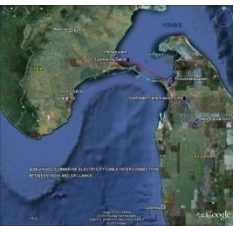
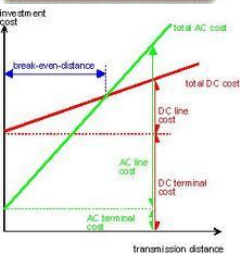
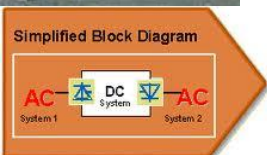




# Feasibility Study for Interconnection of India-Sri Lanka Electricity Grids

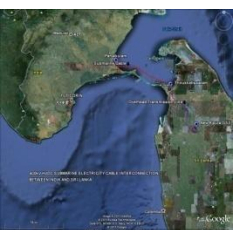
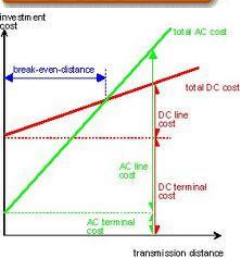
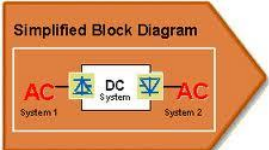


**Kamani Jayasekera**  
**Chief Engineer (Transmission Planning)**  
**Ceylon Electricity Board**  
**11<sup>th</sup> July 2011**



Sri Lanka needs new generation to meet increasing demand

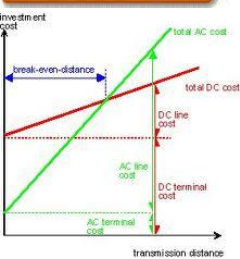
Power exchange with India be a candidate for meeting future power demand



