

**Meeting note - 27/06/2012**

Key

MH – Mark Higson

HH – Hergen Haye

HITACHI → 10k in UK/Europe

Highest Eol put in – want to buy whole lot.

2-3 weeks for next substantial response to Nomura

60% GE/HIT 40% o/s JP



But leading on HNP – ABWR in JP



reapplied for re-license in US.

Discussed with M. Weightman – GDA etc?

MH - Any Eol is welcome – take that away.

Want credible consortium.

Wylfa esp – be developed, without delay.

Not interested in speculative bid.

Speed is of essence – no 'hiatus'.

Owners to proceed the build, there is finance backing

Keen on reactor diversity.

Max UK economic benefit – supply chain



Not necessarily UK companies, but investing in UK

NAME REDACTED - want to build in UK

President – wants Europe build

believe can get close to avoid grid connection dates in place, because ABWR build time is short

1 critical

38 months core → Fuel load

1358 – current rate

1500 MW in UK possible (coohr)

2500/site workers

22 plants in 40 years – Hitachi

Have progressed procedures to improve process

Latest 3 months extra due to ↑ concrete.

Full information on different construction specific

Would build modularisation facility in UK.

Skills programme ↓ through ↑ field build.  
↓ risk ↓ cost

NAME REDACTED - feel competitors agree Hitachi is best in this.

On the N<sup>th</sup> design of plant

Lessons learned on new owners/constructors

operators → learn from operators.  
←

92% load factors

BWR – cheaper to maintain over lifetime

[ 2 updates on reactors at Fukushima b4 Tsunami ]

PWR = outgrowth of old Govt programmes

MH – Do we have resources to do this [ ONR ]?

esp specific site licensing for Hinkley.

HH – need to ensure regulator is not overloaded

MH – to note tension HMG vs s/holders.

↓  
We may want to make sure the best national bid can be supported.

Looking for progressive growth in programme

What commitments would HNP purchaser be willing to make?

NAME REDACTED – JBIC/EHC/?ECA Japanese –

v.confident can procure £ from JP banks

NAME REDACTED - Operator – would like US (top) + European (next level)

V good relationship with global operators

MH – Public acceptability is key for programme.

- Important to sell as a going concern – skills

HH – Wylfa is a committed community now – delay = –ve impact.

Lit → FID 18-24 months.

NAME REDACTED - Need confidence an income stream to get

MH – nuclear → reasonable price

→ not at any price!

- Need to be sensible about what this is.

Need to be confident nuclear is a low cost competitor in electricity manufacture.

**Meeting note from 25/07/2012**

Mngmnt Wed 1/8 with HNP

16-18/8 – site visits

No data room – 25K pages + gaining

SNC partner.

When value + price to discuss.

EON/RWE - completion 31/12/12

Potential list of possible expense lines from Hit.

Unlikely to have GDA+FID by early 2015

—→ May 2015 election a risk.

CfD - transparent on level and term

Horizon have done some work on UK supply chains

Acquisition price with a CfD? Need to clarify

28/9 – best and final

Possibly 2/3 9/10 August – possible

NAME REDACTED speak to NAME REDACTED

Investment - certain

## Meeting note from 12/09/2012

- long time strat priority for Hitachi
- help UK meet low carbon goal
- welcome HMG support for nuclear
- ABWR only Gen3+tech – offers fair ⚡ price
- reactor diversity, not FOAK, to construction risk certainty of construction.

- ❖ GDA – matter for ONR. ONR looks to Govt for priorities. Govt would be clear that reactor design for Hit would be a priority if with HNP role ongoing decomm + licensing work. Speed depends on Hit and answering questions. Regulation is stronger now than before, but also ↑ workload!
- ❖ EMR – aim to take draft bill with comments forward revised in early Nov. Expect 12 months for Bill.
- ❖ EDF – EDF keen to complete by end of Dec, but depends on EDF meeting the timetable. We will want to make clear the price + transparency once deal agreed. Looking at SoS entering agreement until legislation was available, and counterparty could take over.  
Will end up with very clear counterparty, and needs certainty to ensure financing is available.

