



CESS's Experience in Decommissioning, Dismantling & Relocation

Head-quartered in Stromness in the Orkney Islands, Craigie, Engineering Sales & Services Ltd. (CESS), was originally formed in 1990 and has rapidly developed as one of the World's leading sourcing, valuation & marketing agents and suppliers of surplus and "advance-order" power plant and related equipment. CESS's client base covers many companies and individual consultants in the Industrial, Utility/IPP, Oil-field, Process and Petrochemical Sectors.

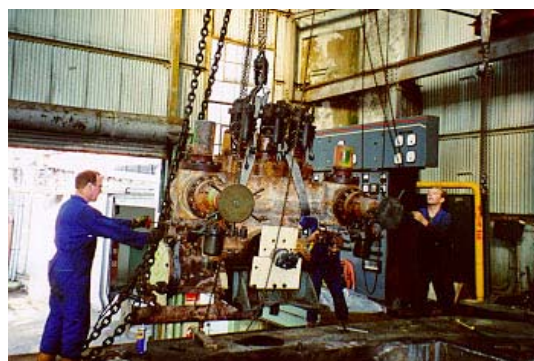
The Company can also provide the manpower required for project development, feasibility studies, asset and surplus equipment valuation, environmental impact assessment (EIA), procurement, construction, commissioning, ongoing operation & maintenance, and eventual de-commissioning, dismantling ("CESSation" technology) and removal/recycling of such facilities, usually on a fixed term or contract basis.

The first dismantling and removal contract in which CESS were involved in 1995 was for a **25 MW AEG condensing steam turbine generator** with auxiliaries which was dismantled and removed from the Nuclear Test Centre at Karlsruhe in West Germany and reinstalled at the **Binani Cement** Factory in India.



During 1996, the company completed a major contract for the **South African Pulp & Paper Industries (SAPPI)**. This project (£1.1 M) involved the dismantling, preservation/crating and shipment of 2 x 6 MW **Siemens Gortitz** back-pressure steam turbine generator sets from a district heating plant at Gotha in Eastern Germany and their re-installation and commissioning at the Sappi Saiccor Plant in South Africa.

In 1997 CESS were awarded the tender to purchase, de-commission and remove the 3 MW (Peter Brotherhood) and 6 MW (AEI) steam turbine generator sets from **BPB Paperboard's** Davidson Mill in Aberdeen, Scotland.



In April of 1998 CESS were just one of 11 companies who were pre-qualified by the **Tennessee Valley Authority** (TVA) as being suitable for TVA's proposed 'partnering agreement' to market and dispose of their surplus and excess equipment assets (from 6 x 1200 MW nuclear power stations).

TVA are by far the largest utility within the US market and presently provide peak capacity of over 30,700 MW to over 8 Million customers in the Tennessee River Valley area which covers the state of Tennessee itself and parts of Alabama, Arkansas, Georgia, Kentucky, Mississippi, & North Carolina.

Within the formal marketing proposal CESS proposed that an initial valuation of TVA's surplus assets be carried out, and this contract was signed in Tennessee on 11th August 1998 and in December 1998 TVA awarded a 3 year Direct Marketing Contract to CESS for their 230,000 stock code items of surplus/unused equipment, most of which have now been sold.

In 1999, CESS was awarded a Valuation & Exclusive Marketing Contract by **Midlands Power International** for the disposal of their 15 MW Pielstick diesel power plant at Hereford.

CESS then sold the plant to Poysha Power in India, and was then contracted by **Midlands Power** to supervise the decommissioning and dismantling of this plant, which was completed on schedule.



CESS also provided support to **Reliance Industries** in India on the decommissioning, preservation and storage, prior to marketing and re-sale, of their 25 MW Siemens steam turbine.

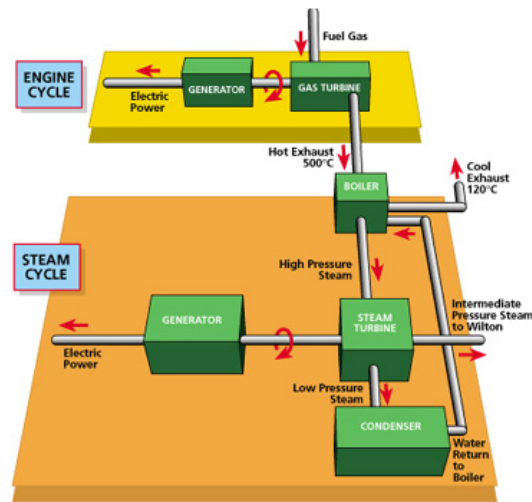
In Nov-Dec 2003, CESS were successful in the sale of 2 x 1.5 MW Daniel Adamson Steam turbine generator sets at Lock Ewe for **MOD/NATO** and then supervised/managed the final decommissioning and dismantling of the units (with boilers) for shipment to Haycarb in Sri Lanka.



