MINUTES of MEETING

Meeting Title	CoC Nuclear Spring 2009 Project Review
Location of meeting	Hannover
Date & time	13-03-2009 10:00-14:00
Purpose of meeting	Bi-annual project review session for: - O/UG to provide an update on Group Generation strategic developments - CoC Nuclear to provide an update on project and market developments

Present	CoC Nuclear	O/UG
	Michael Micklinghoff (MM)	Jan Taschenberger (JT)
	Joachim Specht (JS)*; temporarily	Achim Ufert (AU)
	Magnus Mori (MMO)*; temporarily	E.ON Energie
	Ulrich Wilke (UW)*; temporarily	Torsten Röglin (TR)
	Klaus Hahne (KH)	
	E.ON Nordic	
	Anders Werkstrom (AW)	
	E.ON UK	
	Collin Scoins (CS); temporarily	
	E.ON France	
	Antonio Haya (AH)	
	E.ON Kernkraft	
	Volker Raffel (VR)	
	Thorsten Lott (TL)*; temporarily	
Apologies		
Circulation	Those listed in present	

Prepared by: Achim Ufert O/UG

Date of circulation: 23rd June 2009

Date of next meeting: Autumn 2009, date TBC

1. Actions from the last meeting

No outstanding issues from the last project review meeting.

2. Strategic update through O/UG

JT explains that following last Wednesday's announcement of a €6bn capital expenditure reduction between 2009/2011, the outlook for new build projects has regrettably worsened significantly. As the costs of growth have to be covered out of cash flow adjustments are necessary. Nevertheless already developed options shall be kept open.

With €36bn as initial value, the €6bn reduction will bring Capex spending down to €30bn. On implications, **JT** emphasises that the €6bn reduction figure applies to the whole E.ON Group and needs to be officially translated across the value chain, but the expectation is that Generation will have to shoulder a third of the reduction. There is also the expectation that the reduction will last beyond the MTP period and is sustained out to 2015.

JT emphasises that now Capex for new projects is being squeezed, effective project prioritization becomes all the more important. The presented information is a preview of March 16th board presentation and thus has to be treated confidential.

JT explains that due to the array of complex assumptions and uncertainty around the robustness of the 2008 price tracks, O/UG1 had used a simple two pillar prioritisation methodology. Pillar one assesses the regional attractiveness of a market. Pillar 2 concentrates on project specific variables to generate a qualitative project ranking.

On a Group level it is highlighted that the current "Generation Strategy" has to be aligned with the new Capex envelope and therefore a significant project rationalisation and prioritization is necessary.

JT describes the Group outlook for Generation as follows:

- For Generation the total Capex envelope out to 2015 was ~€20bn
- Out of this spending ~€15bn have already been allocated to pay for projects in construction and future maintenance investment for the existing fleet.
- Based on the timing profile of this budget, only 1 or 2 Gate 2 requests by 2011 can be granted.

On unabated coal, **JT** outlines that there is concern at Board Level over the Group's exposure and that the window of opportunity for large scale unabated coal is now most likely closed. **J**

The nuclear and hydro options are highly prioritized. With the assumption of 50 % success rate for nuclear projects, 1bn € expenditure is expected by 2015.

3. Project Screening USA/France

For the avoidance of doubt **JT** points out that for expansion plans in Northern America there will definitely be no budget available by 2015. **MM** concludes that the projects Utah and Bruce will be officially terminated as a consequence, though the contact shall be kept up. **MM** states, that the state of Kentucky changed the energy law now allowing nuclear power to be built.

JT explains the background of the current board meeting topic on participation in a JV for the 2nd EPR in France. This is seen as a door opener for future own projects in France.

4. Trilateral WG2

TL states that the EPC-preparation is pending due to too few resources an all sides. Furthermore he officially intermitted the trilateral work due to following reasons:

- Unclarity concerning responsible and authorised contact persons within AREVA (meanwhile AREVA nominated new contact person)
- No answer on E.ON-proposal for contract structure (meanwhile AREVA and Siemens generally agreed on E.ON-proposal)

Today the negotiations will continue after a moratorium since November 2008.

The impact of the "divorce" of Siemens/Areva and cooperation of Siemens/Rosatom is difficult to predict. **CS** suggests thinking of resolving this problem with substituting the supplier for the turbine island.

5. Project status

UK

NDA auction will start on March 16. The consortium with RWE has the potential to build 6 GW of nuclear. The main competitors in the auction will be the consortium of Suez/Iberdrola/Scottish-Southern. There will be public engagement activities in the upcoming two weeks.

RWE focuses on AP-1000. The process to choose the reactor technology has not yet been agreed upon. Deadline is end of year 2009. The staffing of the working groups has started. In the first stage 40 fte are planned by end of 2009 this will be increased to 80.

