

A Report

On

One day Workshop

Energy Audit and Management

(29th September 2018)

Under

TEQIP-III

Course Organized by: -

Madhav Institute of Technology and Science,
Race Course Road, Gole ka Mandir,
Gwalior - 474005, Madhya Pradesh, India

1. Name of the Department/Section:

Department of Electrical Engineering

2. Name of the Activity:

Energy Audit and Management

3. Date & Duration of activity:

29th September 2018 (One Day)

4. Details of activity in 150 words:


In session 1, Mr. Maan started the discussion with brief introduction on Energy Audit and its benefits at the industry, commercial and domestic levels. He talked about energy saving & its benefits, environmental sustainability, industrial productivity, smart grid: concept and its applications. Discussion on pump, cooling tower and lightening system auditing was also held. He also spoke on power quality issues and their solutions in electrical network. Importance of heat rejection formula in efficiency improvement, energy conservation building, and power factor correction methods were also discussed. Various devices used for energy auditing techniques in industry were also enlightened.


In session 2, Mr. Khare started the discussion with general structure of power system network, losses associated with transmission & distribution. Then the discussion moved on to metering techniques including smart meters, Net metering related to grid connected PV, theft involved at consumer end of power network and challenges faced by electrical utility personnel. Not only theoretical concepts, speaker gave a glance of real situations in power distribution sector.

Speaker Details:

1. Mr. Satvinder Singh Maan, Technical assistant
CMVP- Certified Monitoring & Verification Practitioner (USA)
ECBC master trainer, BEE Certified Energy Auditor
Lead Auditor-ISO-50001, Galleleo Master Certificate (U.K.)
IGBC – Accredited professional, GRIHA Certified Trainer & Energy Evaluator
Lead Auditor-ISO-14001, Lead Auditor-BSI-16001 & OHSAS-18001
2. Er. Akshya Khare
General Manager, MPMKVCL
City Circle Gwalior

