

**TTT Inc. Holding Group
ESCO PROJECT QUESTIONNAIRE**

Facility Name:

Facility President/Managing Director:

Facility Technical Director:

Phone:

Fax:

E-mail:

Website:

PLEASE PROVIDE AS DETAILED INFORMATION AS POSSIBLE:

- 1) Schematic Diagram of the layout of your facility, including location of all Energy/Environment/Automation systems with detailed dimensions.
- 2) Weekly or Monthly Summary of Energy and Steam/Hot Water Consumption for the past 3 years.
- 3) The cost you pay for:
 - Externally generated Electricity
 - Natural Gas
 - Fuel Oil
 - Coal
 - Other Fuel
- 4) Are partial/complete Facility Energy Audit reports available for review?
If yes, please provide a copy of the most current one/ones.
- 5) Data on your existing:
 - a) Boilers if any:
 - Number of units:
 - Type:
 - Power Rating:
 - Fuel Source:
 - BTU in at 100% Load:
 - BTU out at 100% Load:
 - BTU in at 75% Load:
 - BTU out at 75% Load:

- BTU in at 50% Load:
 - BTU out at 50% Load:
 - BTU in at 25% Load:
 - BTU out at 25% Load:
 - Number of hours a day in use:
- b) (Micro) Turbines if any:
- Number of units:
 - Type:
 - Power Rating:
 - Actual Operating Efficiency and Calculation Method Used:
 - Number of hours a day in use:
- c) Chillers if any:
- Number of units:
 - Type:
 - Power Rating:
 - Actual Operating Efficiency and Calculation Method Used:
 - Number of hours a day in use:
- d) Heat Exchangers if any:
- Number of units:
 - Type:
 - Power Rating:
 - Actual Operating Efficiency and Calculation Method Used:
 - Number of hours a day in use:
- e) Condensers if any:
- Number of units:
 - Type:
 - Power Rating:
 - Actual Operating Efficiency and Calculation Method Used:
 - Number of hours a day in use:
- f) Absorbers if any:
- Number of units:
 - Type:
 - Power Rating:
 - Actual Operating Efficiency and Calculation Method Used:
 - Number of hours a day in use:
- g) Thermal Storage Tank if any
- Number of units:
 - Type:
 - Storage Capacity:

- Actual Operating Efficiency and Calculation Method Used:
 - Number of hours a day in use:
- h) Diesel or other Generating Set/Engine if any:
- Number of units:
 - Type:
 - Power Rating:
 - Actual Operating Efficiency and Calculation Method Used:
 - Number of hours a day in use:
- i) Fuel Cells if any:
- Number of units:
 - Type:
 - Power Rating:
 - Actual Operating Efficiency and Calculation Method Used:
 - Number of hours a day in use:
- j) Heating/Ventilating/Air Conditioning Systems if any
- Number of units:
 - Type:
 - Actual Operating Efficiency and Calculation Method Used:
- k) Other Systems if any:
- Type:
 - Actual Operating Efficiency:
- 6) In your Facilities Department, as it pertains to operation/maintenance of Energy/Environmental Systems, how many of your staff are:
- Engineers: Additional certifications/training:
 - Technicians: Additional certifications/training:
- 7) In your Facilities Department, which of the Energy Systems listed in question 5 are connected via Internal Local Area Network to a real-time Computer Monitoring System?
- 8) If considering ON-SITE COGENERATION at your facility, are there any CONSTRAINTS/LIMITATIONS we should be aware of:
- a) Right to re-sell extra power?
- b) Right to back-up/maintenance power from the public electricity grid in case of system shutdown/overload?

- c) Feasibility study undertaken for pending project?
- d) Construction/Installation issues (boiler house size restrictions on height, area)?
- e) Fuel supply options and Price Arbitrage options?
- f) Insurance Issues?
- g) Combustion Cycles required:
 - Topping/bottoming:
 - Heat balance:
 - Repowering:
 - Combined-cycle:
 - Baseload:
 - Peak-shaving:
 - Thermal-tracking:
- h) Local Permits?
- i) Interconnection with the public electric grid:
 - safety/line protection?
 - inspection/testing program?
- j) Environmental considerations:
 - air emissions control?
 - water requirements?
 - waste disposal?
 - other?