In August 2006, CESS was awarded a contract with Caterpillar to oversee the decommissioning, dismantling and sea packing of their 22 MW Cat diesel plant in Cambodia for shipment to Chile. CESS also assisted with preparation of preservation/packing, and with preparation of the shipping documents.



In 2010 we were invited to travel down and meet with Teesside Power and give budgetary pricing on the decommissioning of their 8 x W701 CCGT Plant (150MW each)



Major Client list:

- Tennessee Valley Authority
- JP Morgan Securities (Hong Kong)
- BASF Refinery (Belgium)
- PSEG Global Limited (London, UK)
- Scottish Hydro Electric plc (UK)
- Rolls Royce Power Ventures Ltd UK)
- BC Hydro (Canada)
- Exxon Corporation (Esso UK)
- Maritrans Tankers (USA)
- Allegheny Energy (USA)
- Contact Energy Ltd (New Zealand)
- PriceWaterhouse Coopers (Malaysia)
- BPB Paperboard (UK)
- AECI Operations Services (RSA)
- Smit International Ltd (Scotland)
- GE Finance (Indonesia)
- Nomura Research Institute (Japan)
- SAPPI (South Africa)
- Stewart & Stevenson Int' Inc. (USA)
- International Power (UK)
- Slough Heat & Power (UK)
- Sabah Shipyards (Malaysia)
- Jacobsens-Elektro A/S (Norway)
- Midlands Power International (UK)
- Reliance Industries (India)
- Pentex Oil & Gas (UK)
- ENSCO (Louisiana, USA)
- Trust Power Ltd (New Zealand)
- Renova AB (Sweden)
- Bahrain Electricity ST (Bahrain)

- Peak Pacific Investments (China)
- Miller International Loss Adjusters (UK)
- Petroplus (Netherlands/UK)
- JP Morgan Chase (Hong Kong/UK)
- Tri Energy (Thailand)
- Tasiast Mauritanie Ltd (Mauritania)
- China Light & Power Ltd (Hong Kong)
- Carron Engineering & Const'n (UK)
- Sree Rayalaseema Alkalies (India)
- Synergy Capital (Pakistan)
- Morgan Stanley (USA)
- Hermes (Netherlands)
- Bank of America Leasing (USA)
- Nucor Corp (USA)
- Standard Bank (South Africa)
- GDF/Suez (UK)
- GATX Capital / AARM (Australia)
- Ernst & Young (Malaysia & UK)
- Negriz Group (Nigeria)
- EPCOR (Canada)
- Jaguar Energy (Belize)
- Genesis Power (Sao Tome)
- Tata Chemicals (India)
- Masood John Brown (India)
- Blue Crest Capital (UK)
- Sita Limited (UK)
- Industry & Energy Assoc' LLC (USA)
- Green Frog Fuel (UK)
- Elyo Facilities (UK)
- Crown Cork (Cambodia)
- Premier Power (UK)

Mike Craigie has also written two online articles for Energy Central:

http://www.energypulse.net/centers/article/article_display.cfm?a_id=1466

Article Viewed 5142 Times

http://www.energypulse.net/centers/article/article_display.cfm?a_id=654

Article Viewed 5519 Times

CRAIGIE ENGINEERING SALES & SERVICES Ltd has to date been instrumental in the sale of 75 gas turbines (total 2,145MW), 37 steam turbines (1,362MW), 96 diesel/gas engines (230MW), and 45 transformers (total 616 MVA).

