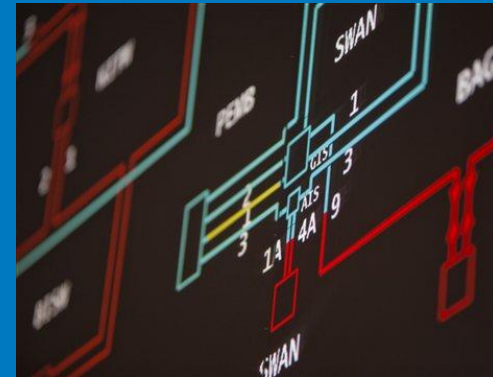


# CMP237 Workgroup Meeting 2



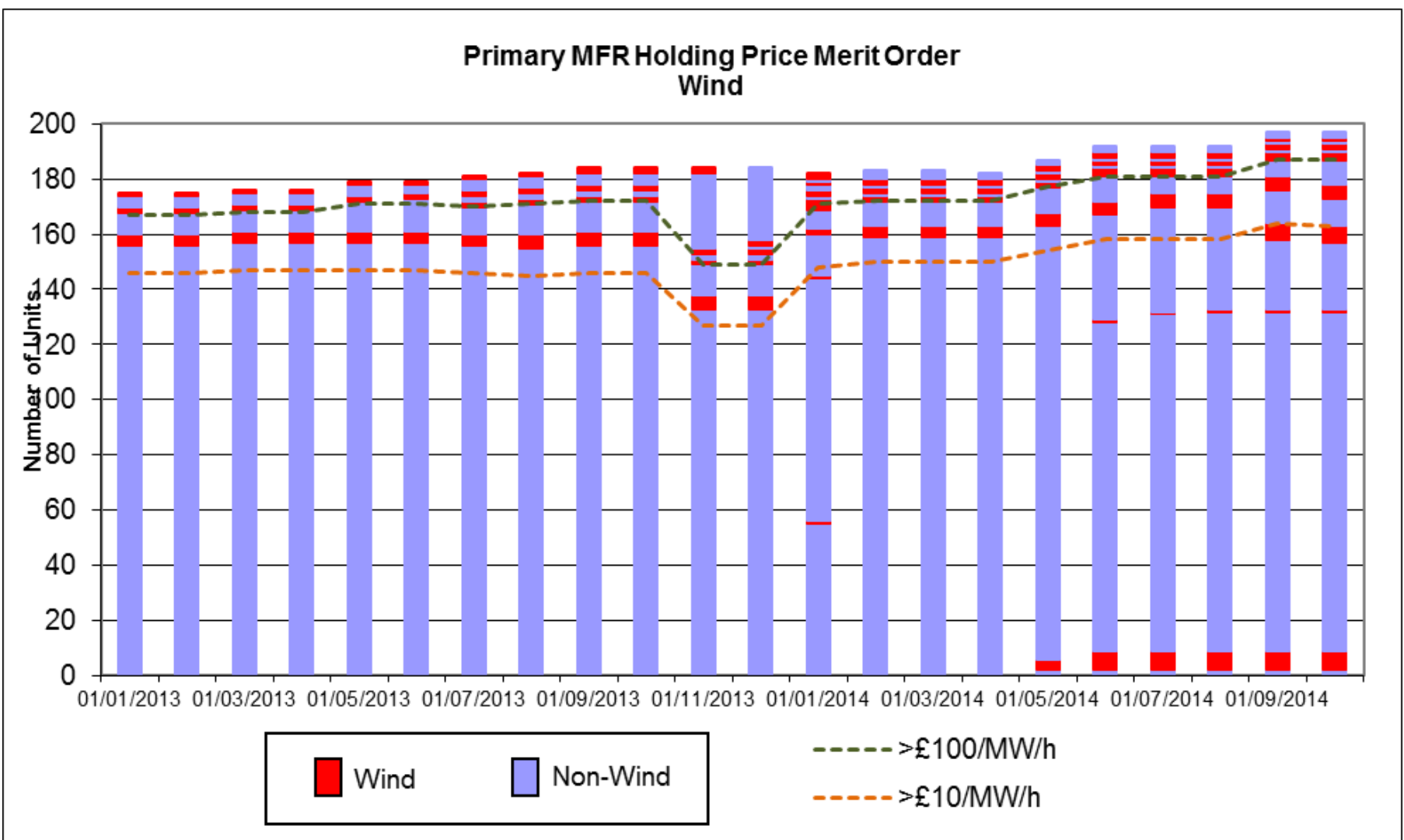
21<sup>st</sup> November 2014

## Wind Despatch

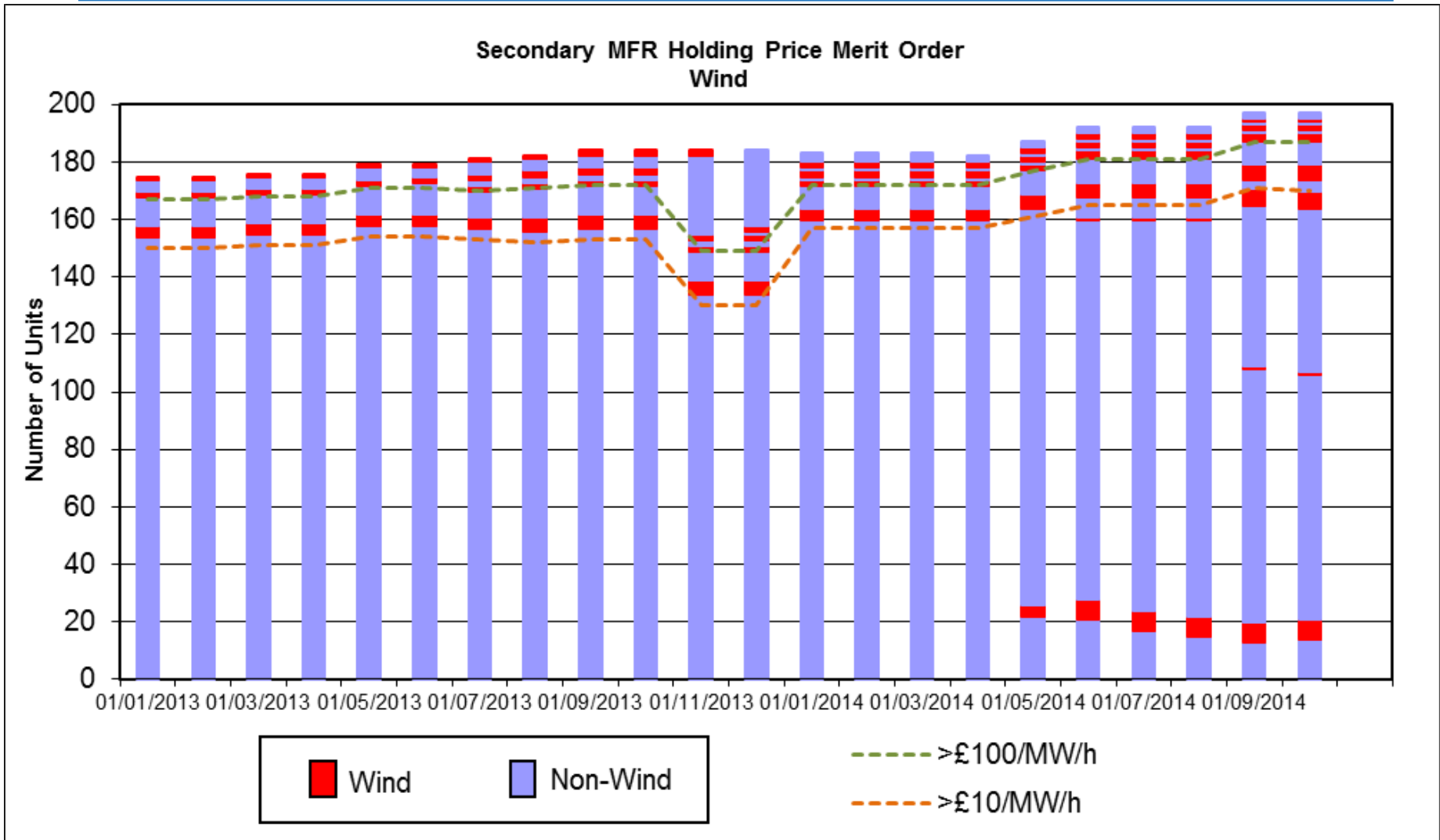
---

- On 7<sup>th</sup> November we despatched wind for response:
  - CLDCW-1 02:05 – 04:54
  - CLDNW-1 02:05 – 04:54
  - CLDSW-1 02:05 - 04:54
  - GRIFW-1 03:14 - 04:25
  - GRIFW-2 03:14 - 04:25
  - GORDW-1 03:28 - 04:44
  
