

## Taj View Hotel, Agra

The construction of hotel was started in 1972 by Mr. Khanna's & Mehra's in the name of Holiday Inn a Unit of Northern India Hotels Limited and opened in 1975 after completion of construction work with 80 rooms and inaugurated by the President of India Mr. Fakhruddin Ali Ahmed. The owner of the hotel appointed to Mr. Chandra Bhan as General Manager.

◆ In 1977 Management has been changed Mr. Raunak Singh has taken over this hotel and appointed Mr. K.J.S. Ahluwalia as GM and 20 more rooms were added in the property.

◆ In 1981 again Management has been changed, Mr. Prem Gupta of IST Watches took over this hotel and renamed it as "Galaxy" and appointed Mr. Devesh Bhargava as Chief Executive and Mr. V.P. Singh as Resident Manager. After the resignation of Mr. Devesh Bhargava, Mr. K.K. Tuli was appointed as a GM and after Mr. Tuli, Mr. M.L. Gupta taken over the charge.

◆ Finally in December 1985 PIEM Hotels took over the property from Galaxy and renamed it as "Taj View", and entered in to a agreement with IHCL for running the property since then it has been with the Taj Group of Hotels.

◆ After take over the property by PIEM Hotels Limited an amount of Rs. 400.00 lacs for renovation of rooms, lobby and restaurants in 1986-87.

◆ After Mr. Deepak Srivastava Mr. Vilaas Humbre took the charge as General Manager on 17<sup>th</sup> July'2001.

◆ In the year 2002-03 company spent Rs. 215.36 lacs for renovation of Lobby, porch and restaurants.

◆ In the year 2003-04 company spent Rs. 273.57 lacs for renovation of 40 rooms (4<sup>th</sup> & 5<sup>th</sup> Floor).

◆ In the year 2004-05 company spent Rs. 450.48 Lacs for renovation of 60 rooms, (1<sup>st</sup> 2<sup>nd</sup> & 3<sup>rd</sup> Floor) Health Club, Lobby Toilets and both Guest Elevators.

In Current year company spent Rs. 20.00 lacs for renovation of Swimming Pool.

Taj View Hotel is a multistoried property in Agra being one of the tallest building & is a great and well-deserved honor for Agra. It houses 100 well appointed guest rooms of various standard, shopping complex, banquet halls, multi cusin restaurants and bar for the entertainment of guest and tourist.

The total area of Taj View Hotel is 2,12,482 sq.ft, the air-conditioned area being 1,97,741 sq.ft. The temperature maintained throughout the air-conditioned space is 21 +/- 1 °C.

The connected load is approximately 1200 kW.

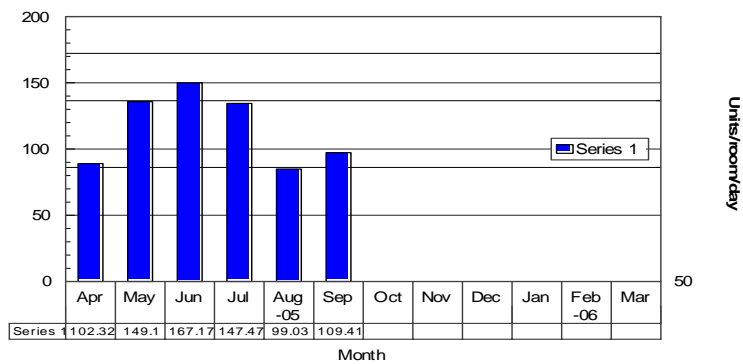


**Energy Consumption**

Figures of the Energy consumption at Taj View Hotel have shown decline as seen in the fig. below

**Energy Consumption Trend -05-06**

Taj View Hotel, Agra



The average reduction of energy consumption over the last 4 months has been decreased

**Energy Conservation Commitment, Policy & Setup**

Taj View Hotel team closely monitors the energy consumption patterns everyday and discuss in the morning meeting. Targets are decided every month in the morning meeting by the unit General manager looking into the scenario of the forecasted occupancy and the budget allocation for the particular month & ensured that they are met. Deviations from the target are reasoned and analyzed during the monthly managers meet and documented.

