

Session 5

Climate Change Readiness of DISCOMS

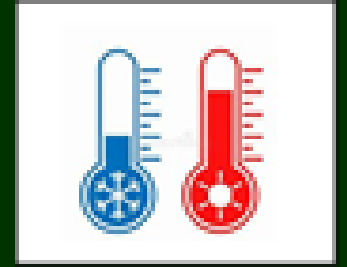
Ravi Seethapathy

Advisor, ISGF

Executive Chairman, Biosirus Inc., Canada

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- *Higher ambient temperatures*
- *Emphasis on Electrification – A/C, EV, Cooking*
- *Thermal capability of asset loading in real-time*
- *Impact on infrastructure ROA and ROI*

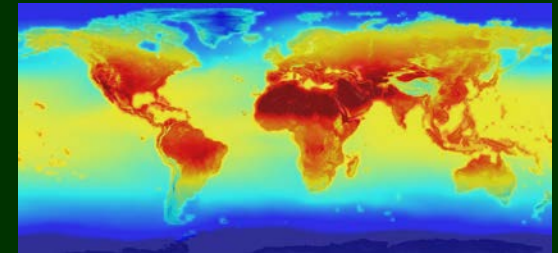


Summer (max) 48-50 deg C (BIS 40 deg C; 24h av 30 deg C)

Daily Temperature Swings ± 15 deg C

Steep RE / Load Ramps

Long “thermal time-constants”



Real-time Thermal Head Room:

- **Ambient Temp + Asset Operating Temp + Forecast load**
- **Ramp Rate impact**

- *High wind and Flood conditions*
- *Overhead lines*
- *Wind and Flood capability of asset*
- *Impact on infrastructure ROA and ROI*



Hurricane Wind Speed 125-180 kmph
Flash Flood due to storm surges/rains

Impact:

- **Overhead lines and towers/poles**
- **Galloping conductors**
- **Assets in Flood Plains**
- **Underground Transformer Banks**