- Details will be available in the next Monthly Balancing Services Summary (MBSS)

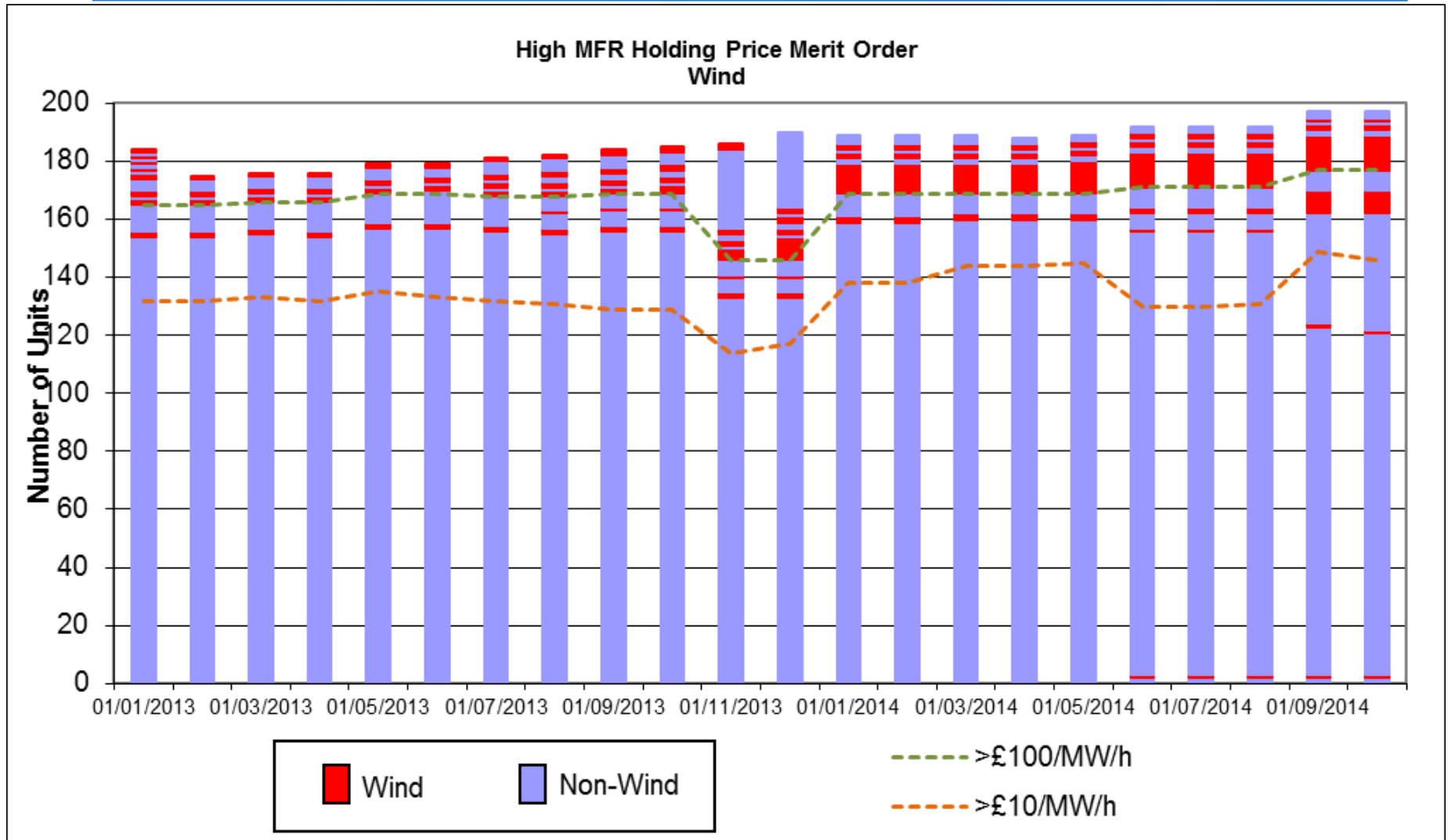
# Wind Holding Prices - Primary



# Wind Holding Prices - Secondary



# Wind Holding Prices - High

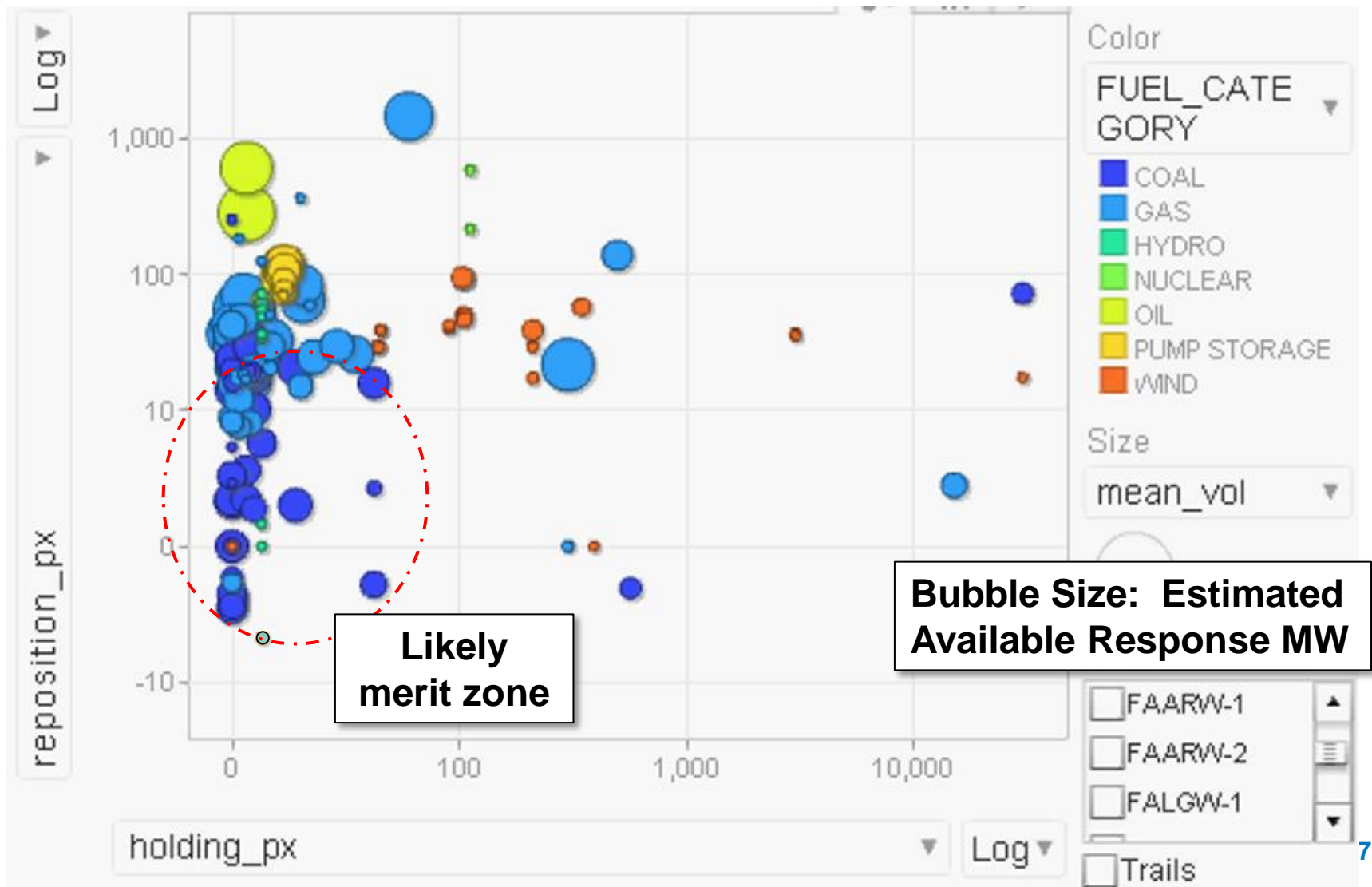


## Combined BOA and Holding Prices

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- The cost of the first MW of a BOA is not the same as the cost of the last MW
- BOA cost depends on how far the unit needs to be moved to achieve most responsive loading point
- Assumptions:
  - The most responsive point is halfway between MEL and SEL
  - Use volume weighted average cost of moving unit to this point per SP
  - For wind, MEL=FPN
  - Holding Prices are summed

