

STAKEHOLDER CONSULTATION PROCESS OFFSHORE GRID NL

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QUALITY CONTROL

Prepared:	A. Ritzen
Release	M.Müller

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0. Summary

On the first day [15.04.2015] of the expert meeting of May the Offshore Realisation Agreement and Offshore Connection and Transmission agreement have been presented. The main concerns based on the feedback during the expert meeting are the following:

- Language of contract
- Timeline and available time to discuss before commitment
- Planning and status of agreement during deadline of tender
- Liabilities with regards to planning
- Compliance testing and approval of testing in relation to time

The second day of the May expert meeting was a technical meeting only. Topics which were included are:

- T.8 SCADA [discussion]
- T.6 Protection [discussion]
- P.1 Planning [discussion]
- T.15 Harmonics and transients study [information]
- T.1 Voltage level [notification]
- T.4 Access to platform [discussion]
- T.11 Overplanting [notification]
- T.9 Metering [discussion]
- L.2 Initial investment plan [information]
- T.5 Operation of bays [notification]
- T.2 # of Jtubes and bays [notification]

A short summary will be given for the topics which have been discussed.

T.8 SCADA

- Overall concern about reaction and response time if system needs to communicate with offshore team
- Overall concern about reliability of fibre cable and therefore request for redundancy system by ways of e.g. wireless communication system
- During the commissioning phase it should be possible to sit together offshore in order to ensure fast and efficient communication
- Identify space needed for OWF's office onshore and OWF's equipment offshore

T.6 Protection

- No concerns

P.1 Planning

- Request for a clear start date for compensation scheme (connection of cables)
- Request for a clear date for availability of cable deck (for cable pull in)
- Request to include risk/sensitivity analysis in the TenneT planning

T.4 Access to platform

- One of the concerns are the HSE issues with regards to a heli hoist and heli deck. This should be further investigated and included in the study
- OWF would like to know what the increase of redundancy compared to added investment by TenneT would be

T.9 Metering

- No significant concern. General consensus on this approach.

1. Welcome

Rob van der Hage opens the meeting and welcomes all attendees.

2. Introduction to day 1

(Please note that the below is not a literal transcription of the comments made, but rather represents the overall tone and context of the discussion)

TenneT: Aim for today: go through all articles of the CTA and REA in order for the audience to discuss back at the office and to detect if any subjects are missing and what the key subjects are.

Q: Do we have the draft agreement available already?

TenneT: Today we present the structure and subjects on an article by article basis. No offshore agreement documents containing full text will be shared yet.

Q: Is this the only meeting in which we exchange views? Until when can we provide for feedback?

TenneT: TenneT has presented the set-up of the legal framework before during the Werkatelier in March and during April's Expert Meeting. Today we will go into more detail. We are open to organize additional sessions or bilateral meetings. Also, the feedback via the internet site is still welcome. Please be aware though that we are bound to procedural arrangements within the energy sector when it comes to creating model agreements and contractual conditions like these.

The formal procedure involves representative bodies via the Grid Users Platform (GEN). In March, we have invited members of GEN to make themselves known if they wanted to become involved. Several parties indicated their interest: Duurzame Energiekoepel, Energie uit Water, Energie-Nederland and, on the background, VEMW.

These parties were invited for today's session too. Duurzame Energiekoepel is present.

The offshore model agreement will be a document based on the currently used model agreement and terms & conditions for consumers, agreed upon with VEMW.

Q: Will the draft that will be send to GEN be shared with this group?

TenneT: We will share that draft, but it is not decided yet whether this will be done before or after the GEN meeting.

Q: It would be useful for the representative to have this information before going into the GEN meeting. Could you send them to the interested parties without putting them on the internet?

Q: It would be very helpful if we can give input in the procedure instead of after the meeting.

Q: What is the timeline of the involvement of GEN? We are expected to be ready in October. Is this still part of discussion with EZ?

TenneT: Today we are still aiming for November.

Q: When will the first negotiations with GEN take place? When will the documents be send to GEN?

TenneT: Starting now and we will have to set up a timeline with GEN.WE will come back with a timeline

Comment: We should really discuss the topics here and agree on how this will be presented to GEN. It's not the right approach to start discussion/negotiations after the documents have been submitted to GEN.

