

## AUTONOMOUS

### DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Report of Faculty Development Programme

On

### “ APPLICATION OF POWER CONVERTERS IN DISTRIBUTED GENERATION AND MICROGRID ”

1	Name of the Activity/Event	One Week Online Faculty Development Programme on <b>“APPLICATION OF POWER CONVERTERS IN DISTRIBUTED GENERATION AND MICROGRID”</b> Organized by the Department of Electrical And Electronics Engineering
2	Date of Activity/Event	From <b>19-09-2022</b> to <b>23-09-2022</b>
3	Organized by/Name of the committee	EEE Department
4	Place of Activity/event	Edision Auditorium
5	Resource person/guest/organization	<ol style="list-style-type: none"> <li>1. Dr. N.M.G.Kumar, Professor in Department of EEE, Sree Vidhyanikethan College Of Engineering, Tirupathi, AP.</li> <li>2. Dr. M. Srinivas Giridhar, Professor in Department of EEE, LBRCE, Vijayawada,AP.</li> <li>3. Dr. C.H.V Suresh, Professor in Department of EEE, VVIT,Guntur.</li> <li>4. Dr. A .Vani, ADE, SPDCL, Telangana.</li> <li>5. Dr. K .Vimal kumar, Professor in Department of EEE, JNTUK, Kakinada.</li> </ol>
6	Type of activity/Event	One week online Faculty Development Programme

7	Activity/Event objectives	<ol style="list-style-type: none"> <li>1. To enable the participants to learn and conceptualize renewable energy technologies and distributed generation systems.</li> <li>2. To enhance learning capabilities of the participants in grid integration issues of above energy sources.</li> <li>3. Power Electronics applications in Renewable Energy Integration.</li> <li>4. Power Quality issues in Renewable Energy sources.</li> <li>5. Developing the design, control of the different types of general-purpose &amp; multi-level converters.</li> </ol>		
8	Participation	Students	Faculty	Total Participation
		Nil	40	40
9	General remarks	<ol style="list-style-type: none"> <li>1. Less Explanation on Micro Grid Development.</li> <li>2. Less explanation about in industrial Applications.</li> </ol>		
10	Suggested Improvements	<ol style="list-style-type: none"> <li>1. More Explain about Micro Grid Development</li> <li>2. Need practical sessions</li> </ol>		
11	Enclosures	<ol style="list-style-type: none"> <li>1. Report.</li> <li>2. Photos.</li> <li>3. Attendance Sheet.</li> </ol>		
12	Signature of convener			

A one week Faculty Development Programme on **“APPLICATION OF POWER CONVERTERS IN DISTRIBUTED GENERATION AND MICROGRID”** was organized by Department of Electrical & Electronics Engineering at Narayana Engineering College, Nellore, from 19<sup>th</sup> to 23<sup>rd</sup> Sep 2022, in Edison Auditorium.

The Resources persons of this Programme, was Dr. N.M.G.Kumar, Professor in Department of EEE, Sree Vidhyanikethan College Of Engineering, Tirupathi, AP. Dr. M. Srinivas Giridhar, Professor in Department of EEE, LBRCE, Vijayawada, AP. Dr. C.H.V Suresh, Professor in Department of EEE, VVIT, Guntur. Dr. A .Vani, ADE, SPDCL, Telangana. Dr. K .Vimal kumar, Professor in Department of EEE, JNTUK, Kakinada ,40 faculty members attended this program, out of this 15 members were from dept. of EEE and 30 members were from other colleges.



