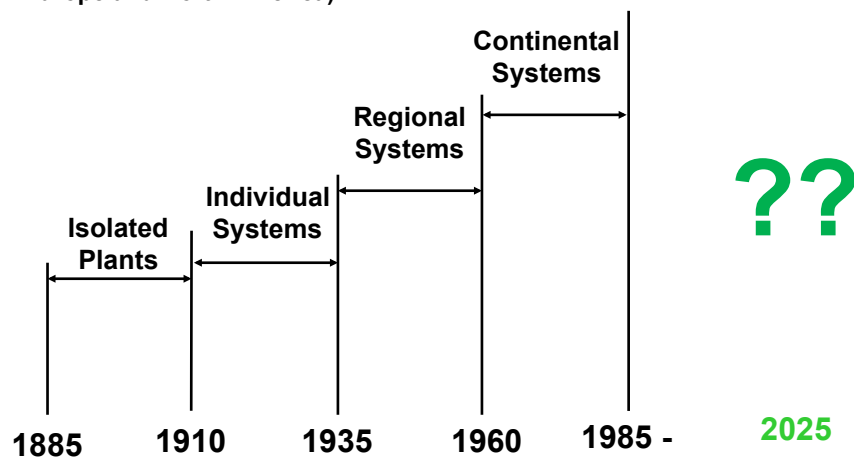


## A Classical Conflict

# Energy vs. Power

- 1 -

## Development of the power systems (In Europe and North America)



Source: John A. Casazza

- 2 -

### The First Challenge of Electric Power Engineering

1880 – 1920: To make it work



### The Second Challenge of Electric Power Engineering

1920 – 1980: To make it big

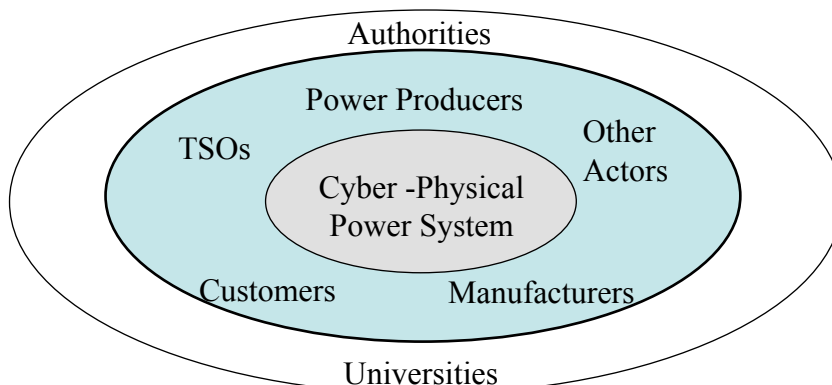


### The Third Challenge of Electric Power Engineering

1980 - : To make it sustainable



### The Structure of a Socio-Technical System



From T.P. Hughes

## Research Center for Energy Networks, ETH Zürich (Forschungsstelle Energienetze – FEN)

### Aim

To perform applied research for different stakeholders in the field of energy networks.

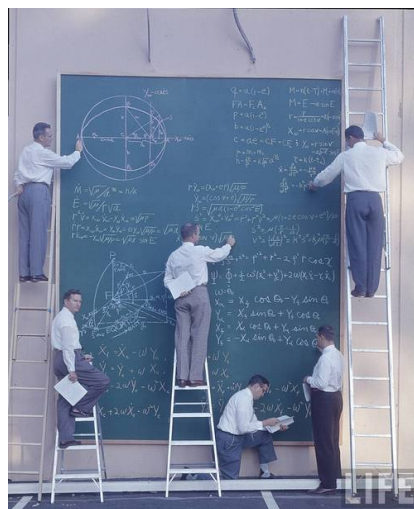
### Key characteristics

Independent, competent, transparent, applied



- 5 -

## Building an Energy/Power System is a Team Work



- 6 -