Day 1: 12.05.2015

(Please note that the below is not a literal transcription of the comments made, but rather represents the overall tone and context of the discussion)

3. L.01 Connection agreement

[Discussion]

Summary of concerns based on feedback during the Expert Meeting

- Language of contract
- Timeline and available time to discuss before commitment
- Planning and status of agreement during deadline of tender
- Compliance testing and approval of testing in relation to time

Presentation on the Offshore Realisation Agreement

Q: What is the "connection unit"?

TenneT: By definition of the Electricity Act it is part of the grid. Until the connection point the responsibility for management will be with TenneT. Technically it runs from the main bus bar to the interface with the installation of the connected party.

Q: Will the agreement be in Dutch or English?

TenneT: We're considering to agree in English. We have to agree according to Dutch law, but the language of the agreement can be in English. To be decided and agreed upon.

Q: How will that be decided and when?

TenneT: If the parties and the involved governmental bodies agree, then we can finalise. From a legal perspective we would prefer to have an English and a Dutch version.

C: Please also add references to the Dutch law. There are concerns on translation and reference and/or definitions, which might lead to confusion.

Q: Will you be talking more about access to the platform?

TenneT: Yes, it's part of the technical topics.

C: In terms of security rights for the wind farm financing parties we need to know where the ownership of the connection starts.

Q: Is the amvb due to go to the parliament as well?

TenneT: Yes, The Minister intends so.

Q: Mentioning the matter of a reference date for compensations: do we have any idea on the level of detail of the compensation scenario? Will it be sufficiently detailed? The STROOM proposal will go into effect as from January 2016 and the scenario should at that point also be ready, but expectedly not in full detail.

TenneT: Planning is part of technical topics and will be incorporated in the connection (realisation) agreement.

C: The agreement will be part of the tender package which will be presented in December at the latest. At that point it will be fixed in the documents.

TenneT: The tender will give the planning but the realisation agreement will not be signed at that time. Planning will, at that point, be separately from any agreement be decided upon.

Q: Does this mean that we will know the planning before submitting our tender offer?

C: When we submit our offer we need to have a firm date from TenneT.

Q: Where will this date be documented? Will it be consulted and agreed upon during the technical sessions?

TenneT: This will be part of agreement. After the winner is known planning of TenneT and the offshore windfarm developer need to be aligned.

Q: Does this mean that a fixed date will be set and in case a developer wishes to delay this could be discussed with TenneT?

TenneT: Correct.

C: the provision in the contract that "in case the planning does not seem reasonable, parties will consult with each other in order to arrive at a mutual acceptable solution" is too flexible in this perspective.

Q: Will the delivery date be legally binding for TenneT?

TenneT: Yes.

Q: Are you sure that the planning of onshore connections will not get into the way of the offshore development (Omgevingswet)?

TenneT: for this first project (Borssele Alpha) we don't have any worries, but for the following projects we should include the influence of the Omgevingswet.

TenneT: Questions on the compensation regulation should be addressed during the discussions with the ministry of EZ.

C: Yes, but the date of the start of the compensation is settled here.

Q: Going back to article 7, can we agree that the 2nd and 4th bullet are not relevant in the offshore agreement?

Q: What kind of liability do we have if we terminate the agreement?

TenneT: basically none, but you have made costs and the runner up will be connected.

Q: Are you taking into account that banks might like you to get into a direct agreement with them (in case of project financing). They want agreement in case project developer goes bankrupt.

Q: Is there attention given to the difference between full commissioning and first power? Will there be a difference? Is that taken into account during the connection phase?

TenneT: This is something we would like to discuss during the technical planning session.

Q: Are we talking about the ability of attaching one string at a time and energise the string? Developers want to energise right away. We should be able to energise string by string and use the information immediately.

Q: Regarding access to platform: we would like to have access during construction and operation phase, as this has consequences for the legal and security/insurance part. Are you aware of that? TenneT: yes we are and will make a draft after the technical discussion is closed.

Q: You will not be the one that will compensate us when the connection is delivered late?

TenneT: Yes, we are.

Q: Then we would also like to know about your insurance in order to be sure you can.

