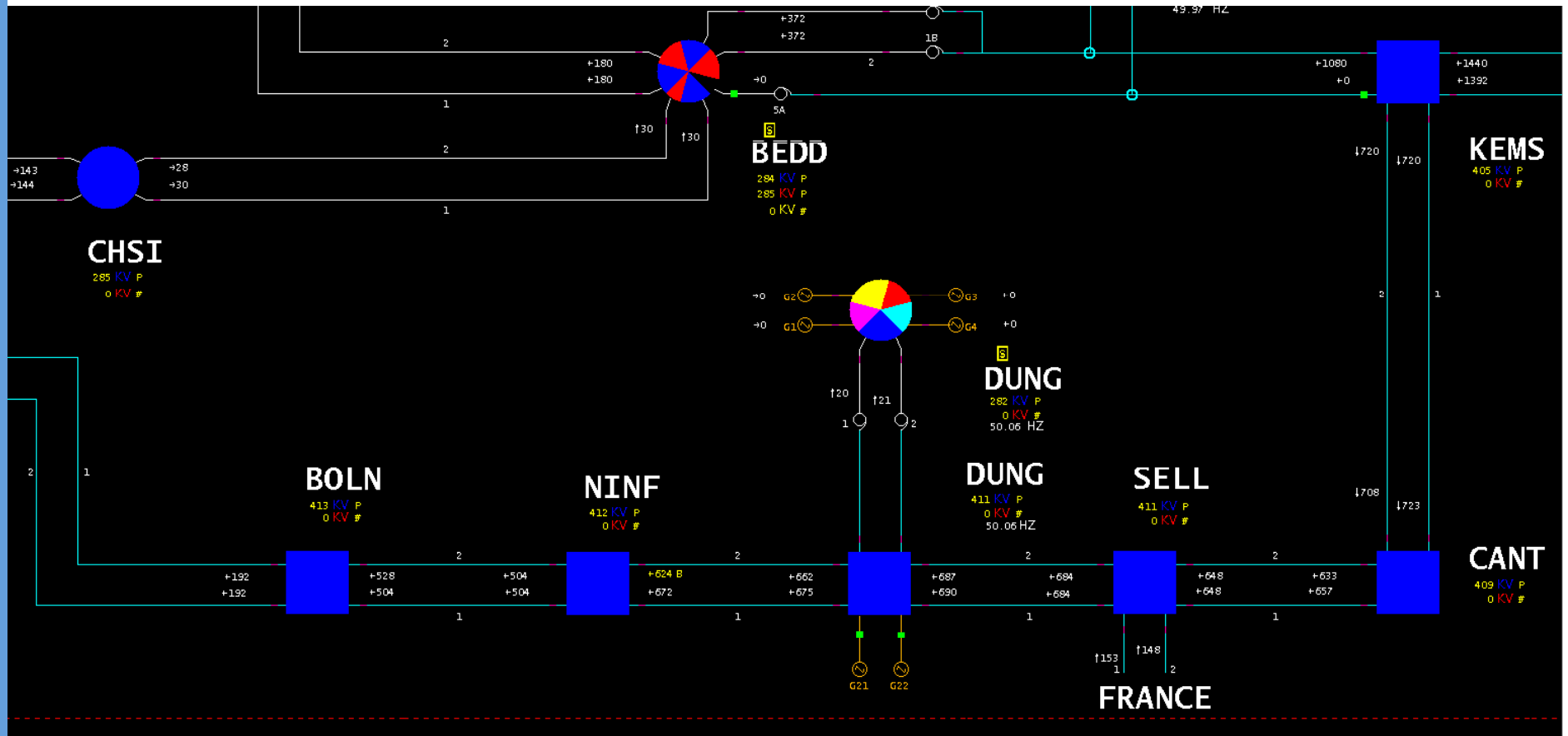


# IFA – Operational Experience

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# South Coast, Including IFA



# Control Arrangements

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- ◆ Control changes every Thursday at 09:00 hrs
- ◆ Either party can take control in an Emergency
- ◆ Bilingual Messaging System (BMS) used to exchange Operational, Commercial and Safety messages
- ◆ Protocol (“Pink Version”) agreed between both parties on how IFA is operated

# Control Arrangements

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- ◆ Emergency Assistance arrangements exists to allow either party to request 1000 MW of additional support – cannot be refused unless sending party's system is under duress
- ◆ Push Button programmed at either end to initiate 500 MW change (at 300 MW/min) by either party – RTE recently changed Push Button at their end to 1000 MW – better suits size of their system

# Control Arrangements

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- ◆ Constraint Management and Balancing Contract (CM&B) allows either party to vary transfer by +/- 500 MW
- ◆ Tends to be used more by NG than RTE – very useful for balancing on GB System
- ◆ Can be withdrawn by either party – usually when margins low

# Effects on GB System

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- ◆ Under POOL operation flows were fairly constant and usually towards GB
- ◆ Under NETA, IFA was opened up to Interconnector Users to buy capacity - flows have become increasingly volatile since NETA was introduced & concerns were raised about “wear and tear”
- ◆ Recently flows have been particularly volatile

# Effects on GB System

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- ◆ IFA flows now vary significantly within day and from day to day
- ◆ Within day changes based around trading periods – changes can be significant and at 100 MW/min, often in anti-phase to demand shape in GB
- ◆ NG often have to slow transfer changes down – much less of an issue to RTE

# Effects on GB System

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- ◆ Intertrip scheme utilised to trip 1 Bipole for faults on GB System
- ◆ Outages difficult to plan on GB System as IFA flows not certain until “day ahead”
- ◆ Management of flows on GB System getting more difficult due to IFA flows

# Effects on GB System

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- ◆ Instantaneous loss of 1 Bipole has significant effect on GB frequency, approx 0.5 Hz
- ◆ Instantaneous loss of both bipoles has occurred on 3 occasions in 25 years approx – non credible fault
- ◆ During recent major system incident in Europe, IFA was unaffected

# Effects on GB System

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- ◆ Operational HF and LF relays have never been triggered
- ◆ Commercial HF service (50.3 Hz) is used occasionally by NG and has been triggered
- ◆ Frequency response service is technically available but no longer utilised

# Conclusion

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- ◆ Operationally link has proved to be very successful
- ◆ NETA/BETTA has significantly increased changes in flows but we have learned to manage these
- ◆ Constraint management is a challenge for us and likely to remain so/increase