



**ANNUAL WILLEM C. VIS
INTERNATIONAL COMMERCIAL
ARBITRATION MOOT**

THE PROBLEM

Twenty Seventh Annual Willem C. Vis
International Commercial Arbitration Moot

Vienna, Austria
October 2019 – April 2020

Oral Hearings
April 4 – 9, 2020

Organised by:
Association for the Organisation and Promotion of the
Willem C. Vis International Commercial Arbitration Moot

and

Seventeenth Annual Willem C. Vis (East)
International Commercial Arbitration Moot
Hong Kong

Oral Arguments
March 23 – 29, 2020

Organised by:
Vis East Moot Foundation Limited



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Joseph Langweiler
Advocate at the Court
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Mediterraneo
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Langweiler@lawyer.me

31 July 2019

By email and courier
Ms Sarah Lancaster
London Court of International Arbitration
70 Fleet Street
London EC4Y 1EU
United Kingdom

Dear Ms Lancaster,

On behalf of my client, *HydroEN plc*, I hereby submit the enclosed Request for Arbitration pursuant to Article 1 LCIA-Rules. A copy of the Power of Attorney authorizing me to represent *Hydro EN plc* in this arbitration is also enclosed.

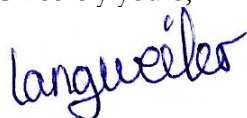
The notice has been served upon Respondent and the registration fee has been paid. The relevant confirmations for service and payment are attached.

The Claimant requests performance of contractual obligations.

The contract giving rise to this arbitration provides that the seat of arbitration shall be Vindobona, Danubia, and that the arbitration shall be conducted in English. The arbitration agreement provides for three arbitrators. *HydroEN plc* hereby nominates Claire Burdin as its arbitrator.

The required documents are attached.

Sincerely yours,



Joseph Langweiler

Attachments:

- Request for Arbitration with Exhibits
- Power of Attorney (not reproduced)
- CV of Claire Burdin under Art. 5.4 LCIA-Rules (not reproduced)
- Proof of Service upon Respondent – Courier Delivery Report (not reproduced)
- Proof of Payment of Registration Fee (not reproduced)

cc. *TurbinaEnergia Ltd*



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By courier
TurbinaEnergia Ltd
Lester-Pelton-Crescent 3
Oceanside
Equatoriana

Request for Arbitration

(pursuant to Article 1 of the London Court of International Arbitration Rules 2014)

in the Arbitral Proceedings

HydroEN plc v. TurbinaEnergia Ltd

HydroEN plc
Rue Whittle 9
Capital City
Mediterraneo

- CLAIMANT -

Represented by Joseph Langweiler,

TurbinaEnergia Ltd
Lester-Pelton-Crescent 3
Oceanside
Equatoriana

- RESPONDENT -

STATEMENT OF FACTS

1. Claimant, HydroEN plc, is a market leader in providing pump hydro power plants. It operates in over 100 countries and is well known to realise pump hydro power plants in challenging environments conforming to the highest environmental standards.
2. Respondent, TurbinaEnergia Ltd, is a world-renowned producer of premium water turbines. It has delivered two of its newest R-27V Francis Turbines to Claimant for Claimant's Greenacre Pump Hydro Power Project.