Indian Hotels TOP ( Total Overdrive Profit ) management team at corporate circulated regular guidelines for various innovative energy saving initiatives, directives and guidelines, assist making provision of budget for the unit in capital nature and gives special sanctions as per the severity of the initiative.

Not only does the top management emphasize on achievement of the highest level of energy efficiency but at unit level also small process improvement teams ( PIT's), CFT's ( Cross Functional Teams ), various energy efficient ideas are generated ,collected and rewarded to the staff involved are formed for the energy conservation, they meet every month, brainstorm and focuses new ideas generated ,action plans are made and followed and reviews are made according to the plan and documented. It also provides secure funding to implement energy efficiency measures. Their timely approvals of the energy conservation plans help speedy implementation of measures to conserve energy. Training & regular briefings are done to help the plant personnel understand the terms related to energy consumption.

### ***Energy Conservation Achievements***

**Implemented Measures:** - The following energy efficient measures have been implemented in the following areas

#### **1. Energy management strategy for Chillers**

##### **a) Load reset**

Introduced the Primary and secondary chilled water pumping system for getting maximum efficiency and system stability at the hotel in the HVAC system. Chilled water flow control is designed based on chilled water flow from the chiller and responds quickly to load changes, to maintain the chilled water temperature. The compressors automatically share the load among themselves and maintain the chilled water temperature as per the set point.

##### **b) Chiller sequencing**

In Chiller (compressor) sequencing is done automatically by the microcomputer controlled panel and shares the entire load on the chiller plant. The loading and unloading of the compressor is regulated by they controller and the chilled water flow temperature is controlled by switching compressor on & off.

##### **c) Cooling Tower**

The cooling water temperature depends of the ambient conditions of the weather condition. If the condenser water design temperature minus the approach temperature of the tower is lower than the outside air temperature, then Cooling tower fans speed is regulated as per the requirement by reducing the frequency through the variable frequency drive put for the controlling the cooling tower speed.

#### **3. Energy management strategy for Air handling units**

##### **a) Controller**

The digital controller monitors the room temperature and the thermostat modulates the chilled water flow through the cooling coil of the Air Handling Unit and maintains the temperature automatically. The set point of the room temperature is made as per the seasonal condition; this software program reduces energy consumption (electrical and mechanical) over all on the central chiller plant thus saving in energy. witching fans OFF & ON is periodically monitored and operate, on a fixed time schedule. However, if space temperature exceeds the limits, duty cycling program is disabled on extreme condition.

##### **b) Optimum Start/Stop**

Air handling units are switched ON depending upon the outside air/inside air temperature and the capability of the AHU to recover the space temperature to the specified standard as given by the corporate as per the brand standard of the comfort band of human body.

#### 4. Energy Conservation through lighting upgrades/modifications

Since last three years Taj View has modified, upgraded and replaced the high energy consumed lamps by using alternative high efficient CFL, PL and metal halide lights over the entire property and has put ES-25 & BEBLEC ( Energy saving lighting panels) for reducing the energy consumption on lighting load only. Automatic voltage corrector OLTC transformers also have been installed in place of conventional type transformers.

In addition to the effort automatic power factor corrector panel has been placed to take care of the power factor correction of the entire property.

#### 5. HVAC upgrades/modifications & Lighting upgrades/modifications

Light & VFD upgrades

##### Energy Conservation plans & Targets

The constant strive and efforts made by unit and at corporate level are to reduce the energy consumption pattern day by day and in future ahead is promising and challenging. The future endeavors to reduce the Specific Energy Consumptions are committed us and objective are made by the requirements of ISO—14001 are followed up as follows:-

a. Auditing of Energy Consumption by certifying agency in this year for finding out the source of energy conservation possibility and striving to achieve the saving on energy consumption. The estimated cost of carrying out of energy audit is of Rs 2-3 Lacs.

