

## Gas Fired Power Generation & CHP Projects

This is a list of some projects in the gas fired power generation and CHP sector for which Spectrum has provided acoustic consultant or noise consultancy services.

Client	Project	Description of Services
Abu Dhabi Power Co	Al Ayn Power Station, UAE	Acoustic design of intake and exhaust silencers for 12-off GE Frame 6 gas turbines. For Aker Solutions ASA
ADNOC	Project 545 On-shore gas project, UAE	Noise control design review and site survey of GE Frame 6 gas turbine generators manufactured by Nuovo Pignone. For Bechtel Technip Joint Venture
AES (Chile)	Nueva Renca CCGT Plant, Santiago, Chile	Computer modelling, noise surveys and noise reduction study (Phases 1 & 2). Government liaison. For Electrica Santiago
AES (Chile)	Old Renca (oil-fired) upgrade project, Santiago, Chile	Computer modelling, feasibility study and Environmental Statement for conversion oil-fired to CCGT plant. For Electrica Santiago
AES (UK)	Tyneside Power Station, UK	Environmental Noise Impact Assessment. For Parsons Brinkerhoff
Arjo Wiggins	Buckland Mill CHP Plant, UK	Investigation of low frequency environmental noise emissions. For Wellman Robey
BP Energy	Four UK sites at: Enichem New Hythe, Ford Halewood, Heinz Foods Wigan and Kellogs Trafford UK	Environmental Statement, surveys, modelling and outline design.
Carlton Power	Yelland CCGT Power Station, UK	Environmental Statement, surveys, modelling and outline design. For PB Power
Carrington Power	860MW CCGT power station, Carrington, Cheshire, UK	Noise modelling and preparation of noise section of Environmental Statement. For SKM-Enviros
China Light and Power	Penny's Bay Power Station, Hong Kong	Three GE 9E gas turbines in open cycle in 360 MW power station. Computer simulation of environmental noise. Building acoustic design. Acoustic design of GT inlet silencers. Noise control design report for Aker Solutions ASA
Croydon Energy	Croydon Power Station, UK	Environmental Statement, surveys, noise modelling and outline design. For Rolls-Royce Power Ventures
Cyprus Electricity Authority	Moni Power, Station, Cyprus	Predictive Environmental Noise Study. For Parsons Brinkerhoff
Derby Cogeneration Ltd	Rolls Royce Derby, Cogeneration Project, UK	Predictive environmental noise control study and EIA, for Parsons Brinkerhoff. Detailed noise consultancy and measurement services. For Rolls Royce Industrial Power Systems Limited

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EDF Energy	1,300 MWe CCGT power station at West Burton, Retford, Notts, UK	Support through planning process. Negotiations to relax noise limit condition granted under Section 36 of Electricity Regulations. Noise modelling during detailed design. Advice to EDF – CIT (Contractors). Background and construction noise monitoring.
Electricity Authority of Cyprus	Vasilikos Power Station Phase III, Cyprus	Background noise survey, noise modelling and preparation of Environmental Noise Impact Assessment. For PB Power
GEC Alstom (now Alstom)	Smurfit Townsend Hook CHP Plant, UK	Background environmental noise survey
GM Waste	Bolton TRF, UK	Environmental Statement, surveys, modelling. For PB Power. Commissioning tests for Alstom
Great Yarmouth Power (now npower)	CCGT Power Station, Great Yarmouth, UK	Audit of noise control design. Commissioning noise tests. For Great Yarmouth Power
Gulf Oil, UK	Milford Haven Cogen Plant, UK	Environmental noise impact measurement and assessment. For Gulf Oil
Heartlands Power Ltd	Fort Dunlop Simple Cycle Power Station, UK	Two 50MW Industrial Trent gas turbines. Issue of complete noise specifications. Environmental Noise Simulations. For Rolls-Royce Industrial Power Systems
Hyder	Chester Sewage Treatment Works CHP Plant, UK	Acoustic design and project management for installing noise control measures to allow 24 hour operation of CHP plant. For Welsh Water
Idaho Power	Idaho Power Station, USA	Environmental noise study and outline design. For Mowlem Engineering
Independent Power Generators	Sutton Bridge Power Station, UK	Environmental Noise Audit on behalf of owners. For PB Power
Keadby Power	Keadby Power Station, UK	Issue complete noise specifications; outline acoustic design of all buildings and noise control equipment. Engineering acoustic design of intake silencers for 2-off GE 9F gas turbines, each rated at 220 MW. Environmental noise simulations. Preliminary and final noise commissioning trials. For Aker Solutions ASA
Langage Energy Park	Langage Power Station, Plymouth, UK	Environmental Statement, surveys, modelling and outline design. For Langage Power
Marubeni Europower	Marmara CCGT, Turkey	Post commissioning noise measurements/advice on environmental and occupational noise problems associated with a new dual turbine 480 MW CCGT plant
Montell-Carrington	Montell-Carrington CHP, Trafford, UK	Environmental Statement, surveys, modelling and outline design. For PB Power
New Jersey Utility Co.	GE Frame 6 CHP Plants, USA	Background site noise survey and environmental noise impact study of proposed gas turbine plant on three sites. For Aker Solutions ASA
Northern Electric	Scarborough GT Plant, UK	One 50MW Industrial Trent gas turbine in Simple Cycle. Environmental Noise Impact Assessment. For Parsons Brinkerhoff

