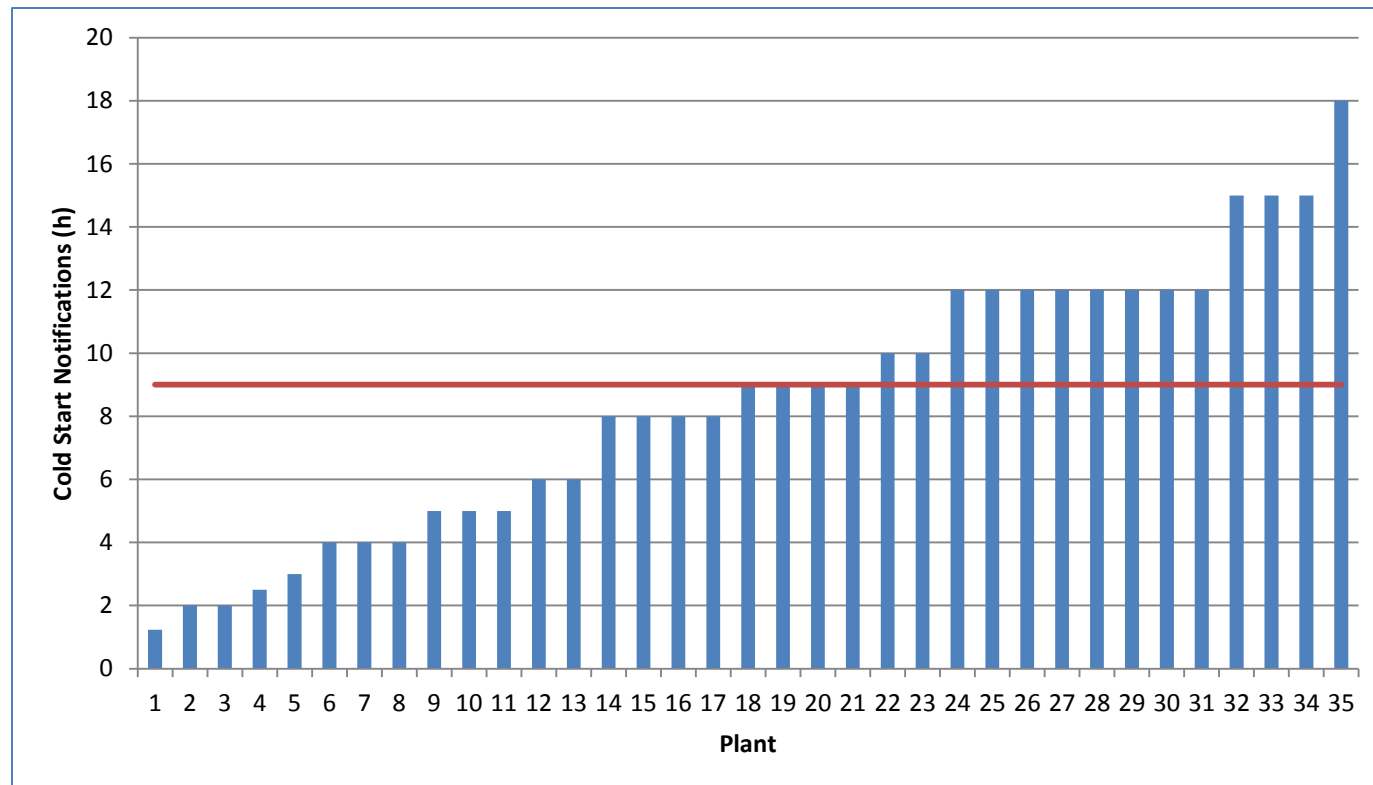


Pre BM Actions

The Issue

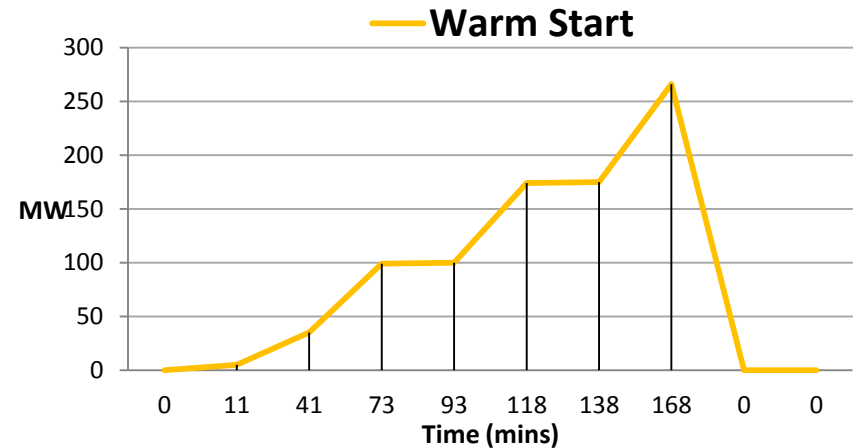
- DAM Gate Closure will be 11:00
- Notifications to the TSO will be circa 14:00
- Trading Day starts at 23:00
- Notifications received 9h before the trading day starts
- A number of plants have cold start times outside 9h (excludes sync to min gen)



Start Times

Unit	Type	Notification Times (time to Sync.) Hrs		
		Hot	Warm	Cold
MP1	Coal	5	8	15
TB4	Oil	3	7	10
DB1	CCGT	2	3.5	5
HNC	CCGT	3	5	9
WG1	CCGT	3	5	12
TYC	CCGT	3	5	10
LR4	Peat	6	12	12
AT1	OCGT	0.33	0.33	0.33
TP1	OCGT	0.17	0.17	0.17

+ Time to get to min load and ramp up



Potential Solutions

- TSO will need the ability to contract with generators before notifications are received at 14:00
 - Should not be a regular occurrence but needs to be catered for
- Potential Options
 1. TSO negotiates pre BM contacts with individual plants that have a very long cold start time
 2. TSO holds competitive bidding process for a number of long cold start plants

What would the TSO procure

- These contracts should cover the costs of getting a plant warm or started and onto the system
 - Not a capacity contract
- Form of product to be procured
 - €/£x to bring the plant state from cold to warm/hot
 - €/£x to get on the system at min stable level within x hours
 - Subsequent actions taken through BM
 - €/£x to be on the system at x MW level within x hours and to stay at that level for x hours
 - Stays out of BM until obligations to the TSO end

Potential Principles for Pre BM Actions

- As market based as possible
 - Avoid distortion of the BM
 - Avoid long term contracts
 - Should provide an incentive to reduce start times where possible