Don't want to ↑ risk and it ↑ cost of finance and then ↑ £ to consumers.

CfD – not <15 years

EDF debate = 15-40 years ← Should cover most scenarios

DECC – no reason in principal why not long but part of negotiations.

length – needs to have regard of nuclear finance

NAME REDACTED - alive to taking public + politicians with you  
would prefer to see long term 'balanced' cfd.  
other factors: design life (60 years ABWR)  
for negotiations cost of waste + decommissioning

Fully funded@ 40 years for a 60 year life

[known timetable is awkward.]

Counterparty bankability – MH

- very unlikely HMG will underwrite any c/party
  - impact on HMG a/c
- Focusing on rest of system? To de-? It.

Move to single entity – levy raising powers  
contracts with supplies

- No real assets so on default, possible scenarios:
  - e.g. large supplier defaults/fails to pay levy
  - look for level of collateral from suppliers to pay, with backstops

e.g. supplier of last resort?

\*aim to protect energy customers.

Mutualisation of losses among non-defaulting suppliers – similar to existing balancing codes.

Also make c/party as insolvency remote as possible – e.g. not for profit company, to prevent claims from other companies (e.g. IT)

Potential fines (10% T/O) should prevent defaults

→  
+ lose licence.

Probability of default – extremely low.

Goes to consumers – balancing and settlement mechanism

Proposals give > security than RO did

Market Reference Price – for non-integrated generation – having discussions with HNP on this.

Recognise liquidity not there – nuclear year ahead  
renewable day ahead

Working to develop options on this with Ofgem.

Adv. of 2<sup>nd</sup> user here – see EDF use/price.

Report from market advisors on Monday.

Recognise risk for independent generators.

MH – know we need to crack ind. gen. questions. But now is not the time.

NAME REDACTED - HNP involved in the next stage of consultancy on this.

### Risk sharing

Looking at options – e.g. not to be exceeded price

Can arrange discussions with BIS if want to know more about industrial relations.

### Identifying strike price

We must be comfortable of risks – last chance for HMG to do this. Need transparency on how numbers were arrived at. Need to gain confidence in numbers. Issue of EU state aid in sharing risks. Risks for HMG are inflation and change of law.

Consider bottom up – all details of returns  
top down – competition

CfD mechanism allows for flexible approach to this.

NAME REDACTED - Construction labour is most volatile issue

NAME REDACTED - We would like to talk about

Expect open book process – price + risk etc.

↓  
DECC oversight on this.

12% construction minimum

10% or below post commissioning

Industry – needs to be justified by vfm

Looking at 'crude' CPI for now.

MH – need a simple process which is publicly acceptable (no lots of small print).

NAME REDACTED – expect to have a force majeure measure, looking at probably adjustments on strike price.

Aim to publish a substantial HoT in Autumn.

worry – war, labour strike, dock strike etc.

### Change of Law

Needs a provision on this, but not worked it out yet.

NAME REDACTED – examples of Col in other sectors.

NAME REDACTED – want a straight + rational process to discovery

Change of policy – note this is worldwide issue.

\*strength of contract law

\*cost for Govt.

\*UK strong record of grandfathering rights

Rests on confidence in UK, and confidence in courts

#### Upfront HNP cost in discovery

- provided costs are legitimately incurred.....

Risk of price going to a premium

If so it is a strategic purchase and should be covered over future CfDs, not recovered in the first cfd.

We are not acting for RWE/EON, prefer ↓ £

NAME REDACTED – think about value of what HNP spent so far.

❖ Have covered all points in response to comfort letter.

MH – this is a letter for winner of bid.

Need to think further with Nomura on process.

Prefer to have letter to winner – b4 closing

#### Wider new nuclear interest

Interested in all other opportunities but HNP a well progressed project.

NAME REDACTED – Set 1 – HNP – ONR, respect + lots of comfort

- Set 2 – Hitachi – some NuGen investors could block Hitachi at moment

OND keen to work with Hitachi

Mark would like to see draft of addendum

Update 60% UK target – want to grow.

#### Public statements.