# Combined BOA and Holding Prices (1/10/14)



## Combined BOA and Holding Prices

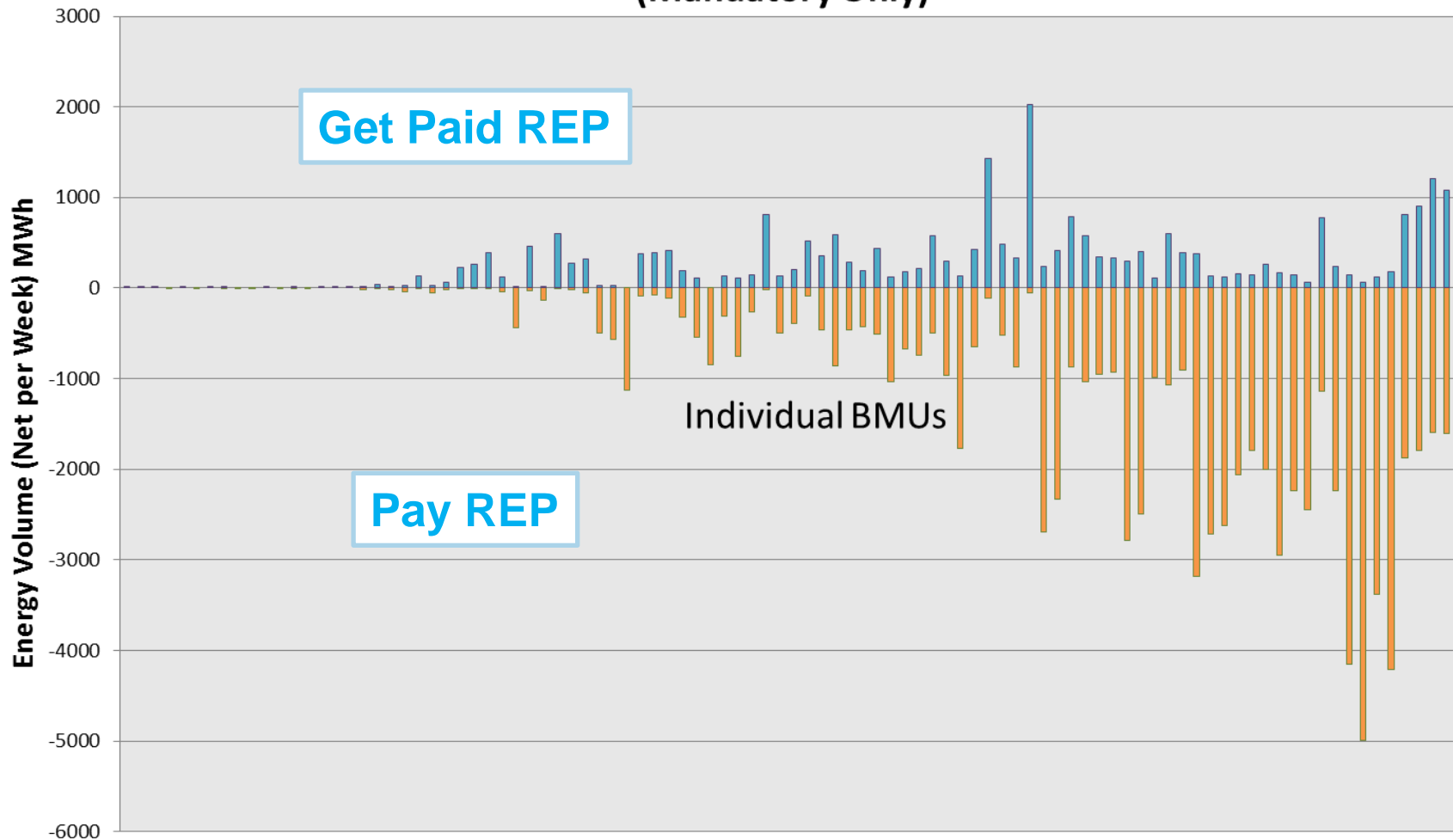
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- Note that most response capability despatched does not require a BM action
- Conclusions:
  - Most wind BOA prices sit in a horizontal band, this is likely to be linked to the lost ROC cost
  - A number of wind sites have total holding prices higher than the equivalent BOA prices – these are the >£100/MW/h sites
  - Wind slightly out of likely merit zone for response call



# Mandatory Response Energy Provided







Response Energy Volume Provided (Net per Week) in 2013/14 for all BMUs  
(Mandatory Only)