TenneT: The source of the money for compensation is not TenneT.

Q: If TenneT will be the intermediary of this payment, where will this be arranged in the legislation? Will there be separate legislation about this process?

TenneT: Yes, there is a basic rule in the law and it will be further elaborated upon.

Q: Still, if TenneT is paying the mandatory compensation., you compensate us first and then get financing from the tariffs. This still puts the financial situation of TenneT in the picture.

TenneT: Yes, that's correct. We also need a framework on how to approve the compensation/judging the claims. The system of the compensation still needs to be worked out – also where the finance comes from.

Q: We are concerned about compliance testing in relation to time. What if we fail a compliance test and this leads to delay? Where does the risk of damages of this delay lay?

Q: Who will decide or judge whether a project developer is compliant?

TenneT: There is a document with compliance definitions. Tests are executed by independent third party and will be approved/declined.

Q: Regarding compliance testing: are the only answers yes or no? We will have to discuss it with colleagues from operations.

TenneT: It could be that one doesn't comply but can take compensation measures and become compliant while being connected.

Q: Physical connection of inter-array cables and TenneT's platform – what is this part of the grid? What happens in case of damage during connection activities?

TenneT: Connecting the installation to the platform will be the responsibility of the developer.

Q: How about crossing agreements?

TenneT: That issue is still up for discussion and if relevant for operation of the platform, to be added to the CTA.

Presentation on the Offshore Connection and Transmission Agreement (CTA)

Q: How do you use the term connection?

TenneT: it's a defined term in the Dutch Electricity wet

Q: why do we need the realisation agreement? Why not take the technical details in the CTA? TenneT: Technical details are in CTA and we have the realisation agreement due to marks the moment/planning of connection. The Realisation Agreement will end at point of realisation of connection.

C: It is not clear why there is a need for a Realisation Agreement.

TenneT: So if we add the planning to the CTA we can skip the realisation agreement?

Answer: Yes.

Q: After the subsidy period, there may be charges for feed-in introduced?

TenneT: Transmission tariffs are not applicable for feed-in, this is included in the subsidy scheme.

Q: Could this be connection to the lifetime of the wind farm instead of subsidy scheme since the business case is based on the lifetime of the wind farm?

TenneT: The only thing we would like to clarify is that if something changes regarding the applicability of the subsidy scheme, this will not change the agreement.

Q: The Agreement mentions "proposed changes". Does this mean by TenneT or the developer?

TenneT: Both, but after the Grid Code is brought in line, this will be included there.

C: We need legal reassurance that the developer is not obliged to change the technical specifics of the installation. The onshore edition is read and that paragraph is reassuring – therefore please rephrase this bullet (article 5).

Q: Regarding tariffs, where are the system services charges incorporated?

TenneT: Point taken, we will check proposed regulation.

Q: What is meant with "primary connection point"?

Q: Are the issue of trafo and cable losses included in the technical discussion?

TenneT: No, it is put in here as a reminder that we might have to agree on something. On second thought, this will probably not be relevant: cable losses until the platform are for the windfarm owner. Platform losses are for the account of TenneT.

Q: Also in the CTA compliance tests are mentioned. How often do you ask us to execute such a test?

Q: Depending on what documents we need to submit, will TenneT ensure that it will use that only for compliance purposes?

TenneT: Yes

C: Also include a minimal term for termination of the agreement.

Q: "Cancellation in case of pressing issues" is mentioned – what is the threshold?

C: There will be an overlap between CTA and Realisation Agreement – separate strings can be either in CTA or REA, therefore it would be useful to combine TCA and REA.

Q: Would it be a suggestion to merge the general terms and conditions into the agreement itself?

Process

It is generally suggested to have at least two more sessions like this before going to GEN and representative bodies.

Q: Which parties are involved with GEN? Which process do you follow? This in order for everyone to be represented.

TenneT: GEN parties that should be included in model contract negotiations are identified and invited for these sessions. If they agree with receiving a draft agreement which is further discussed in Expert meetings of the offshore stakeholder consultation process, agreement on the negotiation agreement can be reached.

Q: Is the proposition to include the identified parties in this consultation?

TenneT: if the representative bodies and the consulted parties at the Expert meetings agree upon the procedure, this will be fine.

