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**COLLEGE OF ENGINEERING**  
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## **WORKSHOP REPORT**

*In the title of*

**“RENEWABLE ENERGY SYSTEMS”**

**From 11<sup>th</sup> to 13<sup>th</sup>, JANUARY 2023**

**Beneficiaries: III year EEE Students**



**Jointly Organized by**

**Energy Club**

**&**

**Department of Electrical and Electronics Engineering**

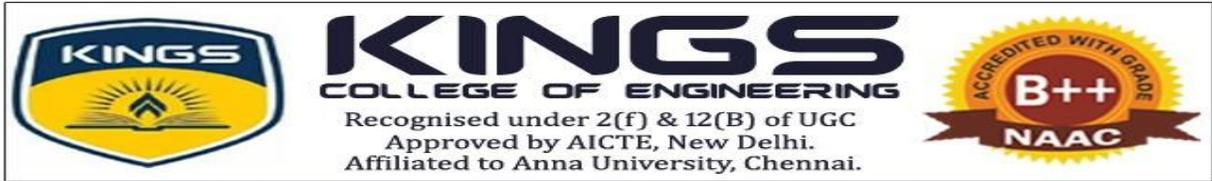
**KINGS COLLEGE OF ENGINEERING, PUNALKULAM**

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**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**  
**ACADEMIC YEAR (2022-2023) ODD SEM**  
**REPORT ON THREE DAYS WORKSHOP**

- Title of the Workshop** : “Renewable Energy Systems”
- Date** : 11.01.2023 to 13.01.2023
- Resource Person** : 1. Mr.S.R.Karthikeyan, AP/EEE, KCE  
2. Mr.R.Sundaramoorthi, AP/EEE, KCE  
3. Mr.J.Arokiaraj, AP/EE
- No of students participated** : 41
- Objectives of Workshop** : To provide knowledge and exposure to students about:
- Maximize the amount of renewable energy consumed
  - Minimize greenhouse gas emissions
  - Minimize fuel consumption to reduce dependency on fuel imports
  - Maximize overall economic benefit
  - Operate at the highest possible level of reliability

Welcome address was given by Mrs. A.Prabha, AP\EEE . The presidential address was given by **vice principal Dr. S. Sivakumar**. He underlined that attendees will gain additional knowledge about the range of technical competencies and opportunities that await electrical engineers in the future. He emphasised that the students should have a thorough understanding of the microgrid and renewable energy systems and encouraged them to ask more questions.

A brief overview of the sessions and introduction to our resource persons was given by Dr. A.Albert Martin Ruban, HOD/EEE.

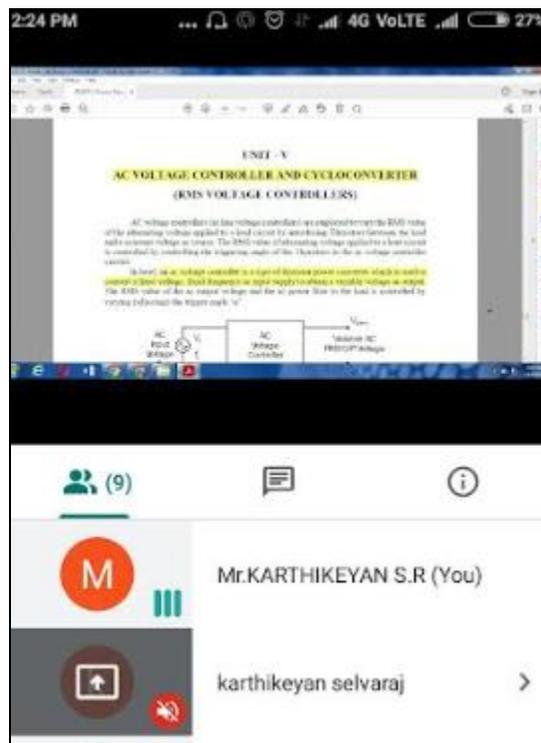
**Day : 1**

**Title:** India's Power Grid Organisation

**Resource Person:** Mr.S.R.Karthikeyan, AP/EEE, KCE

**The following points were discussed during the session 1:**

- ❖ The Indian Power system comprises four main components: electricity generators, distribution networks, transmission lines, and consumer use.
- ❖ It is divided into five regional grids for planning and operational purposes.
- ❖ The largest power producer in India is included in this grid.
- ❖ The ranking of the leading companies in the Indian power and electricity sector.



**Session Snapshot: 1**

**Day: 2**

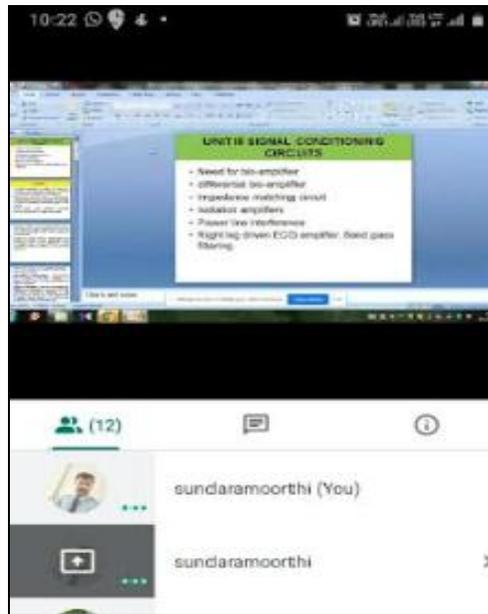
**Title:** CEED Using Renewable Energy Systems

**Resource Person:** Mr.R.Sundaramoorthi, AP/EEE, KCE

**The subsequent topics were deliberated upon in the second session:**

One of the most sophisticated small-scale centralised electricity systems is Microgrid, which typically includes loads, Distributed Generation (DG) units, and energy storage resources.

