



PRACTICAL EXPERIENCE IN COMMISSIONING OF LARGE SCALE WIND INSTALLATIONS IN TAMILNADU

Presented by

SIVALINGARAJAN. M

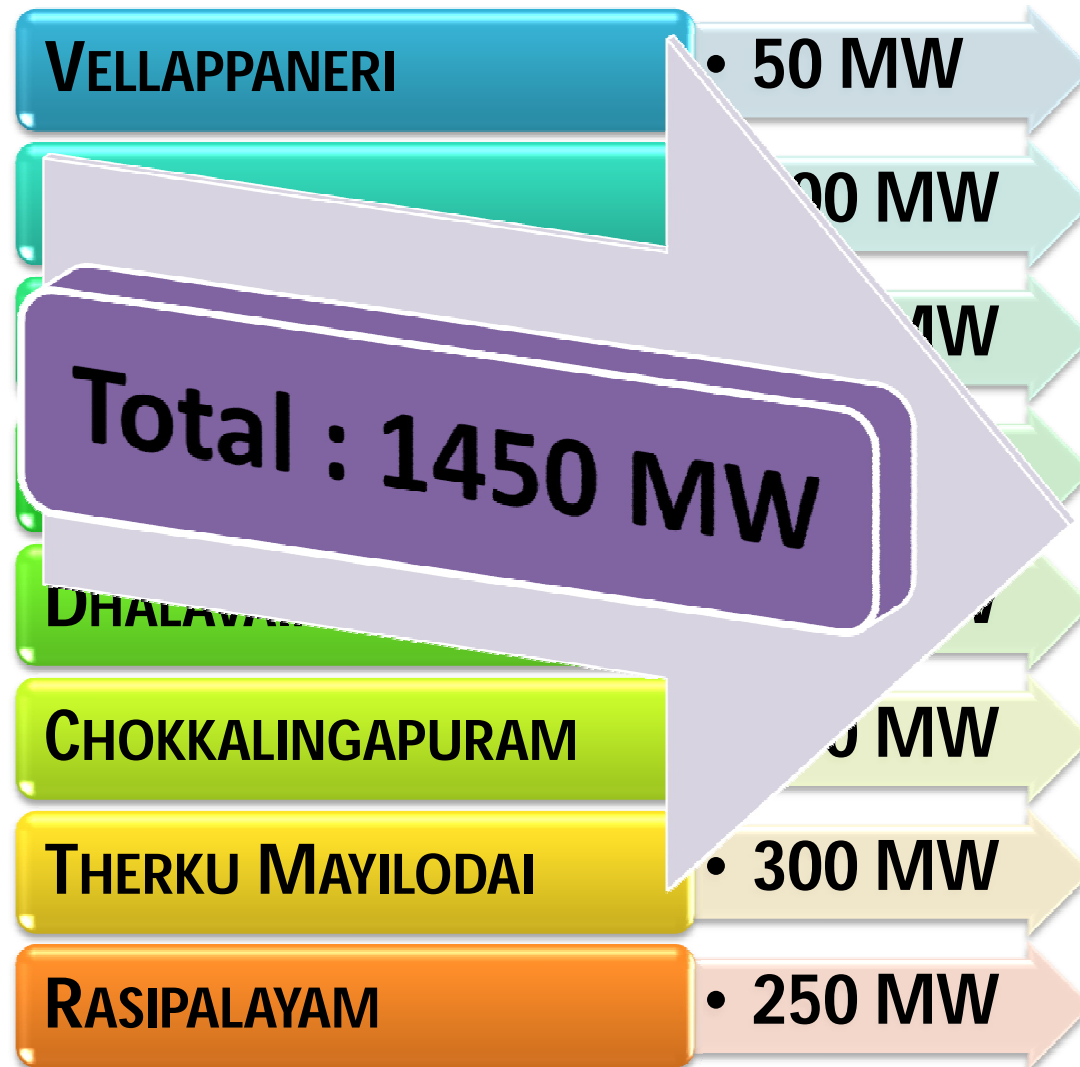
SUPERINTENDING ENGINEER

NON-CONVENTIONAL ENERGY SOURCES

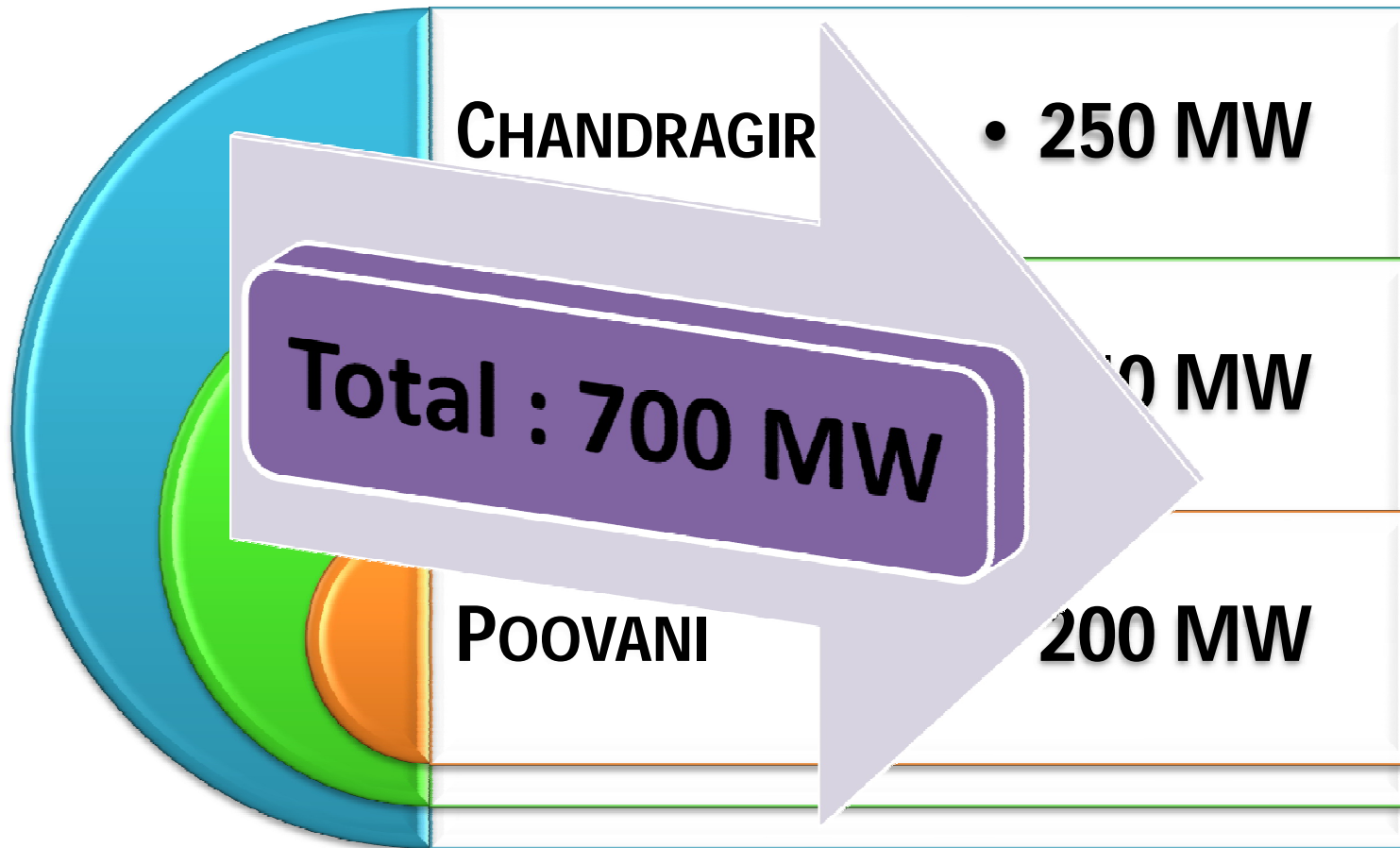
TANGEDCO/ TIRUNELVELI



LIST OF MAJOR WIND FARM PROJECTS UNDER PROGRESS IN TAMILNADU WITH TNEB GRID CONNECTIVITY (LOAD FLOW APPROVED)



LIST OF MAJOR WIND FARM PROJECTS UNDER PROGRESS IN TAMILNADU WITH PGCIL GRID CONNECTIVITY (VANDANAM)



TOTAL CAPACITY



LIST OF DEVELOPER-WISE MAJOR WIND FARM PROJECTS UNDER PROGRESS IN TAMILNADU WITH TNEB GRID CONNECTIVITY (LOAD FLOW APPROVED)



SUZLON

350 MW

- *Vellapaneri*
- *Villiseri*
- *Venketes warapuram*



INFINITAS

150 MW

- *Moovirun thalai*



GAMESA

400 MW

- *Dhalavai puram*
- *Chokkalingapuram*



REGEN

300 MW

- *Therku Mayilodai*



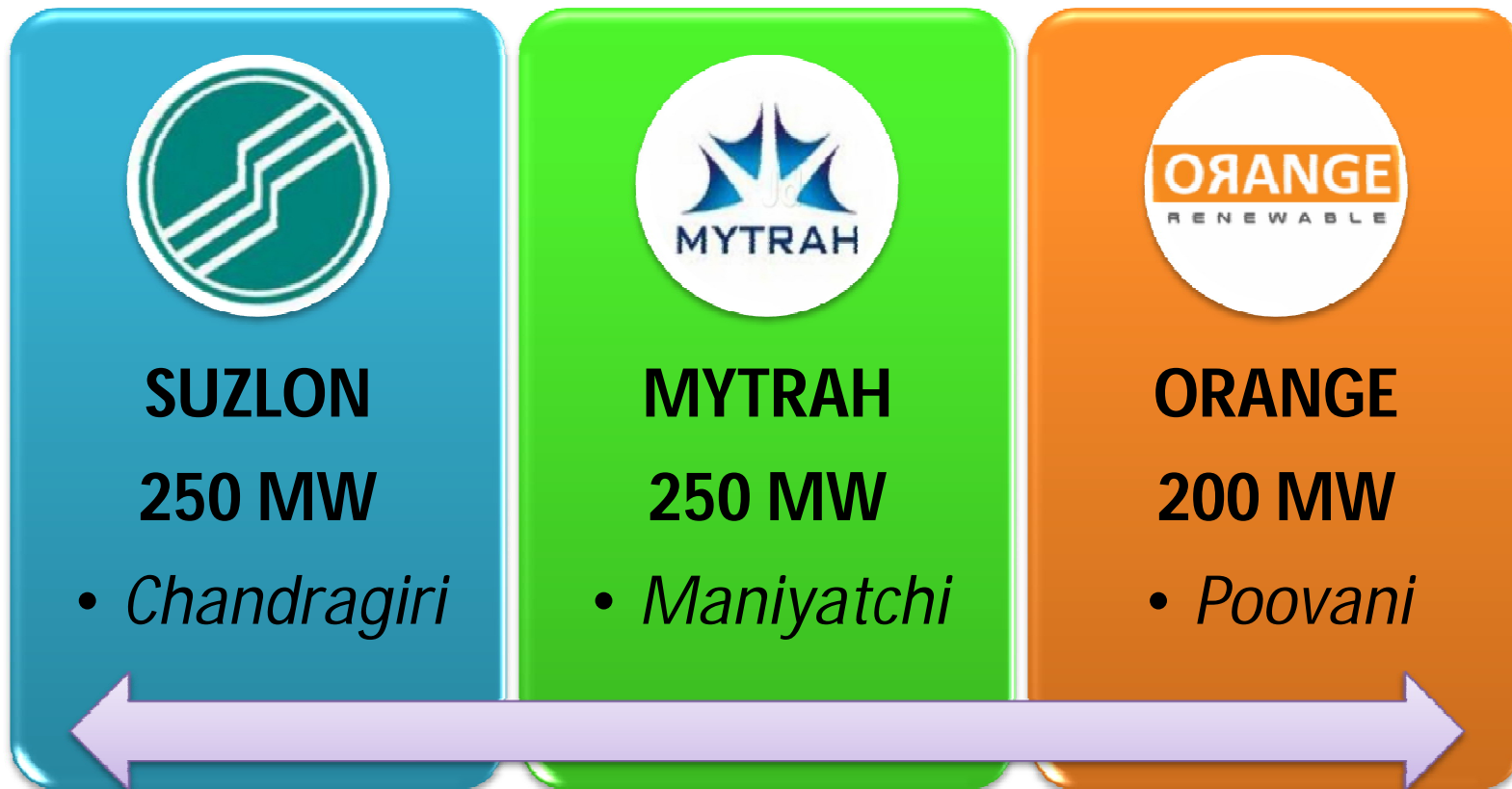
LEAP GREEN

250 MW

- *Rasi palayam*



LIST OF DEVELOPER-WISE MAJOR WIND FARM PROJECTS UNDER PROGRESS IN TAMILNADU WITH PGCIL GRID CONNECTIVITY



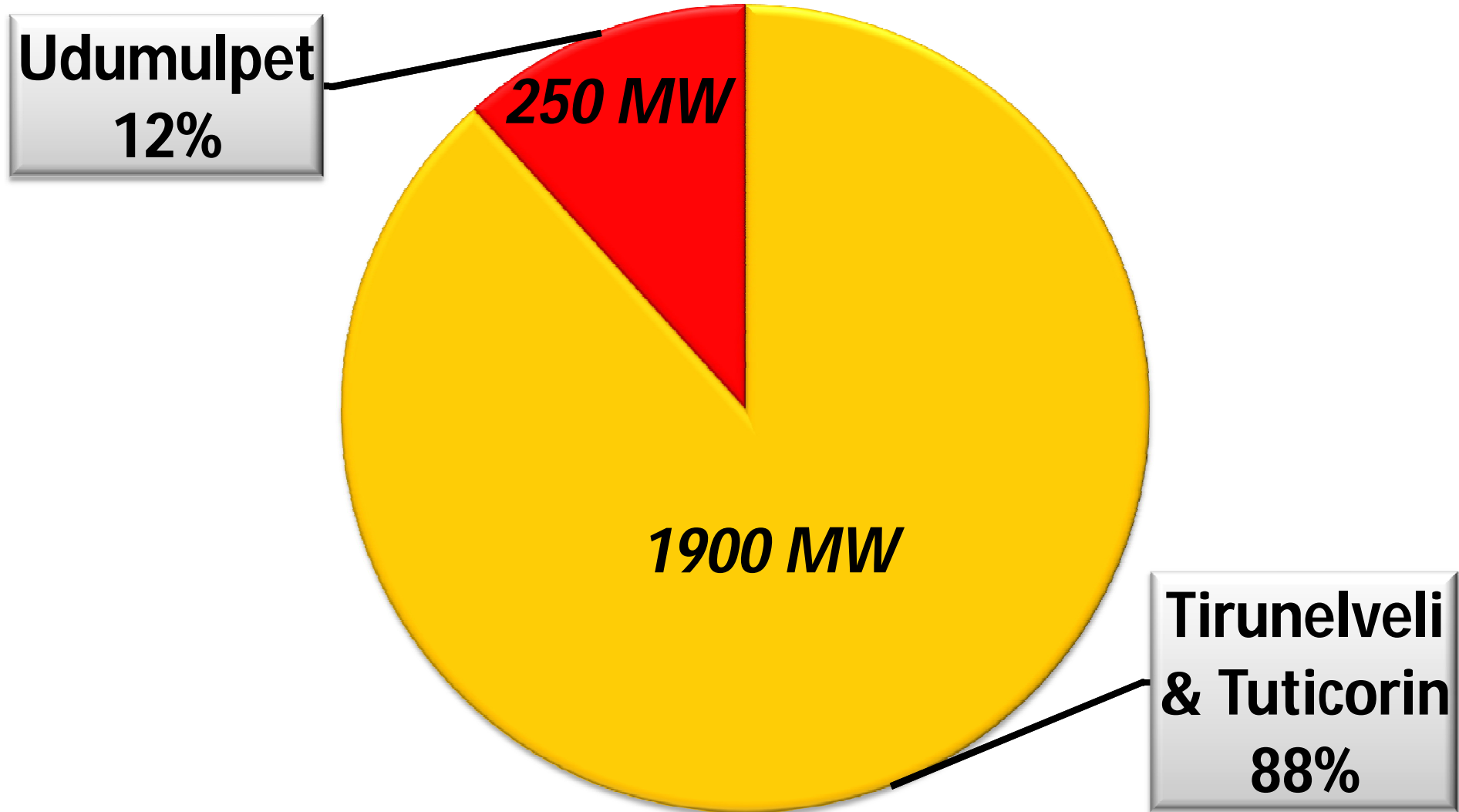
CAPACITY OF WIND ENERGY GENERATORS TO BE CONNECTED BY THE DEVELOPERS

DEVELOPER	CAPACITY
Suzlon	2.10 MW
Gamesa	2.00 MW
Orange	2.00 MW
Mytrah(GE Make)	2.33 MW
Regen	1.50 MW & 2.00 MW

IMPORTANT TANTRANSKO SUBSTATIONS FOR WIND POWER EVACUATION

SUBSTATIONS	CAPACITY
<i>List of Existing Substations</i>	
KAYATHAR 400/230-110 KV SS	830 MVA
Additional	400 MVA
KANARPATTI 400/230-110 KV SS	1600 MVA
THENNAMPATTI 400/230-110 KVSS (Nearing Completion)	1030 MVA
RASIPALAYAM 400/230-110 KV SS	1030 MVA
THAPPUGUNDU 400/110 KV SS	600 MVA
ANAIKADAVU 400/230 -110 KV SS	1030 MVA
<i>List of Upcoming Substation</i>	
SAMUGARENGAPURAM 400/230 KV-110 KV SS	1030 MVA
MUPPANDAL 230/110 KV SS	300 MVA

PROSPECTIVE WIND FARM PROJECTS IN TAMILNADU



CONSTRAINTS



***CLUSTERING OF WEGS IN A
PARTICULAR AREA***



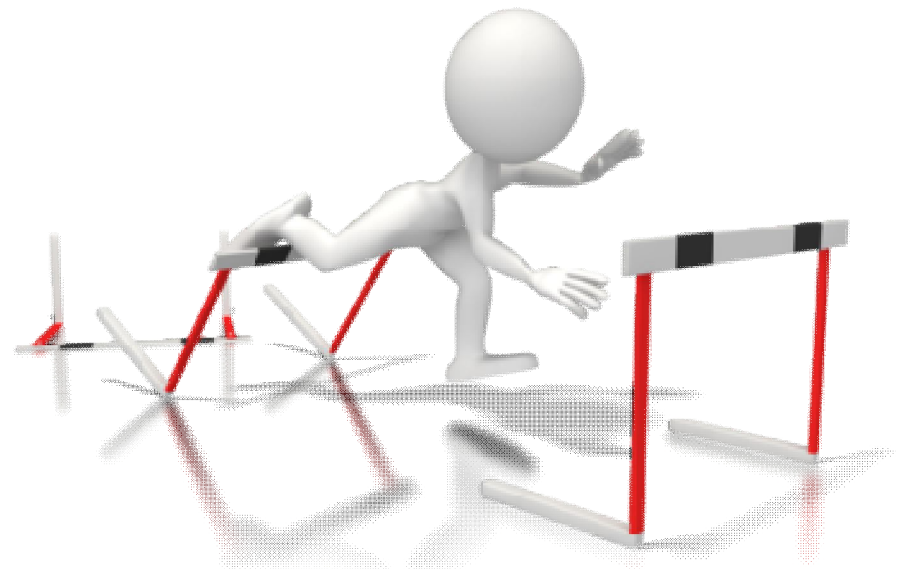
MAJOR ISSUES IN SITE IDENTIFICATION

- i. Site Identification within a radius of 40 kms to evacuate 1900 MW in a Particular District
- ii. To abide by 5D X 7D NORMS adopted by TANGEDCO