C: It is also important to be able to provide written input. But it's handy to have a written proposal of the contract available for that purpose.

Action: Plan a new legal session!

Day 2: 16.04.2015

(Please note that the below is not a literal transcription of the comments made, but rather represents the overall tone and context of the discussion)

4. T8 SCADA, communication interface and data links

[Discussion]

Summary of concerns based on feedback during the Expert Meeting

- Overall concern about reaction and response time if system needs to communicate with offshore team
- Overall concern about reliability of fibre cable and therefore request for redundancy system by ways of e.g. wireless communication system
- During the commissioning phase it should be possible to sit together offshore in order to ensure fast and efficient communication
- Identify space needed for OWF's office onshore and OWF's equipment offshore

Feedback from the meeting attendees

Could you give an indication of the estimated cost reduction for installation of the SCADA system onshore?

With regards to HSE purposes we see it as a good thing to be able to control the WF offshore in case we lose contact with the onshore system. We do add a certain value to be able to stop the WF from offshore substation.

During the commissioning phase it is also better to have a short line of communication – during commissioning our preference would be a system offshore where we and TenneT can work from. We will have to be able to sit together offshore during commission and will have to make this as easy as possible with quick communication and quick response.

As long as the system works it is a good idea. In practise there are always situations where things don't work and then the distance between onshore and offshore is far.

Is it possible to have the 'client' configured as a power control module? TenneT: no it is not.

We should also include a back-up system for communication as a consideration for redundancy – wireless communication system could be foreseen as mitigating measure.

TenneT: the question is how much redundancy this wireless system would add to the already existing redundancy.

For us (OWF) it is common practise to have additional communication even though the SCADA system is offshore.

What about the onshore interface between OWF and TenneT? [TenneT] you can put the equipment onshore. We can make space available close to the system. If you say indicate you need space at the onshore subsystem and indicate how much space we will make sure it is available.

Yes, probability is we need an office as close to the onshore substation as possible.

TenneT: Confirmed that onshore space is needed with separate entrance for OWF. Question is how much? PCM's only or also other equipment and offices?

TenneT: could you all check the room we reserved offshore: 4 cabinets. We (OWF) would prefer 7 cabinets.

Could you keep more options open? Why already make this choice. If this limits our choice to two WTG suppliers you are limiting competition.

If we leave all possibilities open we have to add space and facilities everywhere.

it doesn't have to do with WTG strategy but with our (OWF) development strategy. It is good to hear that some manufacturers are flexible in design but it would be good to leave all options open.

TenneT: How many fibres would you need? As many fibres as possible but minimum 48.

You should keep space at the platform available and as many fibres as possible – that will keep all options open.

The fibre requirements will be higher than just the amount of WTG, other systems apart from SCADA need to be transported to shore such as LIDAR data, visibility and wave measurements, meteo information. Additionally we also need space for this equipment offshore. [TenneT] can you provide information on size of equipment and space needed?

Will TenneT install a base station for mobile communication on platform? TenneT: will be taken into consideration for the design.

5. T6 Protection

[Discussion]

Summary of concerns based on feedback during the Expert Meeting

- No concerns

Feedback from the meeting attendees:

So post award you will make a final design decision? [TenneT] yes correct in consensus with OWF.

Finalised and will be notified in expert meeting June/July.

6. P1 Planning

[Discussion]

Summary of concerns based on feedback during the Expert Meeting

- Request for a clear start date for compensation scheme (connection of cables)
- Request for a clear date for availability of cable deck (for cable pull in)
- Request to include risk/sensitivity analysis in the TenneT planning

Feedback from the meeting attendees

If we look at the planning there are two elements to that. If we compare this to our WF construction. It takes about 3 years between signing contract and producing MWh. If we assume Financial Close for OWF at the end of 2016 this would mean first power would be produced in 2020. This planning assumes two seasonal construction: foundation in 2019 and WTG in 2020. This is based on the permit restrictions with regards to piling in the Netherlands. If this restriction is 'relaxed' you could think of a one season construction period. Then you would build and connect in 2019.