Generating energy from fossil fuels with no greenhouse gas emissions and reducing some forms of air pollution; lowering the cost of electricity produced by eliminating fuel; and using Microgrid to increase customer dependability and resilience to grid disruptions.



**Session Snapshot: 2**

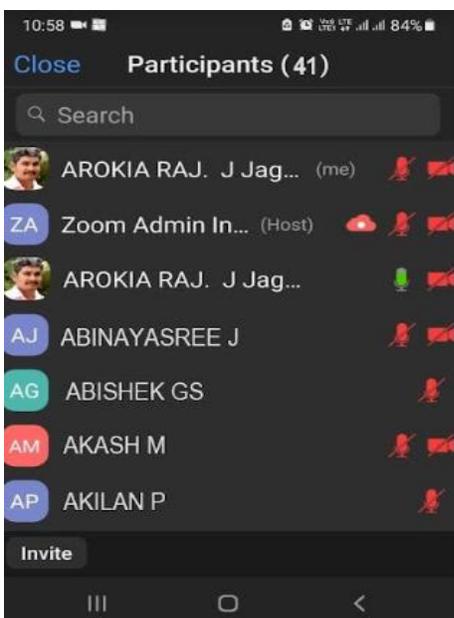
**Day: 3**

**Title:** Importance of Renewable Energy and REL

**Resource Person:** Mr.J.Arokiaraj, AP\EEE

**During the third session, the following topics were covered:**

- ❖ The goal of the Renewable Energy Lab is to develop, test, and distribute efficient and renewable energy systems.
- ❖ REL's goal is to support the full development of these technologies so that they can support environmentally sustainable development in both industrialized and developing nations.



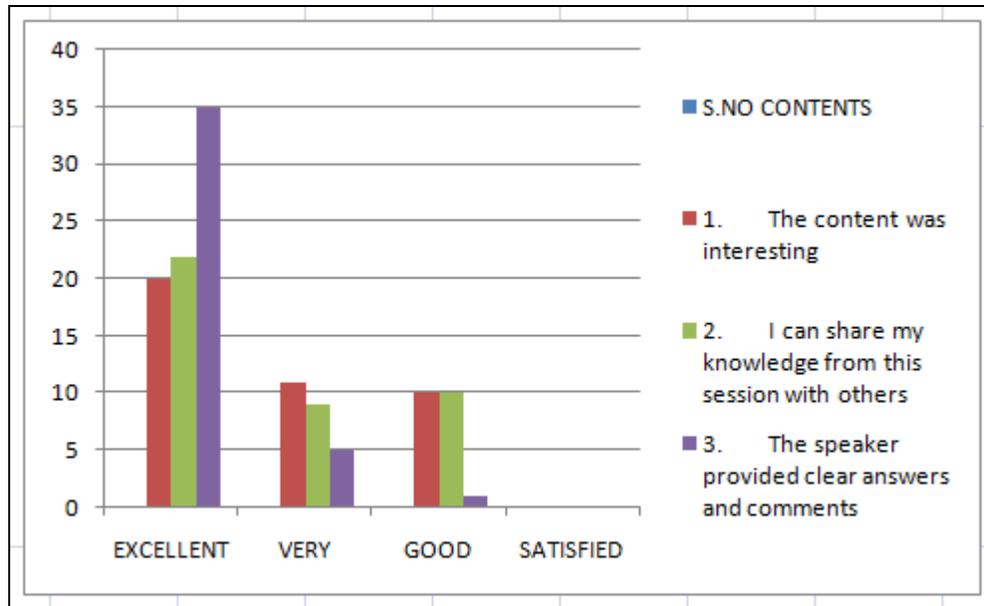
### Session Snapshot: 3

Following the sessions, the students' opinions about the Workshop were gathered through the collection of their feedback.

### Feedback from student

### FEEDBACK ANALYSIS REPORT

S.NO	CONTENTS	EXCELLENT	VERY GOOD	GOOD	SATISFIED
1.	The content was interesting	20	11	10	-
2.	I can share my knowledge from this session with others	22	09	10	-
3.	The speaker provided clear answers and comments	35	05	01	-



Lastly, the vote of gratitude was given by Mrs. P. Thurumagal, AP/EEE, the event coordinator.

### OUTCOME:

- ❖ Upon completion of the Workshop, students gained additional knowledge regarding career prospects in Power grid systems and within our primary field.
- ❖ The students acquired diverse technical skill sets that are essential for their placement.
- ❖ As a result, we developed a route into the MNC using our technical expertise in our primary field. Students gain additional understanding and exposure to renewable energy and microgrid technologies.

*[Signature]*  
COORDINATORS

*[Signature]*  
HOD/EEE

*[Signature]*  
PRINCIPAL