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Northern Territories Electricity Commission	Channel Island Power Station, Australia	Acoustic and engineering design of inlet and exhaust silencers, acoustic lagging and enclosure systems for 6-off GE Frame 6 gas turbines for manufacture by Aker Solutions ASA
Nuclear Management Partners/ Sellafield Limited	Fellside standby boiler project	Detailed noise prediction studies and assessments. For Day and Zimmerman and Worley Parsons
PEMEX/BOC	Gas plant power modules, Mexico	Independent audit of noise control design. For BOC
Rolls-Royce Power Ventures	Exeter Simple Cycle Power Station, UK	One 50MW Industrial Trent gas turbine in Simple Cycle. Environmental Noise Impact Assessment. For Parsons Brinkerhoff
Rolls-Royce Power Ventures	Filton CHP Plant, UK	One 50MW Industrial Trent gas turbine providing combined heat and power. Environmental Noise Impact Assessment. For Parsons Brinkerhoff.
Rolls-Royce Power Ventures	Greenwich Power Station, London, UK	Preliminary Noise Control Study. For Parsons Brinkerhoff.
RWE npower	Fawley Co-Generation Plant, UK	One GE Frame 9E gas turbine providing combined heat and power. Issue of complete noise specification and running of computer noise model to ensure compliance with environmental noise criteria. For RWE npower Cogen
RWE npower	Dow Corning, Barry, South Wales	Evaluation of on-site and environmental noise. For RWE npower
RWE npower	Bridgewater Paper CHP, UK	Feasibility, Environmental Statement, computer modelling, survey and outline noise design for RWE npower. Detailed noise design for Kvaerner Construction
RWE npower	Philips Petroleum CHP, UK	Noise commissioning tests for Philips Petroleum. Further noise reduction measures design. For Kvaerner Construction
RWE npower	Cwmparc, Treorchy, Wales (small gas engine)	Environmental Statement, surveys, modelling and outline design. For RWE npower
RWE npower	Hem Heath Colliery, Stoke UK (small gas engine)	Environmental Statement, surveys, modelling and outline design. For RWE npower
RWE npower	Staythorpe 1,600 MWe CCGT Power Station, Newark, Notts, UK	Background Noise Survey. Construction noise surveys and reporting. Support with noise modelling for EPR Permit. Advice on noise control. Noise commissioning. For RWE npower
RWE npower	Hamilton Industrial Park CHP Plant, UK	Background Noise Survey and Environmental Noise Assessment. For RWE npower
RWE npower	BASF Teesside CHP Station, UK	Predictive environmental noise control study and EIA. For RWE npower
RWE npower	Killingholme Power Station, UK	Environmental and Occupational Noise evaluation of Power Station comprising 2-off ABB 13E gas turbines. For RWE npower
RWE npower	Deeside Power Station, UK	Environmental and Occupational Noise and evaluation of Power Station comprising 2-off ABB 13E gas turbines. For RWE npower