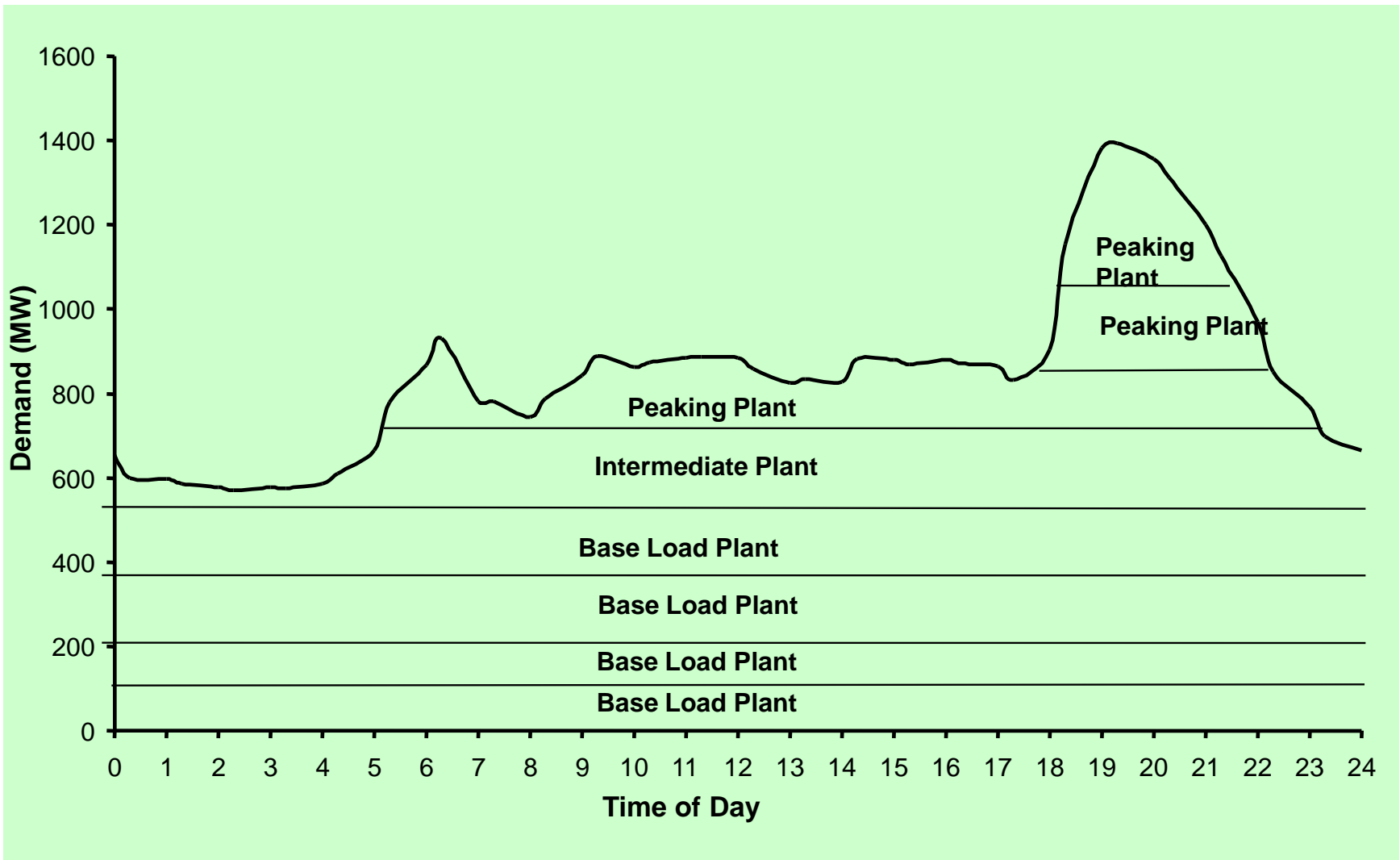


# Benefits and Opportunities

- Meeting growing power demand with imported power
- Improved load profile - valley filling
- Improved system reliability and security
- Access to electricity from cheaper sources of power generation in the South Asia Region
- Opportunity to enter into India Power Exchange for energy trading
- Reduction in operational cost through better resource management



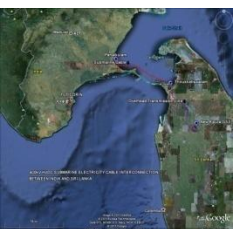
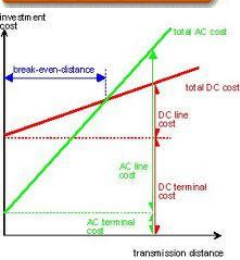
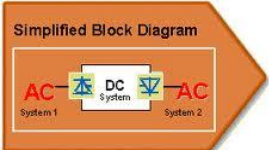
# Typical Daily Load Curve





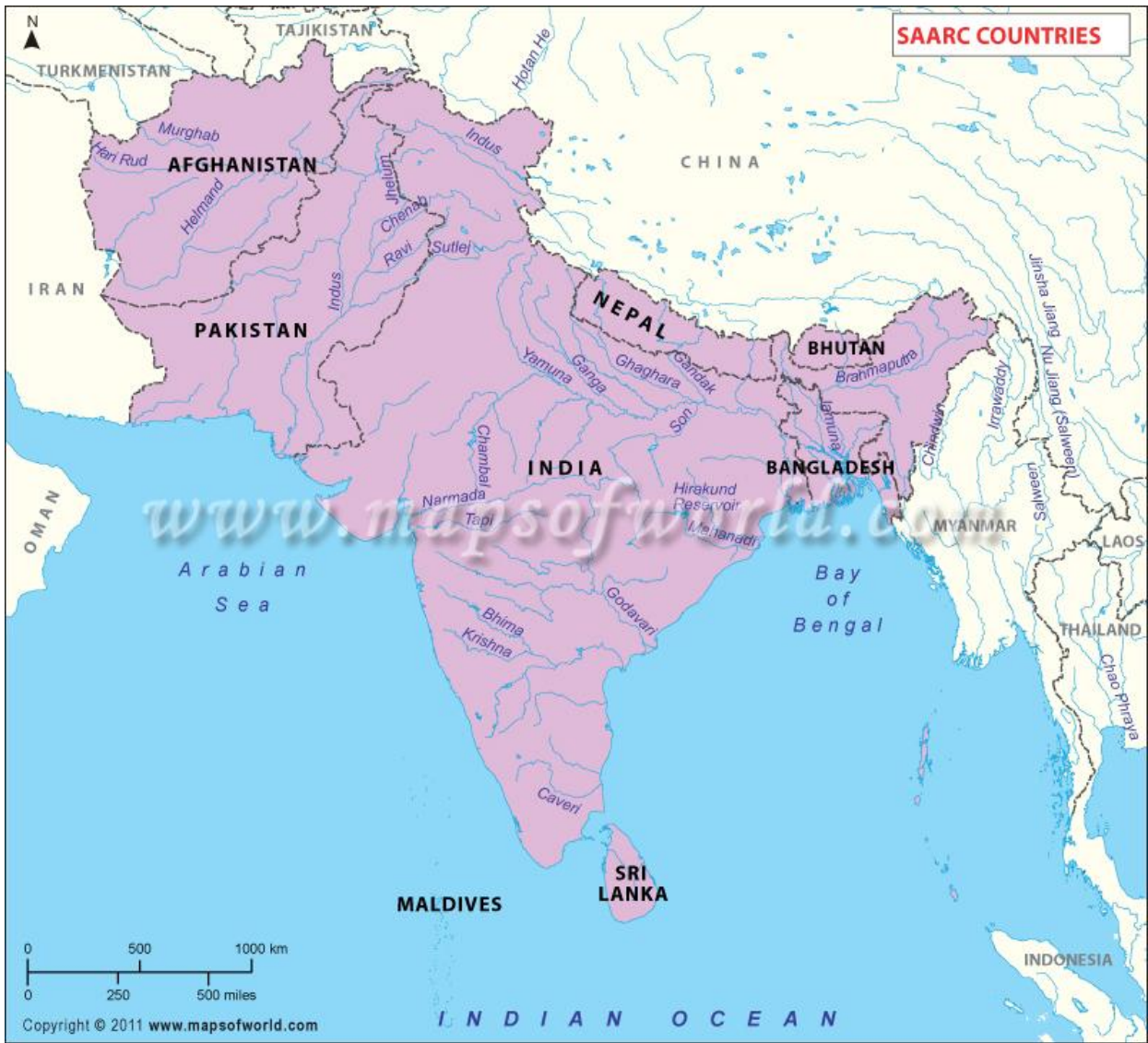
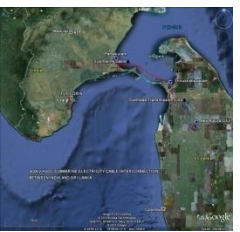
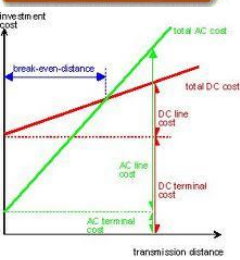
# Background