5. Brochure of the workshop:

<p style="text-align: center;">REGISTRATION FORM</p> <p style="text-align: center;">National Workshop on Energy Audit & Management Under TEQIP Phase-III (September 29, 2018)</p> <p>1. Name:.....</p> <p>2. Gender:.....</p> <p>3. Designation:.....</p> <p>4. Organization:.....</p> <p>5. Correspondence address:.....</p> <p>6. Mobile. No.:.....</p> <p>7. E-mail:.....</p> <p>8. Qualifications:.....</p> <p>9. Teaching/Research Exp.(yrs):.....</p> <p>10. Lodging Requirement: Yes/No..... (Chargeable)</p> <p>11. Area of Research:.....</p> <p style="text-align: center;">(Signature of the Applicant with date)</p> <p style="text-align: center;">(Signature of Head of Department/Institute with date)</p> <p style="text-align: center;"><small>Note: Photocopies of this form can be used for registration.</small></p>	<p style="text-align: center;">ORGANIZING COMMITTEE</p> <p>Patron Er. Ramesh Agrawal Ex MLA and Secretary, Scindia Engineering College Society</p> <p>Chairman Dr. R.K.Pandit Director</p> <p>Coordinators Prof. Ashis Patra Associate Professor Dr. Vijay Bhuria Assistant Professor</p> <p>Organizing Secretary Prof. Vishal Chaudhary Assistant Professor</p> <p>Organizing Committee Dr. A.K.Wadhvani Prof. Rakesh Narvey Dr. Satochana Wadhvani Prof. H. S. Ashwar Dr. H.M.Dubey Prof. Kuldeep Swarnkar Dr. Shashi Dixit Prof. Praveen Bansal</p> <p style="text-align: center;">ADVISORY COMMITTEE</p> <p>Dr. Laxmi Srivastava Professor & Head, Electrical Engineering Department Coordinator, TEQIP-III</p> <p>Dr. Manjoo Pandit Professor, Electrical Engineering Department Dean Academics</p> <p>Dr. Rajeev Kansal Dean Student Welfare Dr. Prateesh Jayasawat Academic Coordinator, TEQIP-III</p> <p style="text-align: center;">ADDRESS FOR COMMUNICATION</p> <p>Dr. Vijay Bhuria Prof. Vishal Chaudhary Department of Electrical Engineering Madhav Institute of Technology and Science Race Course Road, Gola Ka Mandir, Gwalior (M. P.) 474005 Phone: 07512409311, 213</p>	<p style="text-align: center;">NATIONAL WORKSHOP ON Energy Audit & Management Under TEQIP Phase-III (September 29, 2018)</p>  <p style="text-align: center;">COORDINATORS Prof. Ashis Patra, Associate Professor, Dr. Vijay Bhuria, Assistant Professor</p> <p style="text-align: center;">ORGANISED BY Department of Electrical Engineering Madhav Institute of Technology & Science, Gwalior-474005 (A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV Bhopal) www.mitsgwalior.in</p>
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<p style="text-align: center;">ABOUT THE INSTITUTE</p> <p>Madhav Institute of Technology & Science, Gwalior was established in 1957 by His Highness Late Sir Jiwaji Rao Scindia, Maharaja, of the erstwhile state of Gwalior. The foundation stone of the Institute was laid by Late Dr. Rajendra Prasad, on 20th October, 1956 and the building was inaugurated by Late Dr. S. Radhakrishnan on 11th December, 1964. The president of India, Dr. Pratibha Devisingh Patil graced the Golden Jubilee Celebrations of the institute as Chief Guest on 30th June, 2008.</p> <p>The institute has a campus of around 45 acres. The Institute offers education in eleven undergraduate programmes and twelve PG programmes. The prime objective of the Institute is to provide quality technical education at undergraduate and postgraduate levels. Recently the Institute is also funded by World Bank under TEQIP phase III to strengthen the quality of technical education.</p>	<p style="text-align: center;">OBJECTIVES OF THE WORKSHOP</p> <p>The per capita energy consumption of India is increasing at a very faster rate. There is a sharp increase in the industrial load in the last two decades. But the increase in installed capacity is less as compared to the increasing demand. Because of this, we are facing energy crunch. In order to curb the gap between the demand and supply, the Government of India has enacted 'Energy Conservation Act 2001'. As per this law, energy audit of all the industries is mandatory.</p> <p>The first step in any energy management program is to conduct an Energy Audit. Energy Auditing is a systematic gathering and analysis of energy usage information within a building or process or system. The progress of all initiatives that are put in place should be accurately monitored. Energy savings in the order of 5 to 20 % are possible by optimizing its utilization with better housekeeping, low cost retrofitting and opting for energy efficient equipment at the time of replacement, renovation or up-gradation.</p> <p>The highlights of the workshop are:</p> <ul style="list-style-type: none"> • General aspects of Energy Management and Energy Audit • Assessing the present pattern of energy consumption • Identifying the potential area for improvements on thermal and electrical utilities • Implementing the measures of energy conservation • Enable the participant to carry out energy auditing in a systematic manner. 	<p style="text-align: center;">ELIGIBILITY FOR PARTICIPANTS</p> <p>The workshop is open to faculty members, research scholars and industry personnel belonging to engineering disciplines.</p> <p style="text-align: center;">REGISTRATION</p> <p>Registration Fee Faculty members: No fees Industry Personnel: Rs 1000/-</p> <p>How to Register The participants may register by sending the completed and duly signed 'Registration Form' along with the Demand Draft in favour of 'Director, MITS, Gwalior' payable at Gwalior by 27th September 2018 through post or email. Those who will send scanned copy of DD should come with original DD at the time of workshop. Seats are limited to 50 and application form will be selected on first-cum-first basis.</p> <p style="text-align: center;">ROUTE TO MITS, GWALIOR</p> 
<p style="text-align: center;">ABOUT THE DEPARTMENT</p> <p>The department of Electrical Engineering is one of the oldest departments in the institute with a glorious history of sixty one years of excellence in teaching and research. The department offers one UG and two PG programmes. Since 2012, the department is a minor QIP centre for research programme. The faculty is actively engaged in research, and has published numerous papers in National and International Journals. The alumni of the department have secured their places in the higher echelons of the society and technical world.</p>		

6. Photos of the event:





7. Participant feedback analysis report

Total No. of Participants: 70

Feedback given by Participants: 30

Overall Feedback Rating: Good

Quality of Workshop in terms of communications, facilities, logistics, presentation etc :
Good and Informative

Suggestions/Comments by the Participants:

- (a) The Workshop is informative in terms of its contents.
- (b) We learnt a lot about energy auditing e.g. the process of auditing. Overall, it was good.
- (c) Hands-on session may be included with industrial visits to clarify the concepts.
- (d) Workshop should be conducted for more than one day with practical practices (Kindly make it for one-week workshop).
- (e) Arrangements were good and speakers had vast knowledge about the field

Dr. Vijay Bhuria
Coordinator

Prof. Asis Patra
Coordinator