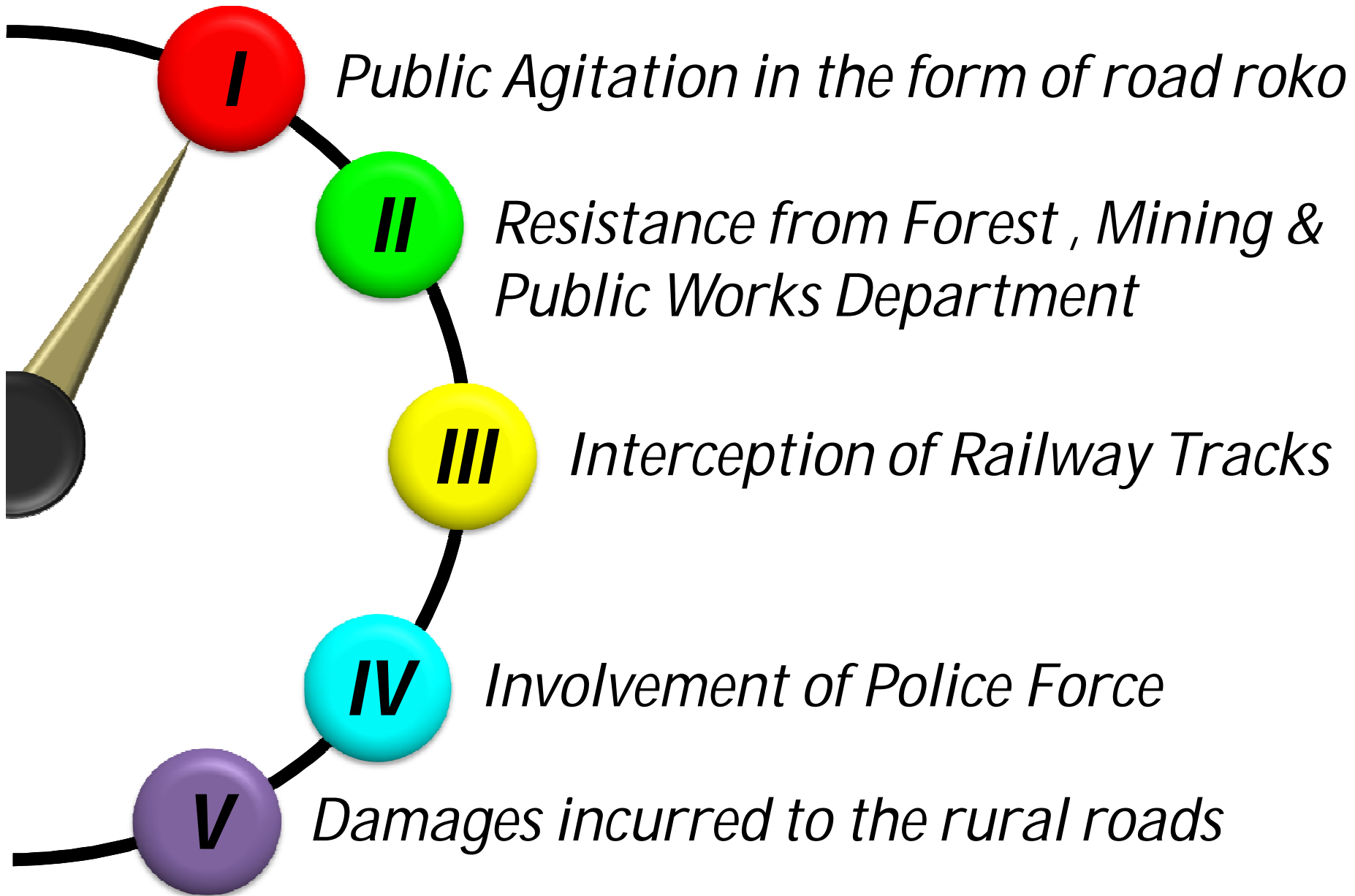


CHALLENGES FACED IN TRANSPORTATION

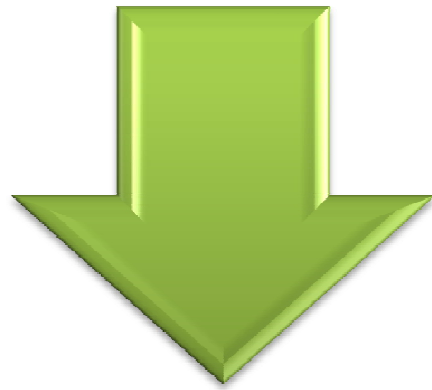
- i. Transportation of bulk quantities of Weg Rotors and Blades in rural areas comprising of agricultural lands and bad road conditions*
- ii. Forced shutdown of TNEB HT Feeders during peak season*



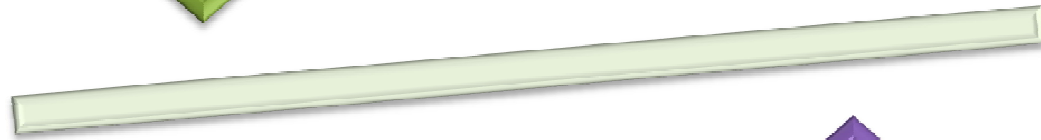
OTHER OBSTACLES FACED



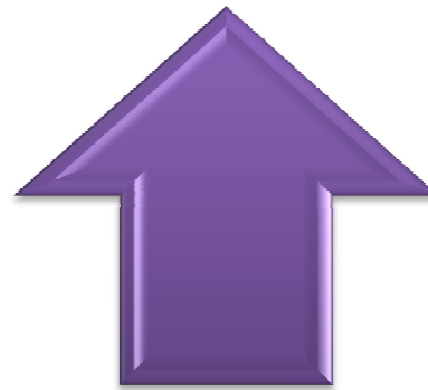
FOCUSING ON THE SAME TARGET DATE!