- Under consideration since mid 1970's
- Pre-feasibility study conducted with the assistance of USAID in 2002 by Nexant Inc.
- Review of the Pre-feasibility study with assistance of USAID in 2006 by Nexant/ Power Grid Corporation of India
- Considered under SAARC and BIMSTEC Regional Grid





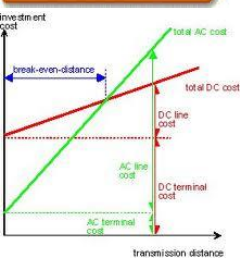
# SAARC Region





# Background

- Bilateral discussions by Secretary , Ministry of Power and Energy Sri Lanka and Secretary Ministry of Power, India in Dec 2006.
- Cabinet of Ministers, Sri Lanka approved in principle in Dec 2006, to study the feasibility of power interconnection and to appoint a Steering Committee Co- Chaired by Secretaries of Power Ministries and to appoint a Task Force for technical, commercial ,regulatory and legal aspects.



# Power Transmission Interconnection options

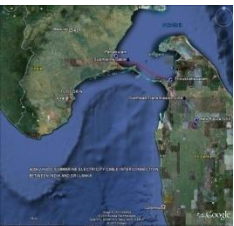
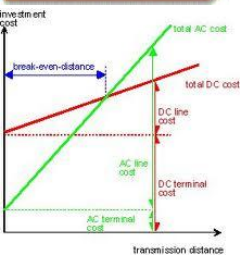




# Background

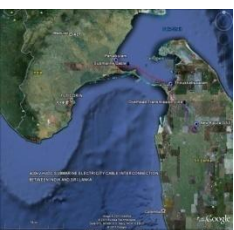
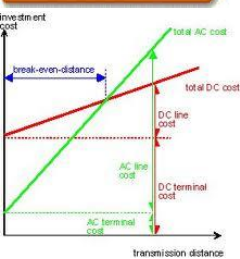
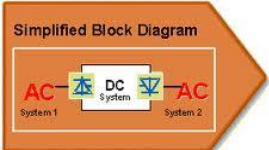


- Executing Agencies; CEB and PGCIL are jointly carrying out the feasibility study
- Estimated cost : US\$ 3.0 Million
  - ✓ shared by GOI and GOSL in equal proportion