The impact of the green package with 50 % share of renewables in UK on the electricity price and the residual load is discussed. Further assessments are necessary. UG

Fennovoima

DIP application has been submitted. Fortum included district heating into their concept, which is seen as advantageous. With TVO three applications are on the table while only two licences will be granted at a maximum. In the public discussion Fennovoima's application is objected of a solution for the disposal of high level waste.

Ministry of Economy and Environment accepted the EIA which will be open for public access and commenting until mid of April. A parliament decision is expected in spring 2010.

Budget increase for design and procurement phase is inevitable.

Highlight from last SC meeting: Open discussion about household emission program (HEP) of Finnish shareholders. **JT** assumes that agreement on staying silent about HEP won't be kept. Shareholders desire a decision and from E.ON side there is a clear positioning against the HEP.

MM reports on the recruiting process. 18 open positions to be filled with currently low response on job advertisement. E.ON Sweden will be able to contribute 2 – 3 people. EKK has 1 – 2 designated employees.

JT asks for a ranking of the three competing projects. From the governmental side no preferences have been made yet but Fortum seems to be leading due to district heating. Fennovoima needs to further and continuously improve their reputation. Fennovoima claimed already, that renewables as supporting investments are needed. There is no notice yet on impact of financial crisis on plans and capabilities of Fennovoima's industrial partners.

An exchange of information among UK and Fennovoima projects is considered. Toshiba seems to be interested.

6. Status of screening and initiation

Italy

Main challenges are currently to get an insight into the regulatory framework. **MMO** states that improvements on the energy law are necessary.

15 sites have been assessed. Most of them being Greenfield, as existing sites suffer from the bad reputation Enel caused on their existing sites mainly through neglectful waste handling. A technology has not yet been chosen. Italians GE history will be taken into account. The most favourite sites seem to be in central region, as French and German imports flood the northern region. 2020 for first COD's is seen as ambitious but feasible.

E.ON officially expressed its interest in the nuclear new build program in Italy. The total volume of NPP's in Italy is assumed to be 12 GW of which Enel will only cover 6 GW. Public opinion on nuclear power is divided.

In April there will be a site visit at NPP Isar from the industry commission of the Italian senate. Potential partners for E.ON could be A2A and ENI. JT points out the high importance of a coordinated communication of EKK and EA.

A steering committee has been created.

Sweden

Swedish government has declared to reverse the moratorium for new NPP. New build is considered at existing sites except for Barsebäck. Additionally the government aims to reduce co-ownership in NPP's. E.ON co-owns two of the oldest (majority in Oskarsham) and two of the second oldest units (minority in Ringhals), while both sites are suitable for new build.

IKAB
E.ON but also Vattenfall and Fortum have been approached by IKAB, who is planning to have a 70 % majority in a NPP. IKAB plans to choose a partner in Q1 2009. **JT** raises the question, whether there is a business case for IKAB in the light of demand reduction through efficiency increase and the large volumes of planned renewables.

Vattenfall has declared to consider new nuclear in Sweden. Fortum is still hesitating and seems to be waiting for the next election in Sweden (o9/2010).

7. Project Prioritization

MM sees the following ranking of project attractiveness:

- UK
- Fennovoima
- Italy, Slovakia
- France, Sweden

JT sees few chances for projects in Sweden due to the mentioned expectations on demand and renewables. Bohunice is a special case as currently activities in CEE are under reassessment.

The first project with cash-out might be UK. Assuming 2020 for COD the order (EPC) must be placed in 2013 causing a 10 % down payment. By 2010 80 – 100 m€ are expected mainly for the auctioning process in UK.

All projects (UK, F, I) are expected for 2020. The probability of realization is assumed to be less than 50 % for each project.

8. Other topics

Bi- / Trilateral agreement E.ON / Areva / Siemens
Several working groups have been installed.

SWR 1000 JV
"Kerena" is the new brand name for SWR 1000 series. High interest has been expressed from CH, SF, S and USA. STUK has concerns about EPR (also E.ON sees the necessity of design changes) thus E.ON assumes that Kerena might be favored for Fennovoima.

Kerena is one of three Generation III+ reactor designs offered by Areva, alongside the EPR and Atmea pressurised water reactor designs. It is seen as bridge to Generation IV. Siemens' role is unclear.

Sharing of development costs, especially Siemens contribution, must be resolved until next SC meeting in April.

Research
Focus of research work will be Generation IV and EPR II. Research for EPR II has not yet started.
Areva wants to discuss about E-Mobility.

9. Next steps

• **AU to circulate minutes of meeting and the full slide pack presented at the meeting** • **Next Project Review meeting to be held in Autumn 2009**	**AU to circulate minutes and slide pack**