In the case we go for the two season approach 2019 for TenneT is good. If permitting restrictions are changed ('relaxed') then August 2019 would be tight. If installation of our cables would only start in August 2019 that would be too late.

Why would you prefer to install everything in one go? OWF: this is better for the business case. Early income (2019) is good for NPV and good weather for installation/ pipeline issues.

Anyway we need a fixed plan from TenneT; one which we can rely on.

That is correct if you (TenneT) say August 2019 we will base our bid on that date.

Additionally two other dates which are important for our (OWF) installation schedule: jacket and topside installation. Would you be willing to fix that date in legal documents?

Topside/ foundation/cable deck. We need this to put our cables on. The development schedule of the WF is

depending on this for cable installation planning.

Have you also made a worst case planning? What will happen if you run into mistakes in permit for instance?

Yes we (TenneT) are working on a more scientific stress test based planning.

With regards to HSE and coordination we would like to plan our installation preferably without TenneT being out there in installation as well. What is expected from this? How does TenneT intent to do this?

7. T15 Harmonics and transients study

[Information]

Summary of concerns based on feedback during the Expert Meeting

- Room available offshore for reactors. OWF is not sure reactive power compensation can be solved at the wind turbine and previous experience showed that this could only be solved by installation of reactors filter at the offshore platform
- Request to include the compliance testing document as soon as possible

Feedback from the meeting attendees

Will TenneT be responsible for fulfilling harmonics at the offshore connection point? Yes.

That's is good for the OWF. Experience offshore tin the UK is that it happens that if you are compliant offshore it could be that you are not compliant at the onshore station. So happy that TenneT takes responsibility.

Is the connection point at combined strings? [TenneT] yes; each string is measured and the combination needs to comply.

Would that cause a problem with distinguishing the two windfarms in Kavel Borssele? Can TenneT distinguish between WF? Yes; we can do these measurements by string.

What happens if harmonics is exceeded? If you are emitting levels which are too high then the OWF should solve it. If the problem is at the onshore substation then it is TenneT's responsibility.

Will we have space for a harmonic filter offshore? Harmonic filtering is possible with wind turbines.

It is not always relevant where it comes from but you just want to fix it. Then the common place for the reactor is at the offshore substation. We TenneT prefer the solution which prevents extra equipment at the offshore substation.

I am not sure this can be solved at the wind turbine. This could be a potential issue.

We (OWF) had this issue at a WF and the only solution was a coil/common filter at the offshore substation.

Is the compatibly level set in the EU norm? How will you specify those levels?

We will need to see an argument in case you specify levels below the EC levels.

Which relation will be between the testing document and this? This is part of our compliance testing document. Would that document already be available to us (OWF) potentially on the website? TenneT: specs should be defined during the technical session and the exact wording during the legal session.

8. T1 Voltage level

[Notification]

The connection voltage level of the inter-array systems to the TenneT offshore transformer platform will be standardised at 66 kV for all five platforms to be realised by TenneT up to 2023.

Followed by a short discussion on request for reducing risk for OWF if cable certification is not ready yet. EZ is not planning on taking away or reducing this risk for the market.

9. T4 Access to platform

[Discussion]

Summary of concerns based on feedback during the Expert Meeting

- One of the concerns are the HSE issues with regards to a heli hoist and heli deck. This should be further investigated and included in the study
- OWF would like to know what the increase of redundancy compared to added investment by TenneT would be

Feedback from the meeting attendees

How do we arrange access to rooms we (OWF and TenneT) should both have access to? 'other areas' will have to be accessed under accompany of TenneT.

Will there be separate rooms if the two connected WF are from separate owners? OWF would prefer separate rooms with separate access.

Will there be room for DTS communication and would that be the same room? TenneT makes one room available and the OWF has to let TenneT know what is needed in space.

Good; specs will be provided by OWF. Plus some topside room is needed as well (for meteo station, cameras, LIDAR etc) is that also relevant for this paper? No you can access this from the outside. OWF: but TenneT will have to provide some sort of access to the topside

What happens if OWF has to service cable measurements or has an event on equipment which is not inside our room? [TenneT] then the visit has to be combined. [OWF] this could be on short notice and within short reaction time e.g. tree days. Could you agree on reaction time? We will have to look into this and will have to arrange for that. Emergency crew also needs to be available for TenneT and is also available for OWF. Response time will be included in the connection agreement. Please provide your (OWF) general response time. OWF will investigate internally and will get back on this during next expert meeting. Is the heli-hoist the only way and/or primary way of accessing platform or do we use the heli-hoist as an emergency access.