# Proposed Interconnection Option



## Transmission System in Submarine Cable

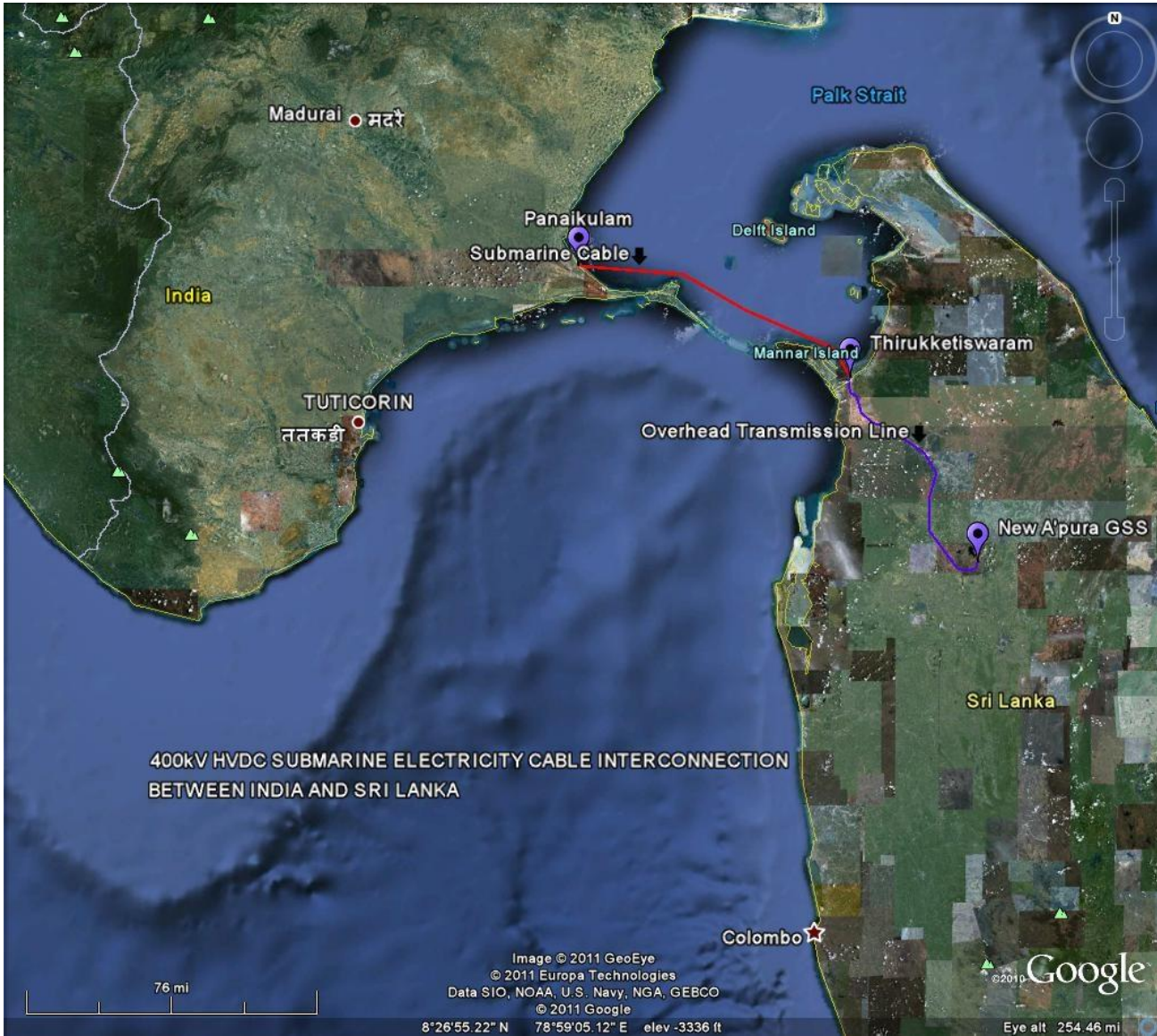
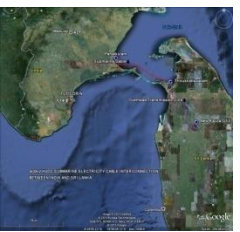
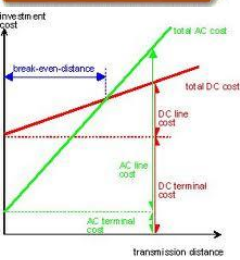
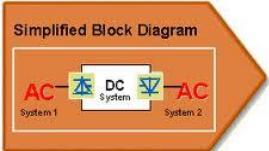
Two cables will be laid in two trenches 10m apart at a depth of 2m below seabed.

## Quantum of Power Exchange

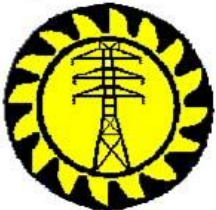
- 2015 onwards - 500 MW
- 2020 onwards - 1000 MW



# Interconnection option



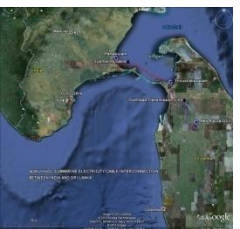
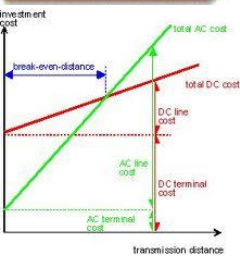
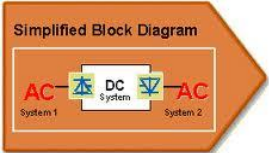


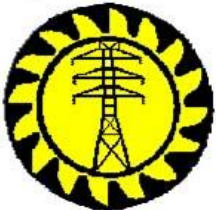


# Present Status

- Feasibility study is presently being carried out by PGCIL and CEB including the Environmental Impact Assessment.

Technical, economical, financial, environmental, legal and institutional issues will be addressed





# The End