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RWE npower	Didcot 'B' Power Station, UK	Construction noise monitoring and acoustic consultancy support through commissioning phase of project. For RWE npower
RWE npower	SCA Aylesford, CHP Plant, UK	Noise surveys; design of gas turbine inlet silencer and lagging systems. Specification of noise control. For John Brown Engineering
RWE npower	Little Barford Power Station, UK	Noise test procedures developed and final noise testing carried out for GEC Alstom on complete station and for European Gas Turbine (EGT) for the anti-icing system. Noise monitoring during steam venting trials, for RWE npower
RWE npower	Elf Oil Milford Haven CHP Station, UK	Predictive environmental noise control study and EIA. For RWE npower
RWE npower	2,000 MWe proposed CCGT power station at Willington, Derbyshire	Background noise surveys, outline noise control design, preparation of noise section of Environmental Statement.
RWE npower	Power stations at Diageo Brewery, St James' Gate, Dublin, and Dundalk, Eire	Occupational noise assessments
RWE npower	2,000MWe CCGT power station at Pembroke, Wales	Ongoing noise monitoring during construction phase
RWE npower	2,000 MWe CCGT power station at Tilbury, Essex, UK	Background noise surveys, outline noise control design, preparation of noise section of Environmental Statement.
Saskatchewan Power Corporation	Meadow Lake Power Station, Canada	Site noise survey to establish existing noise levels from GE Frame 6 gas turbine. Remedial noise control treatment and resurvey. For Aker Solutions ASA.
Scottish & Southern Energy	ICI Runcorn CHP Project, UK	Environmental Noise Impact Assessment. For Scottish & Southern Energy
Scottish & Southern Energy	Burghfield and Chickerell Power Stations, UK	Preliminary Noise Control Study. For Rolls-Royce Industrial Power Systems
Scottish & Southern Energy	BPB Davidson CHP Plant, Aberdeen, UK	Preliminary noise evaluation. For Parsons Brinkerhoff
Scottish & Southern Energy	Weymouth Power Station UK	Study of low frequency environmental noise. Recommendations. For Scottish & Southern Energy
Scottish & Southern Energy	Kimberly Clark CHP, Barrow, UK	Environmental Statement, surveys, modelling and outline design. For BP Scottish & Southern Energy
Scottish & Southern Energy	Kimberly Clark CHP, Northfleet, UK	Environmental Statement, surveys, modelling and outline design. For Scottish & Southern Energy
Scottish & Southern Energy	Keadby 2, UK	Environmental Statement, surveys, modelling and outline design. For Scottish & Southern Energy
Scottish and Southern Energy	Peterhead Power Station, UK	Two GE 9E gas turbines in open cycle in 240 MW power station. Issue noise specifications. Computer simulation of environmental noise. Review vendors equipment proposals. For Aker Solutions ASA

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Scottish and Southern Energy	Salt Union, Runcorn CHP Project, UK	Predictive environmental noise control study including computer modelling. Audit designs of vendors. For Senior Thermal Industrial Boilers Division
Scottish and Southern Energy	800 MWe CCGT power station, Baglan Bay, Port Talbot, Wales	Completion of pre-construction background surveys and provision of advice, relating to consents and design, to project manager
SECWA	Power Station, Perth, Australia	Site survey and noise study of GE 9E gas turbine. For Aker Solutions ASA
Severn Power/Siemens Power Generation	800MWe CCGT, Uskmouth, Wales	Noise monitoring during commissioning. Associated advice regarding discharging planning conditions. For Siemens Power Generation
Shengli, Liao-He and Zhong-Yuan Petroleum Bureau	GE Frame 6 CHP Power Stations, People's Republic of China	Noise control design study and outline designs of gas turbine exhaust silencers. For Aker Solutions ASA
Slough Heat & Power	Slough Trading Estates Power Station, UK	Low frequency environmental noise study. Surveys, recommendations and issue of silencer specifications. For Slough Heat & Power
Tenaga Nasional Berhad	Serdang and Pasir Gudang Power Stations, Malaysia	Full acoustic specifications and acoustic design of building fabric and ventilation system of two 360 MW gas turbine power stations. For Aker Solutions ASA
Viridian Power	Huntstown, Eire	Planning noise review. Project support for Viridian
Viridian Power	Sonoco Paper Mill CHP Plant, UK	Commissioning noise survey for West Engineering
Wessex Water	Power generation building, Avonmouth CHP	Outline noise design. For Siemens
Yorkshire Electricity (now npower)	Wakefield future peaking plant, UK	Preliminary noise study. For Yorkshire Electricity
Yorkshire Electricity (now npower)	Queens Medical Centre, Nottingham, CHP Scheme, UK	Completion of background noise survey and noise impact assessment for planning requirements and to set noise level specifications. For Yorkshire Electricity