We also use the heli-hoist for (medical) emergencies only.

Is access by CTV possible as well? Yes.

TenneT is currently executing a study on the helideck. Amongst platforms within 30km offshore 75% don't have a helideck.

Principal access method is CTV not heli.

The bigger the WF the bigger the financial effect of downtime of platform. According to my colleagues there was not question on why not to install a helideck with this size of WF at this location.

Heli-hoist can be used in case of an emergency. OWF: yes but a medical emergency is something else than a technical emergency. For non-medical emergencies hoisting is seen as a non-preferable way of access.

We would suggest to make a cost benefit analyse. TenneT has made a comparison and the investment of a helideck will add to the redundancy but will not pay off.

This does not only concern the primary system on platform but also your ancillary system. For instance- HVAC, fire detector. If this is not working we need to shut down or have people out there 24/7.

Is the study also looking into improvement of HSE. Helideck also has large HSE risks, landing a helicopter is one of the most dangerous actions offshore. Please also assess negative effects in your study.

Two OWF would never develop this platform without helideck.

Could we get access to the comparison study? We (TenneT) have looked into two main components: cable and transformer offshore. These are major influence factors and we have compared outage probability and outage time to the non-availability of electricity transmission.

Have you also taken into account the fact that many more things go wrong offshore compared to onshore? You should also calculate what extra availability you gain if you add a heli-deck to CTV and heli-hoist?

What is the definition of an emergency? Is unplanned maintenance an emergency or only medical/dangerous cases and emergency?

Who is making the decision heli-deck or not? Is it TenneT or is it a social capital issue (with regards to financial compensation)? Is it free for TenneT to decide or the ministry?

10. T11 Overplanting

[Notification]

PPMs will be allowed to transmit 10% above their rated power (350MW), which is 35MW extra, with the requirement for PPM's to curtail their produced power, in case the 220 kV export cables reach their maximum allowable temperature limits . Details on curtailment of the PPMs will be addressed to in the 'Customer Connection Agreements (ATO)'.

Feedback from the meeting attendees

In the position paper you indicated that you would come back to this once you made new calculations. Have these been done? TenneT: we will recalculate when more detailed information is available during the detail design phase

Will you provide us the updated calculations after the soil survey has been executed? [TenneT] at the time available updated calculations can be shared and information from the survey can be shared.

Could we install more than 380 MW? The SDE doesn't allow to install more than 380 MW.

What will happen in the case one cable fails and both wind farms will have to transport over one cable? How will the available capacity be divided by 350 mw wind farm? Suggestion is by ratio of WF production.

That would mean that if I (OWF) went for a WF capacity of 350MW and the other party goes for 380MW; I would have less capacity on the cable. The choice for 380MW by the other party is a choice which is made without us knowing before the bid and/or have any influence on. So it should be divided by two otherwise you don't know what to use while handing in the bid.

Proposal: in case of failure of one of the systems the available capacity per party will be 175MW + 10%?

Agree. That should be confirmed before handing in the bid.

11. T9 Metering

[Discussion]

Summary of concerns based on feedback during the Expert Meeting

- No significant concern. In general agreement on this approach.

Feedback from the meeting attendees

Does this need a code change? Yes.

Would it be possible to do metering by the SCADA system? Yes, but we need an independent party in order to calibrate.

And we (OWF) have no commercial relationship with this metering agency? TenneT will take care of this? Yes, we (TenneT) will represent the connecting parties.

Is it possible for us to see the measured data/information? Yes, via the SCADA system it is available for OWF. It is more about doing this centrally and coordinated by one party.

How will these measurements feed into the settlement system? The party that will monitor is TenneT. But will we have sufficient access to the numbers/data? Yes. These will also be available to OWF.

General consensus is that in principle this approach is good. Assuming it will be the same for all parties.