**b. Overhauling of the Diesel Generators:** The total overhauling of (1 x 380 KVA) DG set will ensure that they will be able to deliver certain part of the entire load of the building As the DG is old & have become energy guzzlers over a period of time. The estimated cost for this is Rs.7 lakhs.

**c. Improved Air Distribution System for all floors:** From time to time the guest floors of Taj View Hotel has been renovated by changing the old concept of high energy consumed energy devices by eco friendly low power consumed equipments. The room air flow is studied & modified so as to optimize the air flow requirements of the entire guest floor.

**d. Installation of Digital Energy meters:** Digital electronic energy meters has been installed in all critical areas to monitor the energy consumption so that energy consumption on each floor can be closely monitored

##### Details on the Energy Efficiency Improvement projects/Measures

S.NO.	SOLUTION	MAKE	DESCRIPTION	QUANTITY Nos.	VALUE Rs. Lakhs
1.	Chillers	Danhaum Bush	Screw Chiller of 100 Tr and 200 TR capacity	1 each	
2.	Cooling Tower	Mihir and Paharpur	120 Tr each	4 nos.	10.0
3.	Pumps	Kirloskar, Grundfoss, Crompton, Becon etc.	Pumping load	lot	20.0
4.	Tube Lights.	Phillips, Osram, Etc.	Lighting load	lot	1.0
5.	Electronics Ballasts	Phillips, Osram	Lighting load	lot	0.5
6.	CFLs	Phillips, Osram	Lighting load	lot	0.5
7.	VFD	ABB, DANFOSS	AHU load, HVAC pumping	6	3.0
9.	Energy Management System	Tata Honeywell	HVAC Control	lot	20.65

10.	Energy Meters	L & T,Enercon	Energy Reading	25	1.25
11.	HVAC related Mechanical Upgrades	Primary and Secondary chilled water system	-	-	15.0
12.	Water Treatment Plant	In House plant with RO drinking water system	-	-	10.0
13.	Sewage Treatment Plant	In house	-	-	25.0
					160.0

## Environment & Safety

We at Taj View Hotel is striving to certify by the external agency for the ISO-14001 and is under going the implementation process as per the guidelines and standards.

Moreover Taj View Hotel is HACCP (Hazard and critical control point) certified hotel and operates under the guidelines of the specified standard for the safety and hygiene standard of guest and staff as well.

“We, at The Taj-View - Agra, are committed to the protection of the natural environment and prevention of pollution.

We are also committed to continually improve our environmental performance, to comply with applicable legal requirements, and with other requirements to which we subscribe which relate to our environmental aspects, to minimize all types of waste and the use of natural resources.

We commit ourselves to create environmental awareness among the persons working for or on behalf of Taj View - Agra, contractors, customers, suppliers and the local community.”

The plant and equipments are maintained as per the guidelines of **TMP** and the process of **TPM** is followed up for every machine,equipment,area and guest room as well which ensures a complete step by step guidelines for the safe handling & use of substances, providing information, instruction & supervision to our employees & maintaining safe & healthy working conditions.

Apart from the energy conservation at Taj View Hotel, we work on phasing out of ODS depleting substances in a phased manner as per the ISO-14001 requirements. We also works on the noise reduction,restcting of air pollutants by the help of wet scrubber etc.for the air emission and comply to the pollution control board's requirements and counter checks all the specified parameters by NABL certified renowned chemical labs at Delhi for the assessment of various parameters and our internal reference and guidelines.

Following steps has taken to reduce wastage and 100% usage of natural resources:-

- Use of email, Taj Buzz, MNC, for the internal communication
- Practicing of proofreading before taking print out.
- Precious use of Staff notice board for internal circulation of message/memos/documents/reports instead of distributing multiple copies department wise.
- Internal posting of announcements of vacancies on bulletin and internal e-mails
- Encouraging air dryers in Restrooms instead of paper towels.
- Use of recycled paper while printing draft documents.
- Surrounding of the hotel the green belt has been developed and maintained by using the recycled water taken from the in house sewage treatment plant and undertaken beautification & gardening work.