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| For Sale: | 102 MW (upgrade to 155 MW possible) Pre-owned Combined Cycle Power Plant |
| Ref.-No: | GT-CC-053 |

Brief plant history:

This plant is designed with 3 GTG's and it was used as a cogeneration plant originally . The total efficiency is around 54 % when cogeneration is operational. Since one of the two existing LM 6000 is not for sale a replacement LM 6000 (which we may have available) would increase the CC capacity to **155-156 MWe**. All auxiliaries necessary for this capacity level are existing in the scope. Also the net efficiency will be increased accordingly. The plant is presently in operation and will be operated until 31.12.2015.

CCGT PLANT CHARACTERISTICS

| | |
|--|---|
| Type | CCNGPP |
| Capacity | 102 MW |
| Configuration of the CCNGPP | 2 GTG's + 2 STG's + 3 HRSG's |
| Fuel | GT LM 6000 is dual fuel (NG+Naphta) GT LM 2500 can use NG at the moment, however also Naphta is possible after an easy conversion. |
| Cooling Type | Water Cooling |
| Net Efficiency (according to the existing configuration) | 46 %–47,5 % |
| COD | 1999* |
| Major Maintenance Cycle, hours | 50.000 |
| Next Major Overhaul Inspection | GTG-1 after 36.583 h, GTG-3 after 28.579 h |
| Total Operating Hours (For the total package) | GTG-1 111.336 (GT-1 13.417 h) , GTG-3 74.659 |
| Operating Hours Since Major Overhaul | 21.421 for GTG-3 |
| Total Starts Since Commissioning | GTG-1 696, GTG-3 1699 |

***The plant was commissioned in 1999. However, the gas turbine GTG-1 was installed in 2010 as new.**

CCGT CONFIGURATION

| Gas Turbine-1 | |
|----------------------|------------------|
| Year of Construction | 2010 |
| Manufacturer | GE Europe |
| Capacity | 42 MW |
| Model-Type | LM 6000 |
| Efficiency | 38 % |

| Gas Turbine-3 | |
|----------------------|------------------|
| Year of Construction | 2004 |
| Manufacturer | GE Europe |
| Capacity | 31,1 MW |
| Model-Type | LM 2500 |
| Efficiency | 36 % |

| SteamTurbine-1 | |
|----------------------|----------------------|
| Year of Construction | 1999 |
| Manufacturer | GE |
| Capacity | 24 MW |
| Model-Type | DEX1634155432 |

| SteamTurbine-2 | |
|----------------------|----------------|
| Year of Construction | 2006 |
| Manufacturer | Siemens |
| Capacity | 10 MW |
| Model-Type | K 1101 |

| Heat Recovery Steam Generators 1 and 2 | |
|--|--------------------|
| Year of Construction | 1999 |
| Manufacturer | DESA |
| Production of steam, ton/hr | 59 t/h each |

| Heat Recovery Steam Generator 3 | |
|---------------------------------|---------------|
| Year of Construction | 2006 |
| Manufacturer | GAMA |
| Production of steam, ton/hr | 44 t/h |

| Generators 11 KV | |
|---------------------------|------------------------------|
| Generator GT-Manufacturer | BRUSH |
| Generator ST-Manufacturer | GT-1 GE, GT-3 SIEMENS |
| | |
| | |

| Step-Up Transformers 11/155-160 KV | |
|------------------------------------|-----------------------------|
| Manufacturer | GE Prolec and ALSTOM |
| Model | - |



Further information on request

Important Disclaimer

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