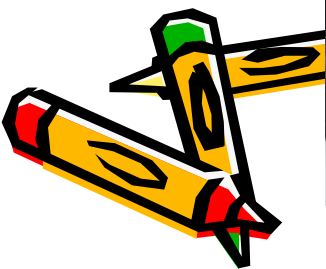


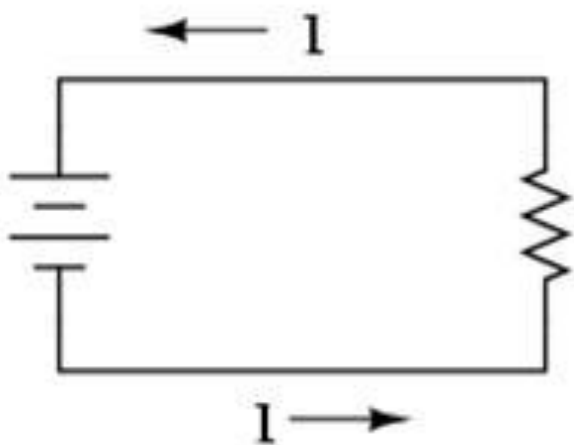
電氣設備未定期檢 導致故障起火或漏電



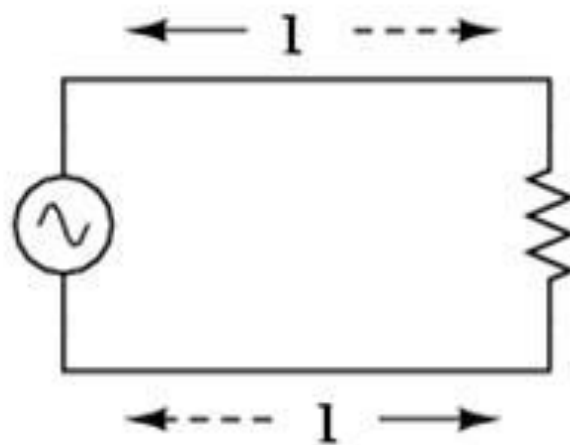
電力系統概要

直流電 vs. 交流電

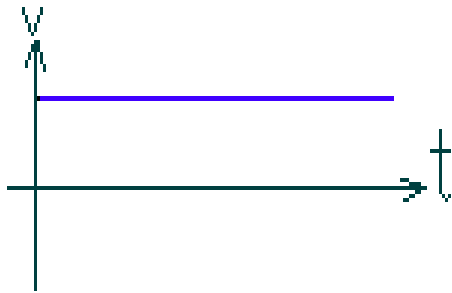
DIRECT CURRENT
(DC)



ALTERNATING CURRENT
(AC)

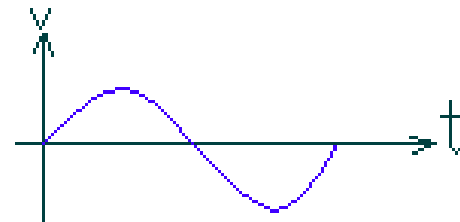


直流與交流的波形



直流電

(蓄電池、乾電池)



交流電

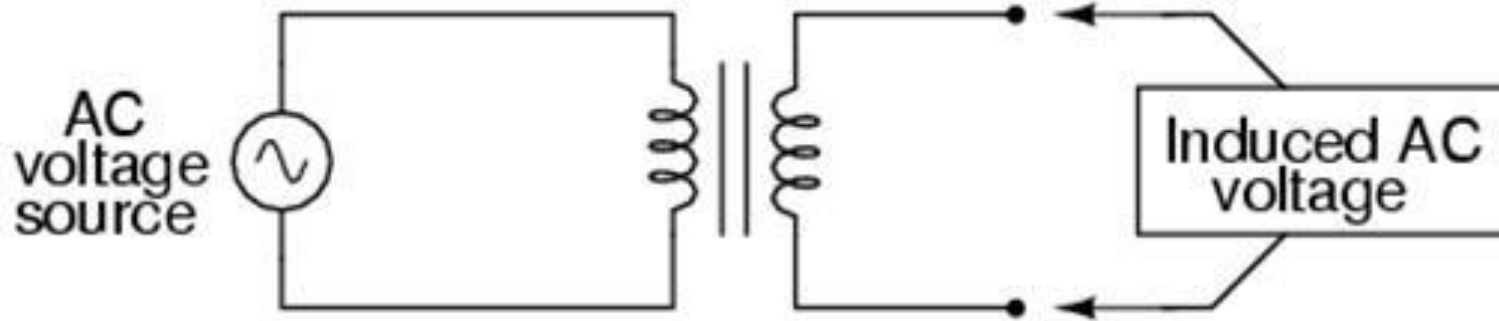
(3ϕ AC220V 60HZ)



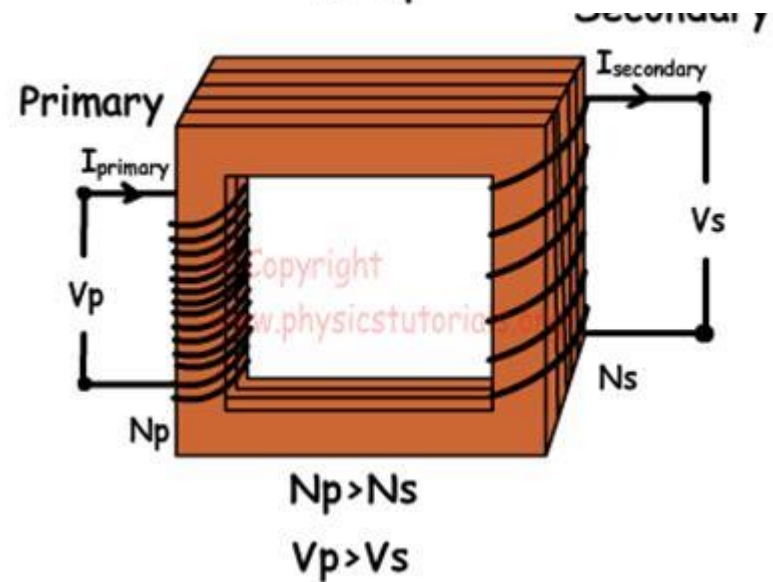
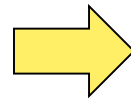
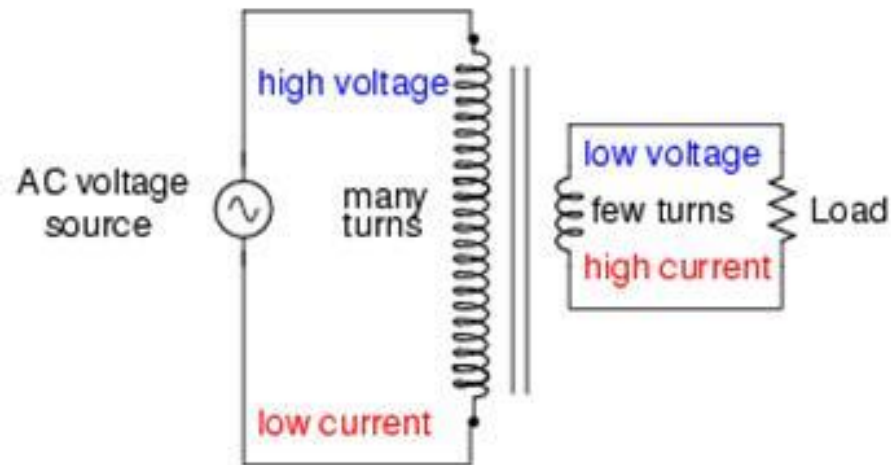
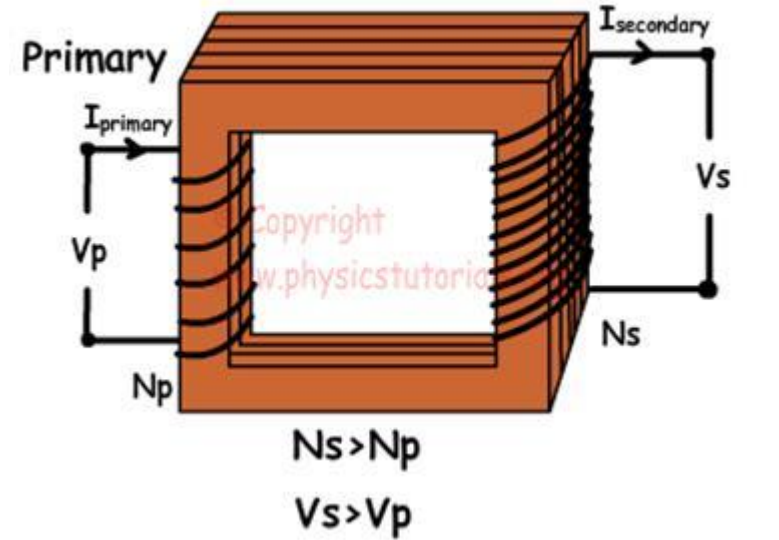
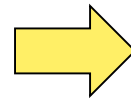
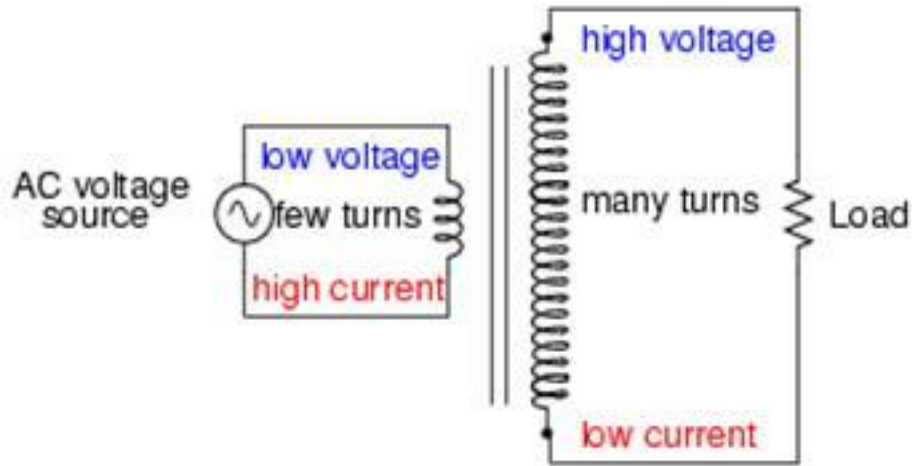
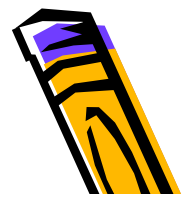
變壓器



Transformer



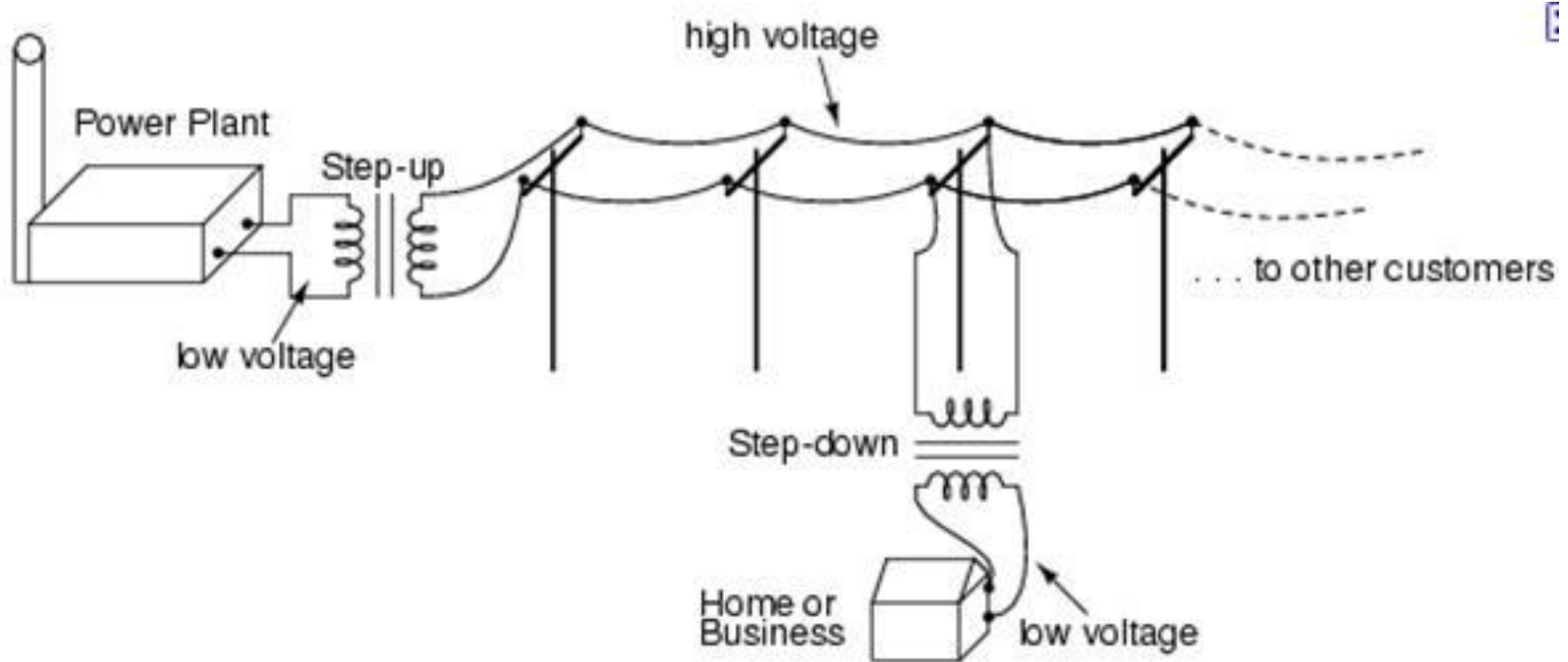
變壓器



電力系統傳輸



發電廠 → 變電所 → 電力輸送 → 變壓 → 用戶

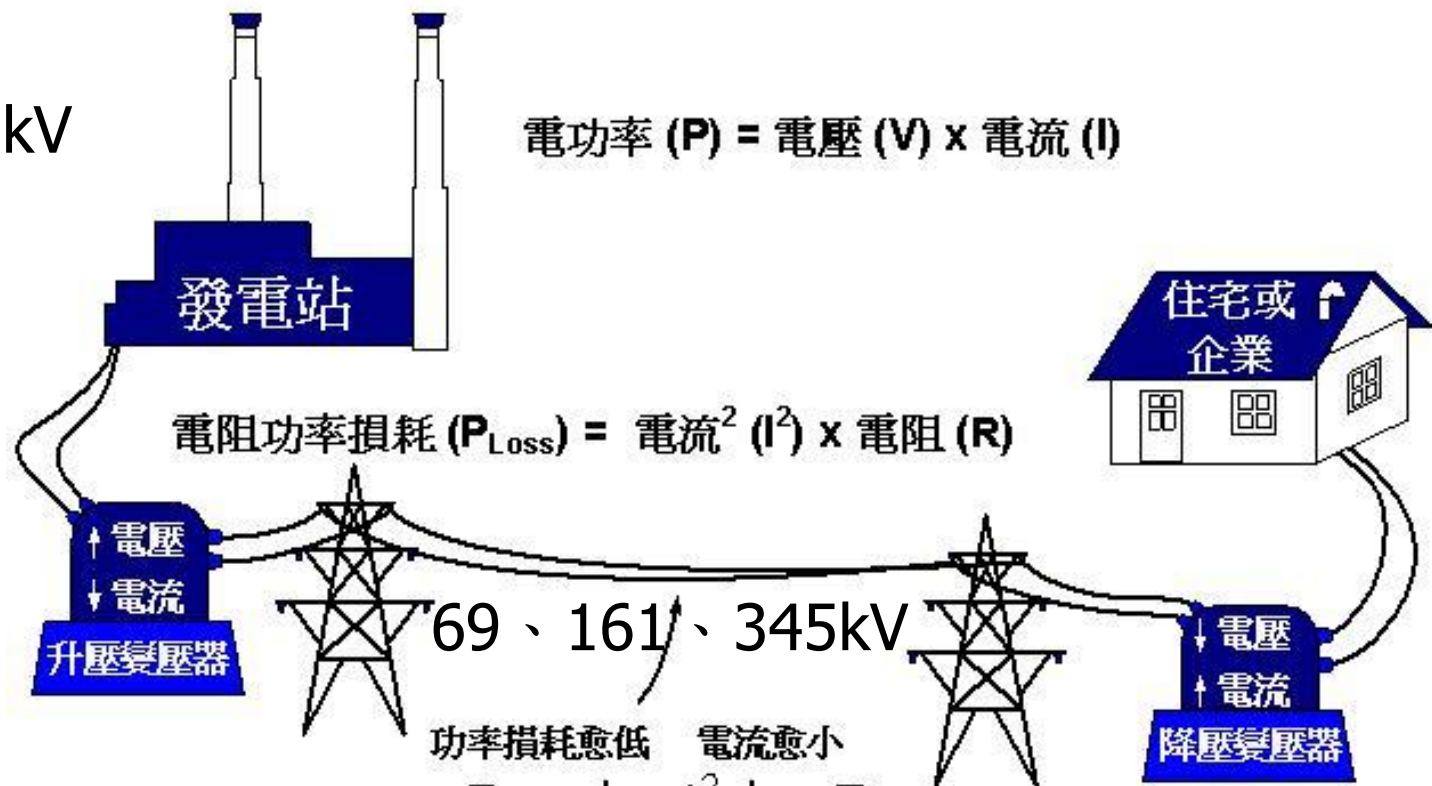


電力供應



11~23.8kV

電功率 (P) = 電壓 (V) x 電流 (I)



電阻功率損耗 (P_{Loss}) = 電流² (I^2) x 電阻 (R)

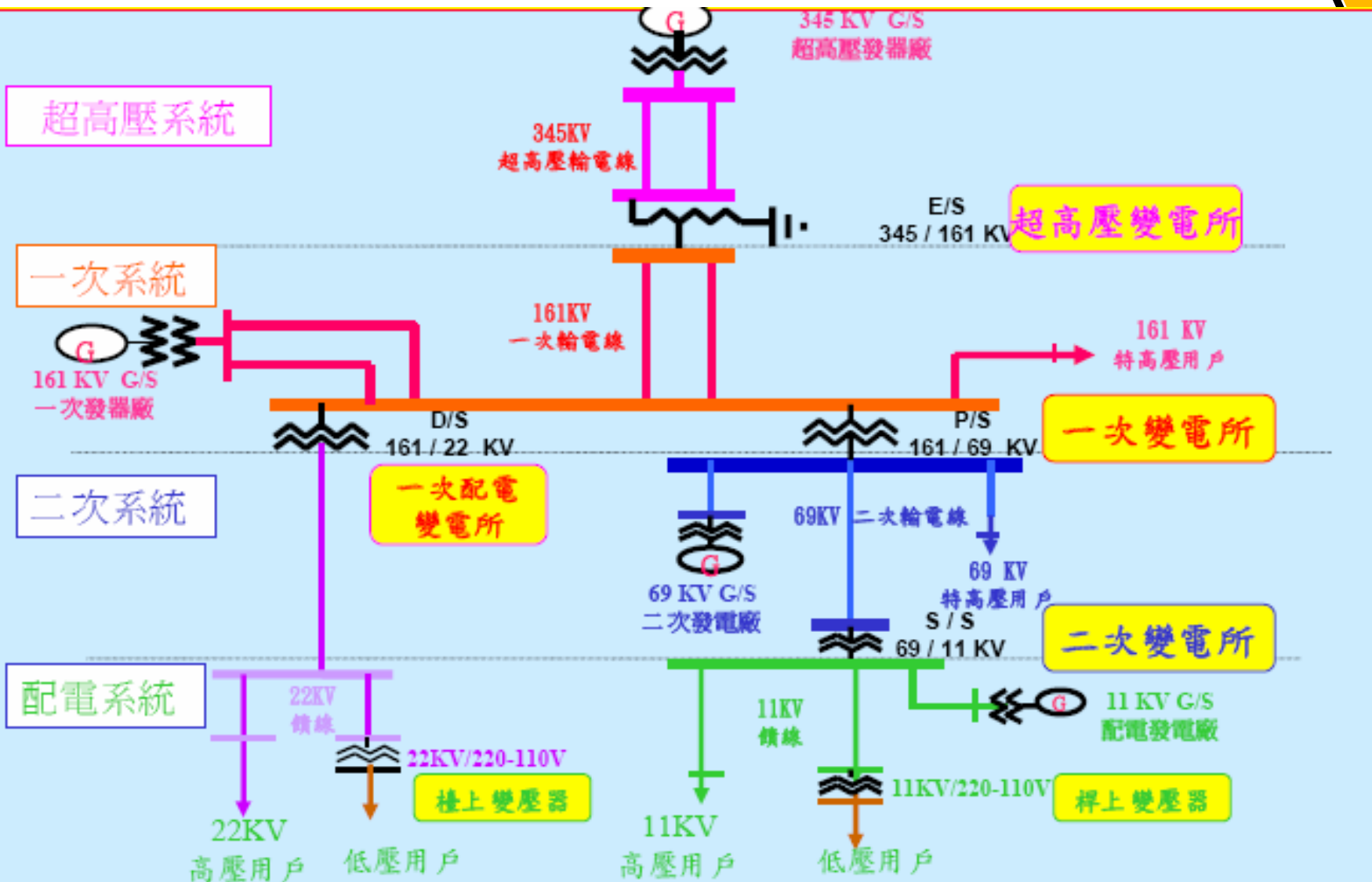
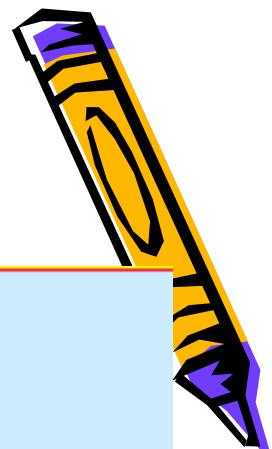
功率損耗愈低 電流愈小
高電壓傳輸 $P_{Loss} \downarrow = I^2 \downarrow \times R$

功率損耗愈高 電流愈大
低電壓傳輸 $P_{Loss} \uparrow = I^2 \uparrow \times R$

22.8kV
11.4kV



資料來源：台電公司網站



工廠受電電壓種類



1. 特高壓用戶161KV :

大型石化、鋼鐵廠、高科技面板廠

2. 特高壓用戶69KV :

中大型石化、鋼鐵、水泥、紡織廠

3. 高壓用戶22KV / 11KV :

台鐵鐵路電氣化、捷運、中小型製造業工廠

4. 低壓用戶440V/380V/220V/110V :

1. 小型製造業工廠
2. 工廠受電電壓種類