12. L2 Initial investment plan

[Information]

Feedback from the meeting attendees

Till when can the minister make adjustments to the scenario? EZ: In principle this could be done at/till any time but that is highly unlikely. We will deliver an informal version of the scenario (after STROOM). In this summer period the main elements of the scenarios should be fixed and shared. Changes cannot be made just as is. Changes to the scenario need to stay up in a legal court. Changes of the scenario could for instance be implied well before opening the bid so all parties are aware of what has changed. In case of drastic/major changes to the scenario it is necessary to discuss this in the council of ministers. This is not taken lightly.

Would it be possible to add in writing that the scenario of time of handing in the bid is leading for that bid. EZ: Yes that is our intention but we will have to check with our legal department if that is possible without legal

status of the scenario.

Is there a linkage between this process and the offshore tender. Can you choose a winner before you know TenneT is able to deliver (since the end date is similar) EZ: Yes we can choose a winner.

What happens if STROOM is delayed?

What is the formal consultation procedure? Is GEN also a part of this? What is it regulated by? TenneT: this will have to be checked.

Apart from the STROOM date are there any other milestone that could influence this process? Yes in principle all dates such as the EZ's on the scenario, TenneT with investment plan, ECN with approval.

13. T5 Operation of bays

[Notification]

The operation of bay's for the offshore platform will be standardised in a similar way as the current practice for the operation of switchgear onshore for the connected parties. The switchgear installation with connections to the offshore PPM is fully operated by TenneT, as the owner of the switchgear.

Feedback from the meeting attendees

What happens if something happens and we request to close the breaker and you are not able to operate for several hours? Does that effect availability and therefore our compensation? TenneT: We should mention response time and common practise is that we, TenneT, operate the switch for the customer.

Would it be possible that TenneT has a financial incentive in order to respond on time. TenneT we have an obligation to do our best efforts.

Better to have a response time and financial incentive instead of good intention.

14. T2 # of J tubes and bays

[Notification]

Based on 66 kV inter-array cables and 64 MW per cable - a standard platform shall be equipped with 18 J-tubes for the inter array system:

- *2x 8 J-tubes for offshore PPM*
- *1 J-tube installed for possible test purposes*
- *1 J-tube installed for the connection to the neighbouring platform.*

Feedback from the meeting attendees

No comments

15. Closure

16. List of attendees

Day 1: May 12 2015

Company	Name
Ecofys	Michiel Müller
TenneT	Saskia Jaarsma
DONG Energy	Steven Engels
Statoil	Øyuind Bergvoll
Statoil	Anne Ulset
Loyens & Loeff	Max Oosterhuis
Van Oord	Janneke Buursma
Eneco	Daphne Postma
Eneco	Jos Jacobs
CMS	Jacqueline Feld
CMS	Cecilia van de Weijden
DONG Energy	Jonathan Morton
DONG Energy	Jacob Feldborg
TenneT	Rob van der Hage
TenneT	Thomas Donders
TenneT	Bart van Hulst
TenneT	Frank Wester
Ecofys	Anna Ritzen
DELTA	Jan Maas
Duurzame Energie Koepel	Monique van Eijkelenburg
Duurzame Energie Koepel	Floor de Kleijn
Vattenfall/NUON	Anderas Pennink
Vattenfall/NUON	Martijn Ars
RWE	Frank Starink
RWE	Joost Pellens
GDF Suez NL	Bob Meijer
GDF Suez NL	Sjoerd Kraijenbrink
Loyens & Loeff	Roland de Vlam

Day 2: May 13 2015

Company	Name
Ecofys	Anna Ritzen
TenneT	Daniël Vree
TenneT	Bart van Hulst
TenneT	Frank Wester
TenneT	Ralph Harrewijn
NWEA	Dolf Elsevier van Griethuysen
RWE	Joost Pellens
Blackstone/WindMW	Andre Hamers
Nuon	Martin Ars
Van Oord	Jesper Knoester
Min EZ	Joost Vermeulen
DONG Energy	Kunuk Rosing
Eneco	Jos Jacobs
Parkwind	Dirk Vandercammen
GDF Suez	Bob Meijer
Statoil	Øyuind Bergvoll
DELTA	Jan Maas
Ecofys	Michiel Müller
TenneT	Rob van der Hage