

Kennedy, Jerome

From: Kennedy, Jerome
Sent: Wednesday, October 10, 2012 12:33 PM
To: Kennedy, Jerome
Subject: Fw: Meeting with Wood Mac

-----Original Message-----

To: Kathy Dunderdale
To: Brian Taylor
To: Lynn Hammond
To: Charles Bown
Subject: Meeting with Wood Mac
Sent: Oct 10, 2012 12:02 AM

Today we met with Wood Mac at their New York office. Bob Fleck was present and officials from Edinburgh and Houston were on the phone, including David Barrowman and Massimo, the 2 Wood Mac analysts we have met with in London in the past.

Their conclusions are that the Ziff Reports on LNG and the Grand Banks pipeline options are sound. They have a concern about the cost of the Regasification facility (Ziff says it would cost \$1-\$1.2B whereas Wood Mac thinks that it could be built for \$500M). Ziff, Wood Mac and Charles are going to have a conference call on Thursday and discuss this issue further. Also, Wood Mac thinks that Ziff is low on the cost of the pipeline, which is good from our perspective, as it shows Ziff taking a conservative approach.

Wood Mac is willing to write a brief report verifying Ziff's analysis and outlining their own conclusions if we want them to do this. They are also willing for any report they write to be made public.

We will see what comes out of Thursday's call but Charles and I agree that a supporting report from Wood Mac would be helpful and would further help to silence the critics and satisfy the public that natural gas is not a viable option to Muskrat Falls.

Sent Via BlackBerry

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Oct 9/12

Meeting of Wood (McC Kenzie)

(Bob Fleck, Wade Schaefer, David Perrenon, Maximo, Charles, JTK)
or the phone Tracy, Heather

Wade Schaefer - NE energy plants
- Connecticut considering testing renewables
- for who (standards to include hydro)

- Quebec placing nuclear plant - 3.9 TW taken out of their mix
- 550 MW go-generation plant with blacked - full Mark her
- * concerns in NY - India for nuclear generation plant
full plan done - 2000 MW (need 2% amount of wind)

Charles - what about 2018-20 time frame?

Wade - NS probably is more need of power than Maine
^

JTK - 6000 MW required to meet fls.

- Wade - deficit in New England

- JTK - Indian Point

Wade - Gov would like to see it close - Indian Point in limbo

- JTK - Navigator paper " 2020 -

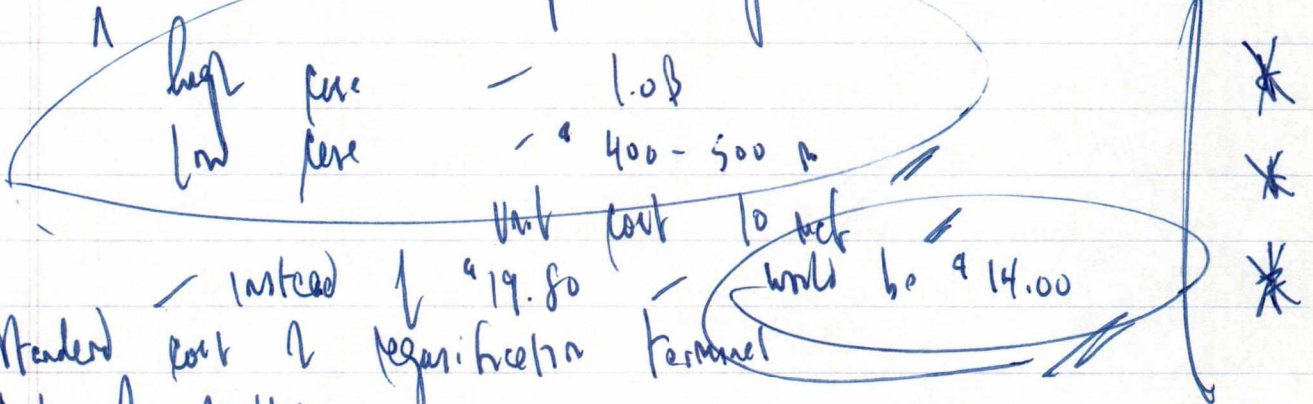
VS electricity market	40%	- coal	101 nuclear reactors - non-nuclear have multiple reactors
- Salem Harbor in NE placing	30%	- gas	
building new CCG plant	20%	- nuclear	
- retirement in 10 years	10%	- hydro	
- oil-fired plants in NE			10 in Ontario

David Massimo, Hugh - Lift Report
 - changes made as a result of suggestions (Charles)

Massimo - Amendments re-evaluate gas of ports → Regu ports
 - what Mike concerns is low level of port level for Regu →
 "1.0B still a high node
 - not favorable of "1.0B of low port

Gordon fun in Grit port -

- Mike believe Lift too high in Regu



- Instead of "19.80
 - Standard port & regularization terminal
 - port & smaller

- in London → "500-700 m

Lift using "1.0B as low port → Wood use world via in
 high port

Wood use world use low port of "400-500 m

- * Wood price: 2.1% would speak directly
 - * cost of REGASIFICATION
- doesn't change conclusion that NG cheaper.

13.80 vs 12.00 - 12.50 = Figure 1.

