



Session: Climate Resilience of Future Grids Resilience - Climate - Sharing

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RESILIENCE – Collins Dictionary





Something that is resilient is **strong and not easily damaged** by being hit, stretched, or squeezed.

People and things that are resilient are <u>able to recover easily</u> and quickly from unpleasant or damaging events.

CLIMATE IMPACT IN ELECTRICAL VALUE CHAIN





- A. Heat/Temperature predominant element in Climate
- Electricity value chain (Generation/Transmission/Distribution /Consumption) has energy conversions that generate heat:
- Chemical Energy → Mechanical Energy → Electrical Energy →
 Mechanical Energy (Consumer use)

 B. Waste Management and pollution Management is also relevant as a consequence of primary activity

SHARING – BOTH SIDES PARTICIPATION ESSENTIAL





OXFORD DICTIONARY

To have, use, do or pay something together with another person or other people

(दूसरों के साथ किसी बात में हिस्सेदारी करना)

SHARING OPPORTUNITIES / NECESSITIES





- A. Avenues
- Knowledge / Experience
- Technology
- Processes
- Practices
- B. Stakeholders
- Electricity value chain companies (G, T, D)
- Consumers
- Vendors
- Regulators (CERC/SRC/CEA/BIS/Pollution Control Boards etc)
- Governments

Existing Resilience Abilities – Are these adequate - ??





- Self healing Grid / Network
- Frequency Management
- Predictive and Preventive Condition Management
- Advance Distribution Management System
- Demand Side Management
- Continuous upgrading of processes (ISO requirement)
- Human Resources Quality and Training
- Disaster Response
- Al and ML for Load Management being initiated
- Etc. Etc.

KEY TAKEAWAYS / RECOMMENDATIONS





- Willingness and Respect for SHARING
- Emphasis and Participation for R&D
- Resources planning / preparedness essential element for reactive response

Need for organising cohesive support of all through: National Disaster / Climate Management Force (on principals of NDRF)

- create 4 centers (N,E,W,S) at selected Discom offices
- manning to be one senior supported by 6 juniors (for 24X7)
- -Appropriate communication reach with all Discoms to respective designated person
- -Data bank of human and equipment resources that can be available from Discoms on short notice (Detailed SOP once prepared to be the participating commitment)





THANK YOU

For discussions/suggestions/queries email: <u>isuw@isuw.in</u> <u>visit: www.isuw.in</u>