From TRANS-CSP

Comparison of a renewable power strategy in Europe with a nuclear – fossil energy mix

Electricity Mix dominated by Renewable Energy with Fossil Fuel Backup	***Electricity Mix dominated by Nuclear Power and Fossil Fuels***
Power on demand by a well balanced mix of renewable and fossil energy sources	Power on demand by using ideally stored forms of energy like uranium, coal, oil and gas
Supply based on many, mostly unlimited resources	Supply based on few, mostly limited resources
Domestic sources dominate the electricity mix	Energy imports dominate the electricity mix
Low vulnerability of decentralised generation	High vulnerability of large central generation units
Low hazardous waste, recyclable materials	Disposal of nuclear waste and CO_2 unsolved
Low risk of contamination or major accidents	Risks of plutonium proliferation and nuclear accidents
Requires public investment over limited time span	Requires long-term continuous subsidisation
Low environmental impact	Climate change, pollution and nuclear radiation
Intrinsic trend to lower cost and less price volatility	Intrinsic trend to higher cost and price volatility
Requires a change of structures and thinking	Fits to present structures and thinking
Based on proven and demonstrated technologies	Requires major technological breakthroughs: ○ Safe fission and breeder technology ○ Commercial fusion reactor ○ Carbon capture and sequestration (CCS)
=> Low risk strategy	***=> High risk strategy***

Converting a conventional fossil fired Steam Power Station to a **Clean Solar Power Station**

Hani El Nokraschy

Precondition:
Area near the Power station for the solar field is available