CESS has now reached an impressive total of over 52,061MW of valuation experience in the past ten years and these valuations have included:

- **396 gas turbines with total of over 21,599MW (including Allison, Rolls Royce, GE, Solar, Pratt & Whitney, Fiat, Ruston, GEC Alstom, Westinghouse, Mitsubishi, Siemens & ABB/Alstom)**
- **182 steam turbines with total of 18,706MW (including AEG, ABB, Ansaldo, Blohm & Voss, Elliott, Fuji, GE, Hitachi, Westinghouse, Siemens, Terry, Mitsubishi, Parsons, Stal, Allen, KKK, Peter Brotherhood, Daniel Adamson, AEI/EE, Worthington, Zamec & Alstom)**
- **495 diesels with total of over 2,095MW (Niigata, Pielstick, Crossley, Colt, Polar, MTU, MWM Deutz, Mirrlees, Jenbacher, Enterprise-De Laval, Superior, MAN/B&W, Wartsila/NSD, Ruston, Cummins, Caterpillar/MAK, Rolls Royce/Ulstein/Allen)**

CESS Project Experience

		Valuation	Marketing	Sourcing	Sale
Gas Turbines	Number	396	173	163	75
	Capacity (MW)	21599	8680	6310	2145
Steam Turbines	Number	182	121	58	37
	Capacity (MW)	18706.5	9622.5	8586	1362
Diesel Engines	Number	495	233	193	96
	Capacity (MW)	2095.5	1082.4	813.4	230.4
Barges	Number	35	19	91	6
	Capacity (MW)	1873	973	5452	354
Transformers	Number	213	125	84	45
	Capacity (MW)	7787.9	2783.4	1134.4	616.4

Client	:	<i>Scottish Hydro Electric: Mott Ewbank Preece</i>
Location	:	Kirkwall Power Station, Orkney Islands, Scotland.
Project Details	:	Provide preliminary estimates for decommissioning, dismantling, and removal of 34 MW diesel power station, comprising of 13 Mirrlees diesel generators and auxiliaries.
Client	:	<i>Binani Cement</i>
Location	:	Udaipur, India
Project Details	:	Removal, relocation and re-installation of 25 MW AEG condensing steam turbine generator set.
Client	:	<i>SAPPI Saiccor (Cellulose Plant)</i>
Location	:	Umkomaas, Kwa-Zulu Natal, RSA
Project Details	:	Dismantling, relocation and re-installation of 2 x 6 MW Siemens-Gorlitz back-pressure steam turbine generator sets.
Client	:	<i>BPB Davidson Paper Mill</i>
Location	:	Aberdeen, Scotland
Project Details	:	Inspection, valuation, purchase, decommissioning and dismantling of one 3 MW Brotherhood and 6 MW AEI steam turbine generator for relocation to Pakistan.
Client	:	<i>Midland Power International</i>
Location	:	Hereford CHP Station, England
Project Details	:	Carry out valuation & marketing, prepare sales contracts, and supervise final decommissioning and dismantling of 15 MW (2 x 7.5 MW) Pielstick diesel engines at CHP Station.
Client	:	<i>Haycarb (Sri Lanka)</i>
Location	:	Loch Ewe MOD Power Station, Scotland
Project Details	:	Valuation & marketing, negotiate sales contracts, and supervise final decommissioning and dismantling of 2 x 1.5 MW Daniel Adamson steam turbine generator sets and boilers at NATO Power Station.
Client	:	<i>Skoda Export/Essar Power (India)</i>
Location	:	Inverkip Power Station, Scotland
Project Details	:	Valuation & decommissioning study for 2,000 MW power plant. (3 x 667 MW steam turbines & boilers)
Client	:	<i>Caterpillar Power Systems (Switzerland)</i>
Location	:	Phnom Penh, Cambodia
Project Details	:	Oversee the de-commissioning, dismantling, packing and preservation of 22 MW Cat diesel plant and prepare documents and packing lists for shipping to Chile

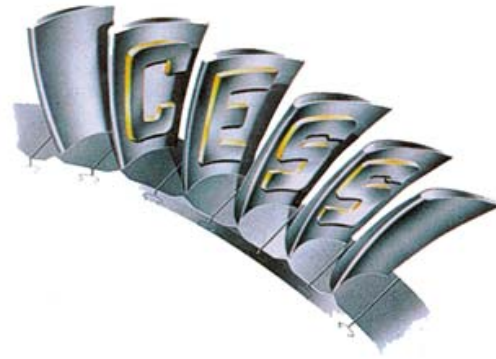
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Craigie Engineering Sales and Services Ltd. is based in Stromness in the Orkney Islands, which is just off the North coast of Scotland. From these headquarters we use state-of-the-art information technology and computer processing systems to handle around 200 enquiries per month for all types of power generation equipment including gas & steam turbines, diesel engines and related ancillary equipment. Facilities and equipment include 200 sq metres of office space, the latest e-mail, internet, file transfer software, colour scanning, design/imaging and printing facilities all of which guarantee a fast and professional response to enquiries from clients.