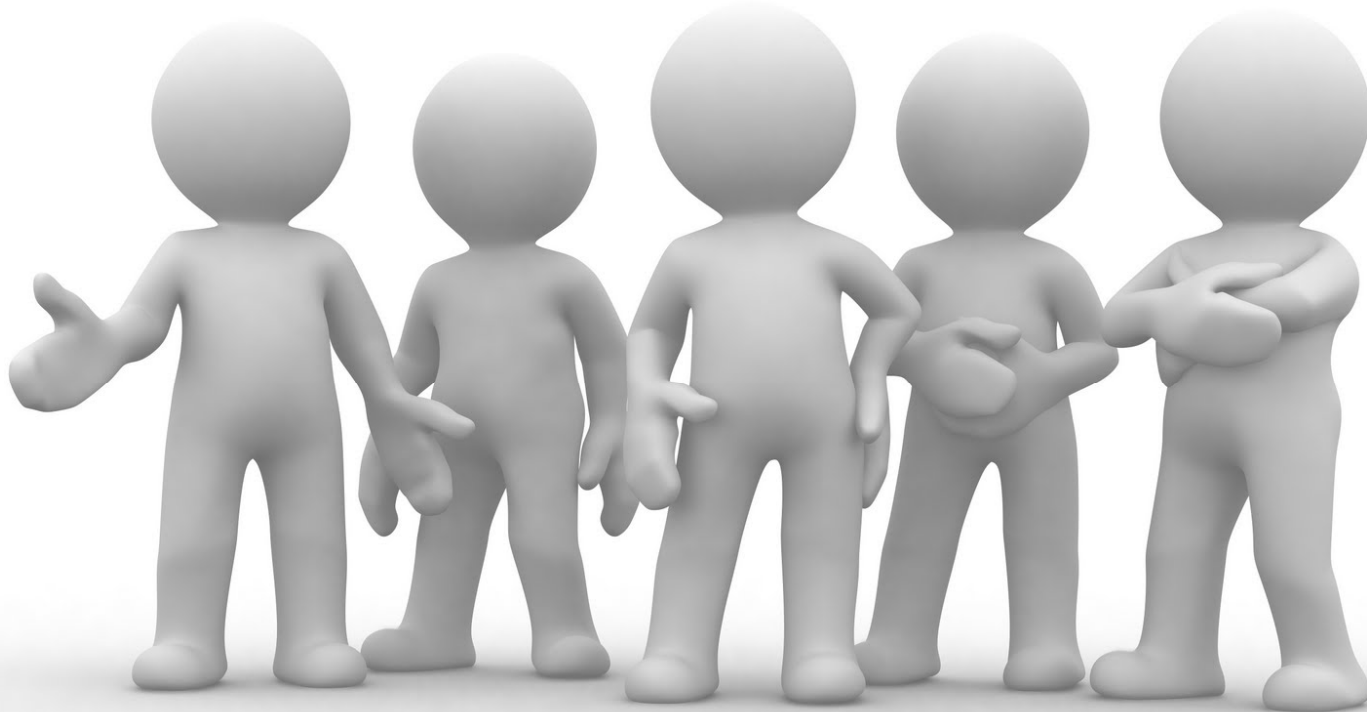
SEP 30TH



MAR 31ST



***POOLING OF ALL OFFICIALS ON A
PARTICULAR DAY FOR COMMISSIONING IS A
HERCULEAN TASK***



LAST MINUTE ISSUES

- i. Litigation cases against TANGEDCO Officials filed by the Land owner after the WEG erection.*
- ii. Complaint lodged by the Public to the District Collector to halt the WEG Commissioning Process.*
- iii. Legal issues raised by the illegal land owners against TANGEDCO officials and WEG Developers*



MITIGATIONAL MEASURES



PROGRAM IN A PROGRESSIVE MANNER



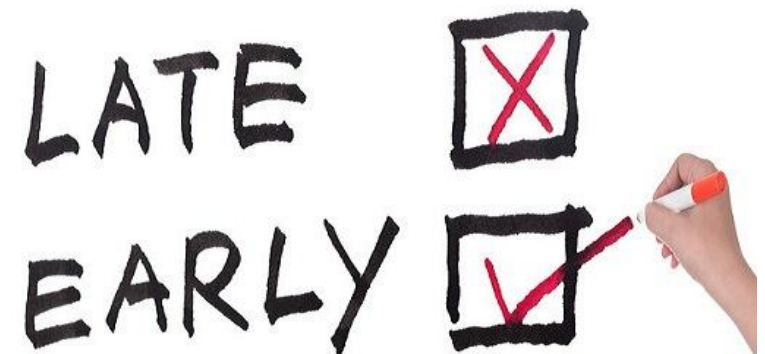
CONDUCTING COORDINATION MEETINGS WITH DISTRICT COLLECTOR & TANGEDCO OFFICIALS

- i. To brief the CSR activities*
- ii. To discuss the issues of litigation*



EARLY COMMISSIONING TO FACILITATE EFFECTIVE EVACUATION

*Commissioning of Pooling Substation & associated
EHT Transmission Line erected under SECTION 10 (1)
OF IE ACT 2003 at least **a week ahead of schedule** to
check the healthiness of the equipment and lines
erected*



CAREFUL MONITORING OF LITIGATION & RIGHT OF WAY ISSUES



GETTING APPROVALS IN TIME



SOCIAL INTERACTION & EFFECTIVE COMMUNICATION





Thank you!