

Investigation of thermal schemes of CCGT for the energy sector of Iraq

الملخص:

In this work, for Iraq justified the use of Combined cycle A CCGT unit-480 with gas turbines of the type Siemens series SGT5-2000E, Combi Boiler heat exchanger & steam turbine of the type LMZ T-150-7.7 per nominal condensing mode when the ambient air temperature of +15 0C, this Combined cycle A CCGT unit has efficiency 51.222% and power 482.8 MW. The calculations of operating modes of A CCGT unit-480 -480 for climate conditions of Iraq in the range of ambient air temperature from 00C to +500C. The change of the outdoor temperature leads to a change in the mode of operation of all mechanical and heat-exchange equipment of A CCGT unit, this is primarily due to the change in the energy characteristics of the gas turbine.