives units in Bintulu Malaysia.
2002	Frame 7001FA	ISP	Troy Ohio USA	Commissioning services	GE Mechanical Start-up and commissioning TA in Troy Ohio on the installation and start-up of 4x 7001FA dual fuel units combined cycle with MKVI control system.
2001	Frame 7001FA	GE	Troy Ohio USA		Mechanical Advisory services on the installation of 4x 7001FA dual fuel units at Troy Ohio.
2001	Siemens/Westinghouse 251B	Atlantic Projects LTD	Boise Idaho USA		Technical advisory services on the installation of 2 Siemens Westinghouse 251B units and 2 LM2500 units in Mountain Home Idaho overseeing the entire project.



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