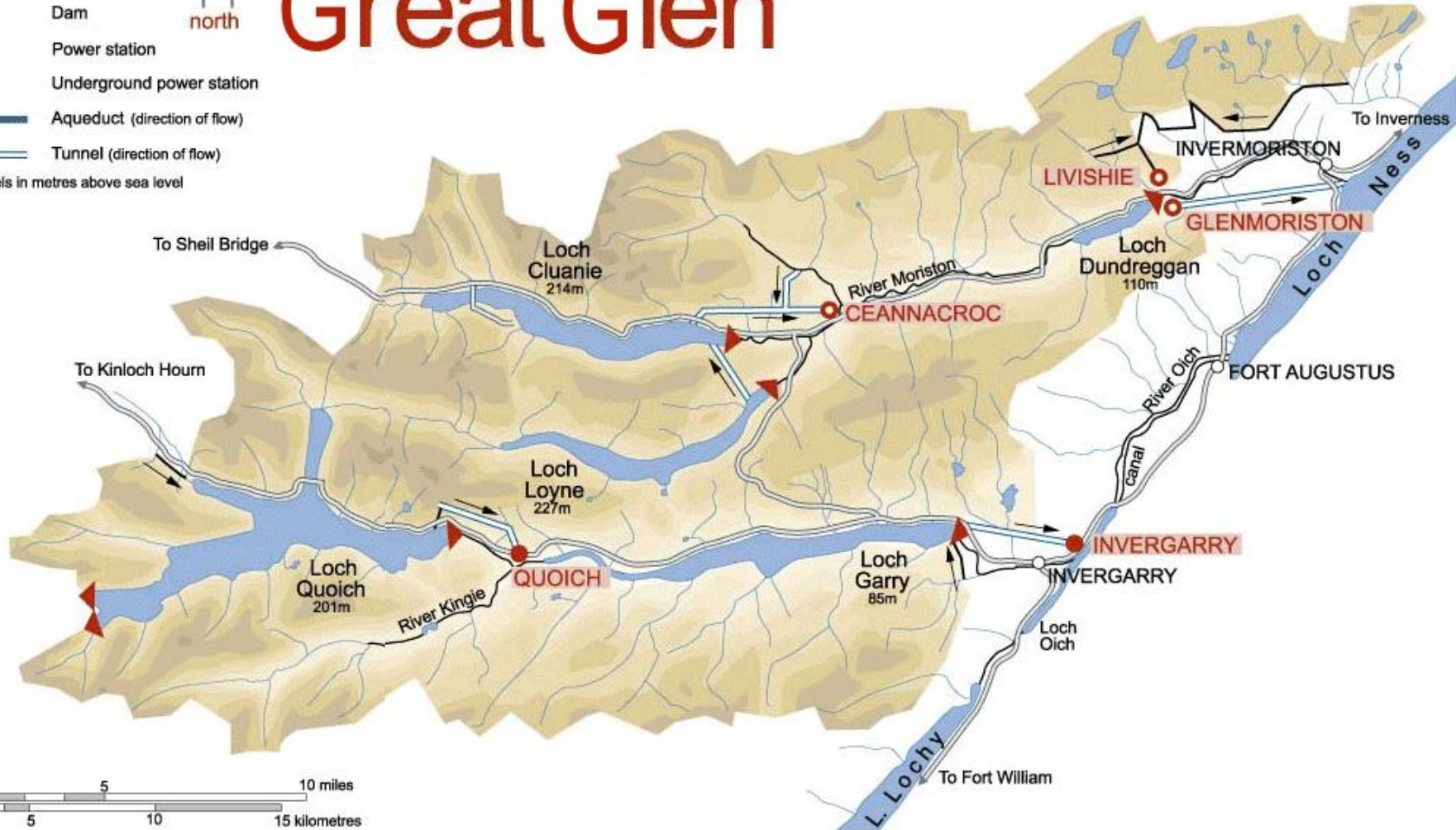


# Hydro – Run of River / Storage

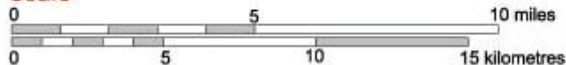
## Great Glen

key to map symbols:

-  Dam
  -  Power station
  -  Underground power station
  -  Aqueduct (direction of flow)
  -  Tunnel (direction of flow)
  -  north
- Reservoir levels in metres above sea level



scale



# What Plant Should Be Included?

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Fuel Cost	No Fuel Cost
Gas	Onshore Wind
Coal	Offshore Wind
Oil	Solar
Nuclear	Tidal
Biomass	Wave
Electricity Storage Technologies (inc. pumped storage, batteries)	Hydro