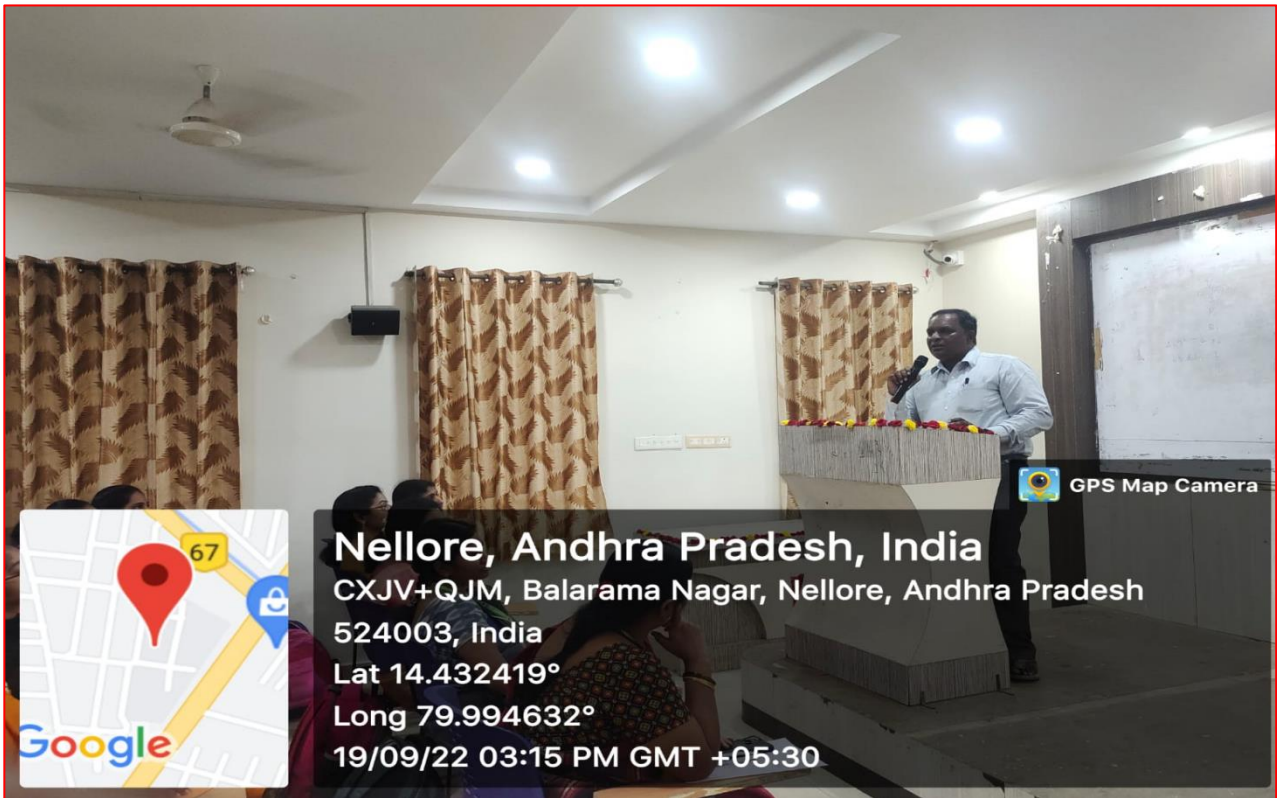
### *Inaugurating the FDP*

On Day-1 in the morning session, the FDP begins with Registration & Inauguration, after a break the resource person started with introduction of renewable energy technologies and distributed generation systems. The program objectives to the participants. Afternoon session covered the .

On Day-2 the Resource person Dr. M. Srinivas Giridhar discussed about the What is Key Issues And Challenges In Micro Grid. Speaker also explained about the What Is Prompting Micro Grid Development.

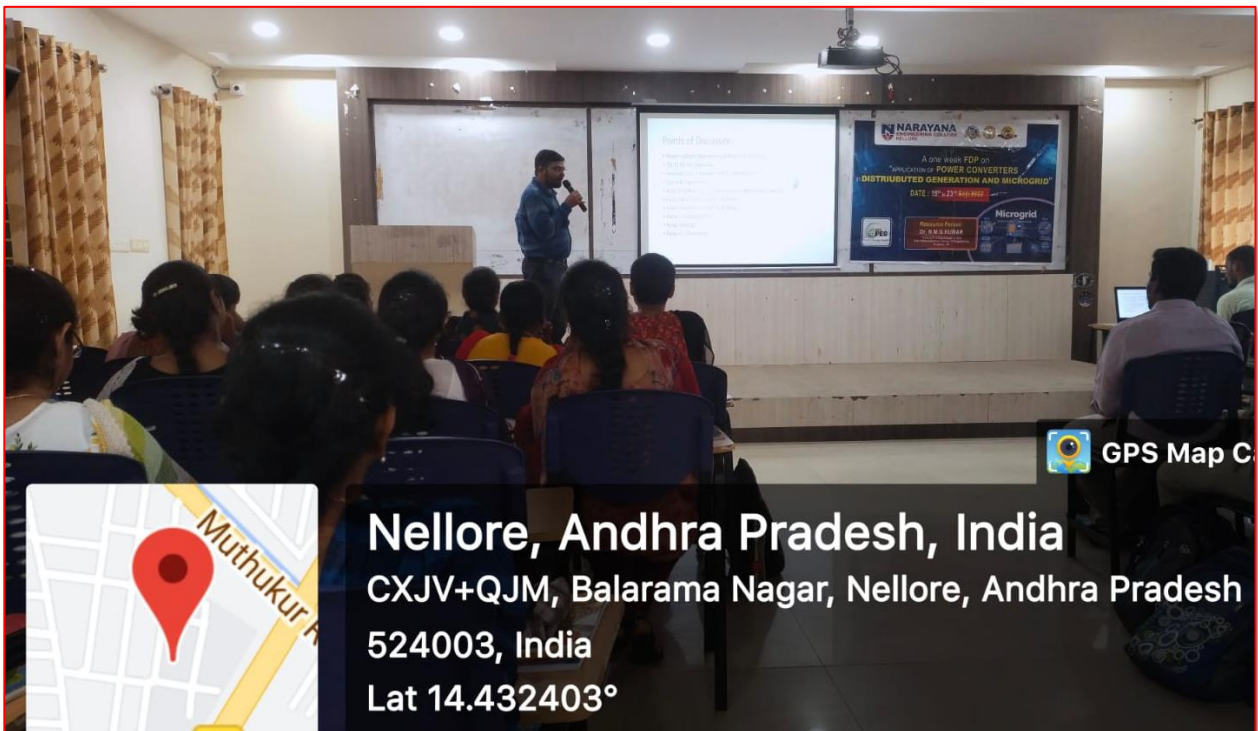
On Day-3 the Resource person Dr. C.H.V Suresh discussed about Distributed power generation systems, comprising of small generation and storage units .

On Day-4 the Resource person Dr. A .Vani, focused on areas of various control challenges such as co-ordinated control, voltage and transient stability of microgrid , protection issues, energy management and solution of inter connection issues of DG.



*Concepts explanation*

During Day-5 Dr. K .Vimal kumar, discussed on. Inadequate grid infrastructure, low metering efficiency , Solutions To Overcome Barrier In Implementation are the major concern of this FDP.



*Concepts explanation*



At the Last the Programme Resource person was felicitated and offered a vote of thanks for providing knowledge about this FDP.



All the participants have appreciated the department for organizing the FDP Program was ended with vote of thanks by Mrs.Nellore Yamini, Assistant. Prof EEE Dept & Coordinator of the FDP. At the end of the valedictory program, certificates were distributed to the participants.

**HOD-EEE**