ANALYSIS ON TYPICAL ELECTRIC POWER CONSUMPTION IN A ABUJA HOTELS.

CASE STUDY: SIGMA APARTMENT HOTEL. WUSE II ABUJA, [www.sigmapartments.com](http://www.sigmapartments.com)

Description: Sigma Apartment is categorized as Luxury Apartments Hotel. It’s a 3 storey of 48 Semi detached flats comprising 1 Bedroom, 2 Bedroom and 3 Bedroom flats. All flats have Kitchen and bathrooms etc. The hotel has detached buildings comprising Gymnasium, Laundry, Restaurant Industrial Kitchen and facility departments.

There are 2 standby Generators. 1nr 500KVA and 1nr 400KVA both serving as Power backup with 1 of two as redundant.

TYPICAL DIESEL FUEL ENERGY CONSUMPTION SCENARIOS:

1. Average of 6 Hours per day during the Abuja heat weather which is typical of 70% of entire Nigeria. That period is about 8 months approximately when Highest temperature is at 67 degree centigrade and Lowest at 30 degree centigrade.
2. During the above mentioned period there is typical Highest fuel consumption is about 60 liters in 48Hrs while Typical Lowest fuel consumption is 20 liters.
3. Average Power consumption during the rest 4 months is 4 hrs typically.
4. Normal price of Diesel N175 – N200

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