

## Electrical Billing System for Hi-tech city, Hyderabad

Hi-Tech City Phase II, an Integrated Techno-Township, a concept that provides World Class Infrastructure Facilities for the IT Industry under one roof, which was conceptualized by the Chief Minister of Andra Pradesh, India, Mr. Chandra Babu Naidu.

HITEC City, because of its magnitude and flexible options, offers a matrix of choices to companies and takes care of their growing business needs, better than any other IT park.



The entire township of HITEC City is maintained by L&T Infocity Limited to international standards. The building has all the required facilities such as assured power supply, centralized air-conditioning, data and voice connectivity and building automation. Substantial space in the first two blocks has been committed to GE Capital International Services, GE Software Services, Oracle Corp., Indian National Centre for Ocean Information Services, FVC. Com, LT Solutions, Shonkh Technologies, Snaz Technologies, Software Development Technologies, etc. and bookings are on for the balance space in the facility, on first-come-first-serve basis.

Since the distribution of area within the building is not fixed and is open ended, L&T required that a flexible solution be provided so that accurate electrical billing is made to the different customers who are occupying different areas within the building.

Protocol Automation Technologies has provided an Electrical Billing System solution to Enercon Systems who are suppliers of the energy meters and have supplied the same for the Hi-tech city. They have installed more than 400 energy meters

each bringing data from Allen Bradley Scanner modules to an Allen Bradley SLC PLC.

The cumulative energy calculation is being done using our HMI software for each meter. L&T have devised formulas on how to calculate accurate energy consumed based on sq. ft. area used, common utilities, etc.

SDB	USDB	ESDB
PA001	4.00	10.00
PA002	4.00	13.00
PA003	100.00	480732.00
PA004	4.00	10954.00
PA005	4.00	22.00
PA006	4.00	145.00
PA008	8154.00	17.00
PA007	-58102.00	33.00
PA009	-25788.00	70.00
PA010	1174.00	4.00
PA011	36.00	130951.00
PA012	-11954.00	25.00
PA013	4.00	38.00
NA	0.00	0.00

Protocol designed the system in such a way that all energy data is stored at regular intervals for each energy meter in and is updated on a per day basis.

Based on data about each occupant and related energy meter data assigned to them already entered in an MS SQL Sever database, billing information based on divisions is retrieved when queried for. Reports are generated for each user based on the area they are occupying.

Data entry screens have been provided in Excel format to enter manual data like Damper hours, which is not automated and not integrated, into the system.

Flexibility has been provided in the software by allowing L&T to change the meter assignment depending on the customer and the floor or area he uses.

This is an important requirement because as and when new customers occupy the floors at a later stage, L&T will be able to produce new bills to them.

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To find out more about our other installations write to us at

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