2.1% makes possible comment.

① Pipeline - Wood price would probably cost more
 182,000 per inch - shorter pipeline, cost
 would work in Gulf of Mexico but NG cost 2.1%
 - not a new concern

② price of petrol - 10-12%
 - 2.1% vs 2.5% - p. 21

High - not ensuring future inflation
 well head GBS too high low 2.1
 - retrofitting FPSO of 600 ft 3.0 ft
 - integrated West Whar, low → too low 2.5 ft

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Process Report - 2.1k: response, on the face of it,
 seems reasonable; ...



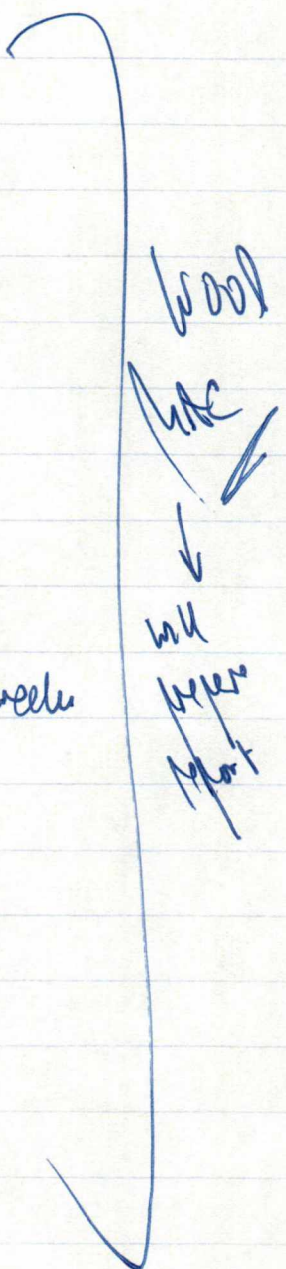
3-5 page document Net
 the not appropriate disagreements
 of 2.1k



has to find out for

brief history - for 1 week
 maximum

JPR - has to be independent & honest
 reputation compromised



wood

late

will paper report

*

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for needs

- Pricing oil market has dropped since January 12
- need - upper \$5.00 by 2030
- lower cost, associated gas being produced of oil
- pipeline not with some jobs completed
- don't think pipeline with NE will happen in the future
- technology problem in power generation
- 6 states that need space at the time, let alone that, etc.

- 6% - 1% before exports
- market problem
- why change in VI value after election
- behind fact, there has been change
- banks all want private before giving money

contact for the LHC terminal.
 Sch. fee - 16-17
 Other - later

- doesn't affect pricing
- Henry Hub price today
- near term (24-36 wks)

2016 - above 4.00
 2020 - 5.00
 2030 - not 5.50 - 5.75

in January
 around 6.00 -
 6.50
 1
 After forecast
 6.00.

- Economics not there to develop offshore gas.
- perception really the pricing index for North East
- need power

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- more restrictions on fracking - like 25 - 50 %
- use of leathers as opposed to water
- if producers why go to Texas? → go to Golden, Eagle, Permian

① Telling producers they have to
 stay at a certain place.

ie. Alberta raised royalty rates

→ difference in negotiations & producers.

And that's at pricing → looking at headwinds

- = demand growth - 1.4 mbls / day
- oil & gas products continue to grow very strongly
- question for 2013 - will OPEC put back production to
 absorb additional supply
- if OPEC doesn't implement over supply
- Demand 2.9 mbls / day
- if production worsen

①

- primary Demand at 2.9 mmbbl/day
- residual - 1.0 mmbbl/day

Base case - balanced market versus oversupply

- Brent based on 105 - 110 ~~no further action~~ ~~against~~ ~~2013~~ *** Syria control
- Economic outlook 2.6%

- WTI - ~~plotted yesterday~~ ~~fell below 100~~ ~~90 - 100~~
- it oversupply

- WTI will be at 97.5. → ~~could see~~ ~~in~~ ~~pot. 1 increase.~~

→ could see how impact on vs production

China - GDP for 2013 - 8.47%

May 2012 forecast
2015

- production coming in
- 2012 \Rightarrow 2.0 mmbbl/day (tight oil)
 increase
- total production vs - 10.8 mmbbl/day
 by 2015
- tight oil 2012 - 1.5 mmbbl/day
- 2014 - 3.1 mmbbl/day

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- biggest risk factor yet year
 - will ^{Cook} foodst production to offset production increase in Dna W for - spec,
 - less than growth 1.4 mbls / day
 - if do not get

- Dna : Syria the biggest factor
- very large intonation
- ² vs to attack Dna by Israel,

VS production

2020	12.2 mbl / d
2025	12.0 mbl / d.

Matching

- biggest upside risk from 2020 - 2030

2030 - 11.5 mbl / d.

- 2020 - 2030
- based on current outlook
 - increase in biofuels
 - significant Med East gains

prices will increase

120. in 2030

- Policy: occurring in fairly benign world - terms
- ↓ political risk ↓

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Renew milk growth

2012 - 2020

2012 - 89 mbbl. / day

2020 - 102 mbbl. / day

2020 - 2030 - much more milk
growth

10 months / day
better for vehicles, fuel efficiency, impact ↓