|  |  |  |
| --- | --- | --- |
|  | JSC «SMNPO – Engineering» | Ukraine, 40009, Sumy,58, Gorkogo Str.,sumy-frunze.com |
|  |  | *E-mail: technical@sumy-frunze.com* |
| Gas turbine driven cogeneration plant (GTDCP) Data Sheetfor the Compressor Station \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

| No. | Parameters | Value |
| --- | --- | --- |
| 1 | Required generator power, MW |  |
| 2 | Number of GTDCP per the compressor station, pcs. |  |
| 3 | Ambient air temperature at CS, °С |  |
|  | – average monthly temperature: |  |
|  | January |  |
|  | February |  |
|  | March |  |
|  | April |  |
|  | May |  |
|  | June |  |
|  | July |  |
|  | August |  |
|  | September |  |
|  | October |  |
|  | November |  |
|  | December |  |
|  | − absolute minimum |  |
|  | − temperature of the coldest five days |  |
|  | − absolute maximum |  |
| 4 | Properties of the gas used as fuel to drive the generator: |  |
| 4.1 | Gas composition, molar (volumetric) % |  |
|  | Methane (CH4 ) |  |
|  | Ethane (С2Н6 ) |  |
|  | Propane (С3Н8 ) |  |
|  | I-Bhutan (і С4Н10 ) |  |
|  | N-Bhutan (n С4Н10 ) |  |
|  | I-Pentane (і С5Н12 ) |  |
|  | N-Pentane (n С5Н12 ) |  |
|  | Hexane (С6Н14 ) |  |
|  | Heptane (С7Н16 ) |  |
|  | Octane (С8Н18 ) |  |
|  | Nonan (С9Н20 ) |  |
|  | Decane (С10Н22 ) |  |
|  | Nitrogen (N2 ) |  |
|  | Carbon dioxide (CO2 ) |  |
|  | Helium (Не) |  |
|  | Hydrogen sulfide (Н2S) |  |
|  | Water (Н2O) |  |
| 4.2 | Content of reagents causing metal corrosion, mg/m3 |  |
| 4.3 | Gas density, kg/m3 (at t=20°С, Р=0.1013 MPa) |  |
| 4.4 | Gas calorific value, kcal/m3 (at t=20°С, Р=0.1013 MPa) |  |
| 4.5 | Gas constant, kJ/kg⋅K |  |
| 4.6 | Maximum dust content, mg/m3 (at t=20°С, Р=0,1013 МPа) |  |
| 4.7 | Dust particles maximum size, μm |  |
| 4.8 | Maximum humidity at suction conditions |  |
| 5 | Barometric pressure of atmospheric air at the compressor station, Pa (or the altitude of the compressor station site above sea level, m) |  |
| 6 | Design load:– wind load, kPa– snow load, kPa– seismic load, magnitudes |  |
| 7 | GTDCP version (modular with generator installed in the building or GTDCP installed in the building) |  |
| 8 | Air cleaning unit type (ACU) for GT |  |
| 9 | Waste heat exchanger power, MW (if required) |  |
| 10 | Exhaust stack height, m |  |
| 10.1 | NOx content in exhaust gases, mg/m3, at 15% О2 |  |
| 10.2 | СО2 content in exhaust gases, mg/m3, at 15% О2 |  |
| 10.3 | Emissions control system (stationary or portable) |  |
| 11 | Washing system availability for GTE gas-air flow duct cleaning (stationary washing unit for each TCP or mobile washing unit for a number of TCPs) |  |
| 12 | Type of GTDCP modules heating system (hot air discharged from the engine, electric heaters, hot water, gas-air or other type) |  |
| 13 | Fire and gas detection system availability |  |
| 14 | Package Automatic Control System recommended type |  |
| 15 | Vibration diagnostics availability |  |
| 16 | Сommissioning spare parts kit availability |  |
| 17 | 2-year operation spare parts kit availability |  |
| 18 | Additional requirements for GTDCP, its units and systems |  |

Prepared by:

Approved by: