

Supply/Demand Signals in Electricity

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Two distinct types of information

- ◆ Market information
 - ◆ published on the BMRS
 - ◆ routine publication to predetermined timescales
- ◆ Operational information
 - ◆ System Warnings defined in Grid Code
 - ◆ to initiate operational liaison to preserve system integrity
 - ◆ published as required

Timescales for routine market information

- ◆ Up to five years ahead
- ◆ 2 - 52 weeks ahead
- ◆ 2 - 49 days ahead
- ◆ 2 - 14 days ahead
- ◆ Day ahead to real time

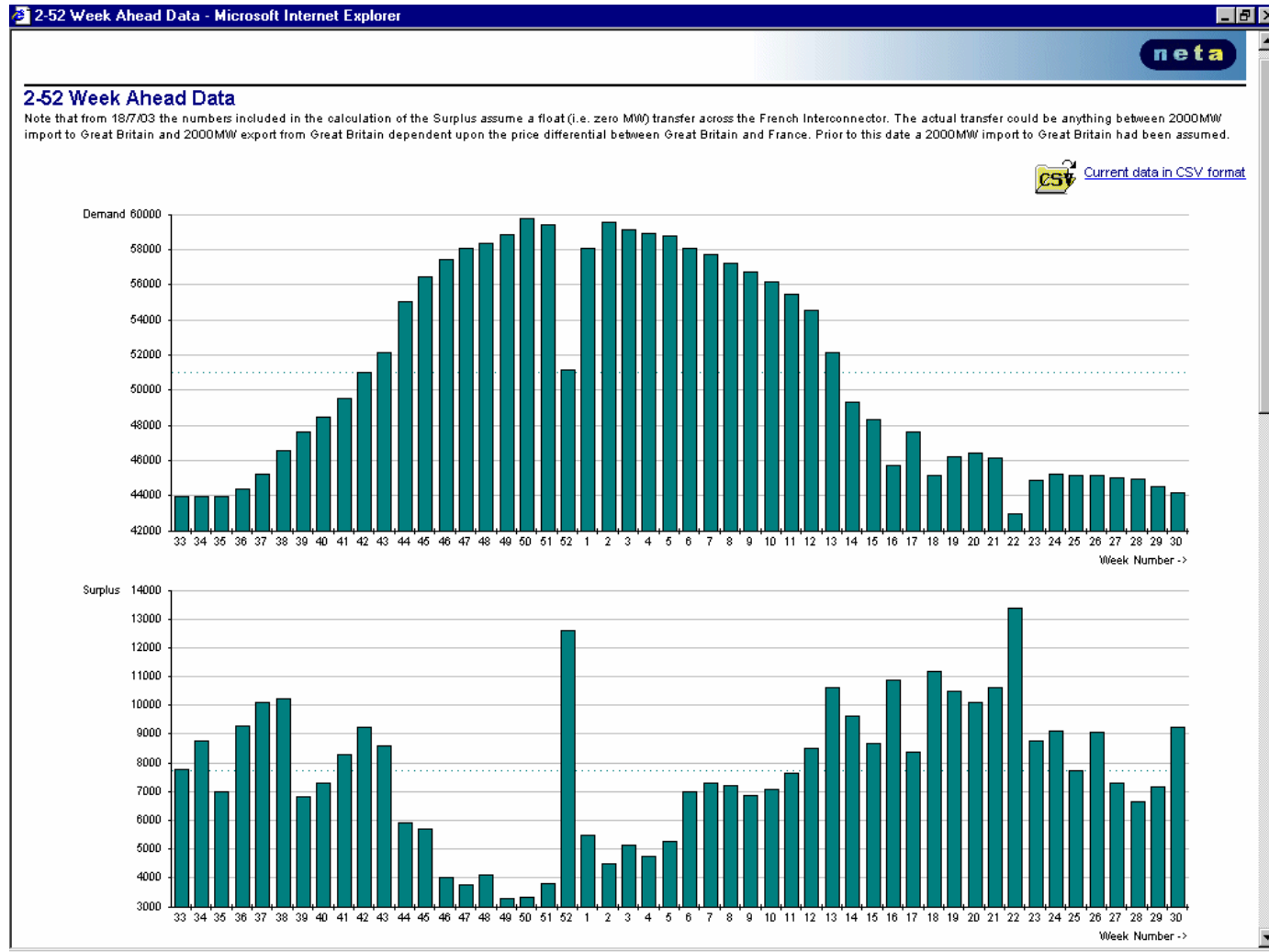
Up to five years ahead

- ◆ Weekly peak half hour values of:
 - ◆ total Output Usable
 - ◆ zonal Output Usable
- ◆ Published for 1 - 2 years ahead and 3 - 5 years ahead separately
- ◆ Published twice per year

2 - 52 Weeks Ahead

- ◆ Weekly peak half hour values of:
 - ◆ demand forecast
 - ◆ Output Usable
 - ◆ surplus
- ◆ National surplus = Demand - (OU + margin requirement)
- ◆ Zonal surplus = Zonal OU - Zonal demand
- ◆ OU derived from generator submissions via OC2 of Grid Code
- ◆ National and zonal data published every week

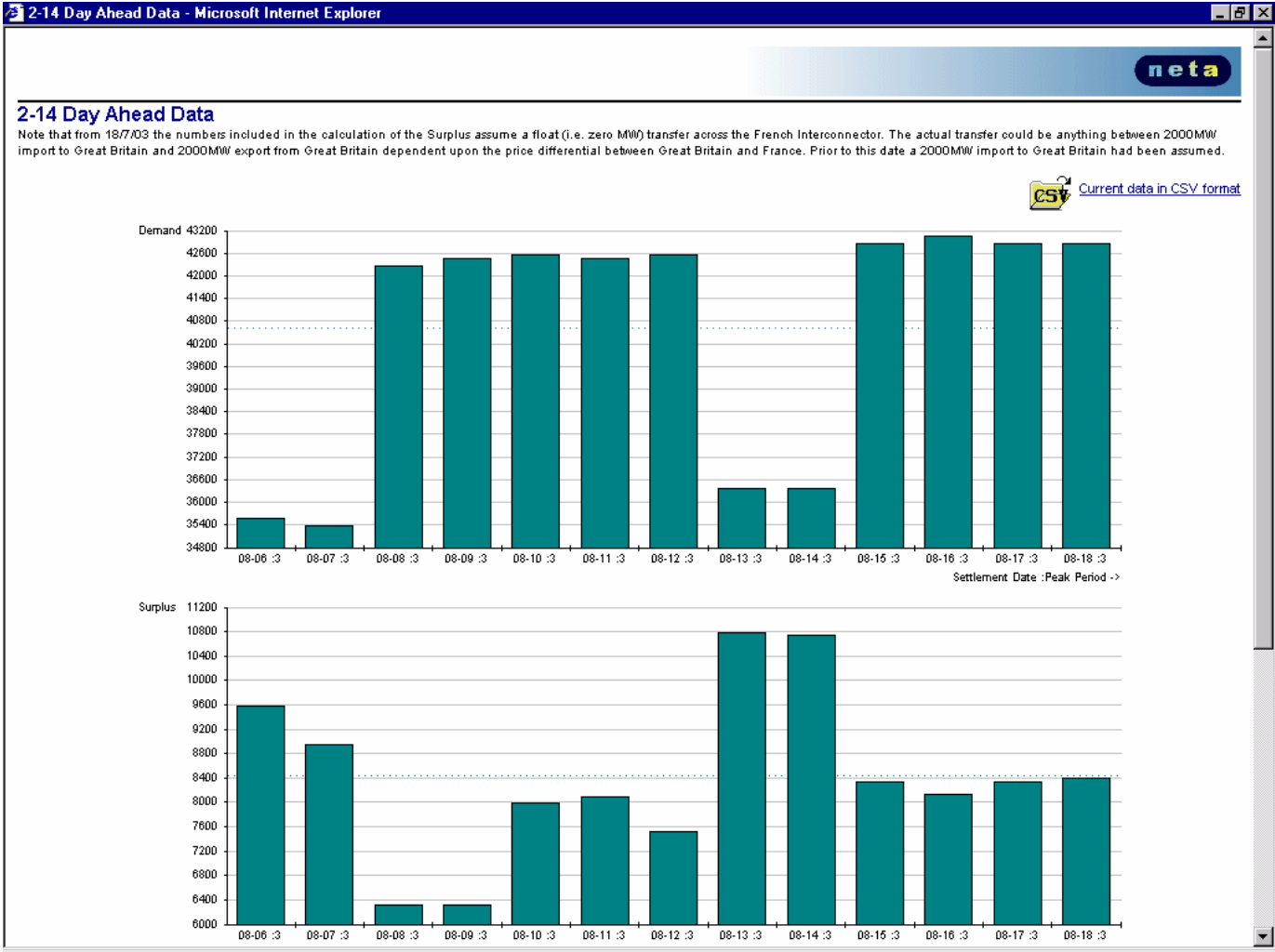
2 - 52 Week ahead data



2 - 14 day ahead data

- ◆ Same data as per 2 - 52 week ahead, but daily resolution
 - ◆ published every business day
- ◆ 2 - 49 day ahead zonal and national output usable also published
 - ◆ daily resolution
 - ◆ weekly publication

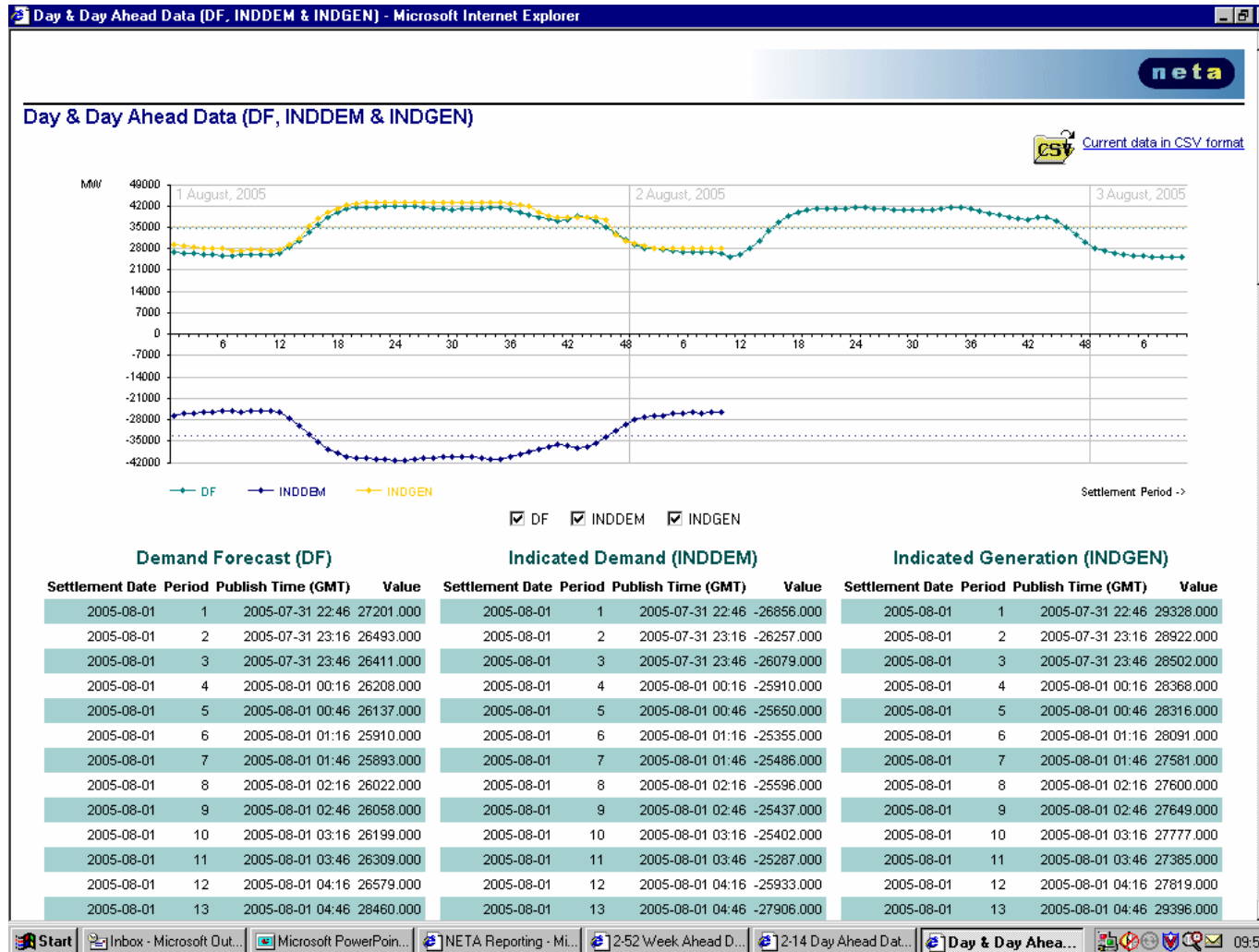
2 - 14 day ahead data



Day ahead to real time

- ◆ Half hour values of
 - ◆ National demand forecast
 - ◆ NG forecast
 - ◆ 'market' forecast (sum of demand PNs)
 - ◆ National indicated generation
 - ◆ Margin data
- ◆ Updated each half hour
- ◆ Out-turn demand published half hourly

Day ahead to real time



System Warnings

- ◆ Process described in OC7 Grid Code (Operational Liaison)
- ◆ Operational notifications published only when required
- ◆ Continual analysis from 11am day ahead
- ◆ Intended to
 - ◆ maximise plant availability
 - ◆ provide information on likely demand control

Day ahead to real time

- ◆ NG published system warnings (OC7 Grid Code)
 - ◆ Inadequate system margin (NISM)
 - ◆ period of warning
 - ◆ MW shortfall
 - ◆ High risk of demand reduction
 - ◆ possible %age level of demand reduction required
 - ◆ DNOs who may receive further instruction
 - ◆ Demand control imminent
 - ◆ specify DNOs