3. Greenacre is a city of 100,000 people situated among the rolling hills of Western Mediterraneo, a remote part of Mediterraneo. Due to the Terranean mountain range, the region is separated from the rest of the country. The main employer is Enviter, a large company, which produces ecological products such as wetsuits made out of natural rubber or parkas out of plastic bottles. The second main source of employment is sustainable farming.
4. For the last ten years Greenacre has moved towards being a sustainable community, including adopting a Sustainability Bill of Rights. The latest project to make the city wholly sustainable was to fully switch to renewable energy. In 2010 the Council of Greenacre, with the support of 82% of the population, adopted a “no-carbon” energy-strategy. It provided for a massive increase of the wind and solar energy production capacity to an extent that the energy generated this way would generally meet the demand. A cornerstone in that strategy was the construction of a pump hydro power plant. Its primary purpose was to make the availability of renewable energy largely independent from the weather conditions which affect the production of wind and solar energy. In times of overproduction the excess energy produced by the wind turbines and the solar panel is used to pump the water from the lower reservoir into the upper reservoir. From there, the water is then released again to the lower reservoir powering the turbines whenever the demand exceeds the supply of green energy produced by the wind parks and the solar panels. By being able to use a considerable amount of excess energy at times of overproduction and to release energy promptly when needed, the power plant also plays an important role in stabilizing the local Greenacre energy grid.
5. In January 2014, the Council of Greenacre invited tenders for the construction and operation of the pump hydro power plant necessary to guarantee a consistent power supply in addition to Greenacre’s solar and wind energy sources. Claimant participated in the process and submitted a bid. On 15 July 2014, Claimant was awarded the contract. One of the reasons for its successful bid was that Claimant’s pump hydro power plant’s design used Respondent’s newly developed, innovative, and powerful R-27V Francis Turbine. The use of that turbine allowed for a more environmentally-friendly design of the plant since only two turbines were needed to guarantee the needed power of 600 MW.
6. Of at least equal relevance was that according to the information provided by Respondent, the new turbine, due to its design and the materials used, allowed for longer inspection and maintenance intervals. This was an important consideration since generally each inspection and maintenance results in a reduced availability of the plant of approximately 4-6 weeks. The inspection of each turbine takes around 2-3 weeks, during which only the other turbine is available to manage the supply of energy. Furthermore, for the inspection works at the generator and the penstock the whole plant has to shut down. Thus, during the inspection time, the plant is, at best, only 50% available to store the surplus of energy at peak production times and to release it at times when the demand exceeds the energy produced by the other renewable energy sources. As a consequence, such energy needed would have to come from one of the only two other sources available, *i.e.* two stacks of powerful batteries of 50 MW each and the coal fired power plant close to the border in the neighboring Ruritania, which is the only conventional power plant connected to the Greenacre grid.
7. To exclude as far as possible the need to buy any energy from the coal fired plant in Ruritania, it was planned to schedule all necessary inspections during the vacation time in September/October. In normal years, during the vacation time of eight weeks, the other sources of renewable energy produce sufficient energy to meet the reduced demand. There are very few hours during night- time when the demand exceeds the energy produced. In these few hours the two battery stacks are generally sufficient to provide the required additional quantity of energy. Consequently, even without the power produced by the pump hydro power station it will then not be necessary to actually purchase energy from the coal fired power plant in

Ruritania. The latter would only provide reserve energy capacity to guarantee a supply in case of unforeseen events or extreme weather situations. There was, however, the clear expectation that there would be no need to use such reserve capacity.

8. Unfortunately, the two months directly before and directly after the vacation break are the months of peak demand and a high volatility of the energy produced by wind turbines and solar panels. During these four months the pump hydro power plant is operating largely at “full speed” due to the extremely volatile production rates of the other sources of renewables. Any standstill of the hydro power plant or a reduction in production during these four months will definitively result in the need to purchase missing energy from the only further available source of energy connected to the grid in Greenacre, the existing old coal fired power plant in Ruritania. Also in the remaining months, the energy produced by the power plant is generally required to meet the demand so that in a case of a standstill of the plant it would have to be replaced by energy from the coal fired plant in Ruritania.
9. The local authorities in Greenacre made it clear during the tender process that one of the relevant considerations for the selection of the contractor was to avoid or at least minimise the need to rely on such carbon based energy. That was already mentioned in the preamble of the model contract contained in the tender documentation which the successful bidder had to conclude with the Council of Greenacre. The councilor in charge of the project, Mr. Gilbert Crewdson, subsequently even insisted on an amendment of the contract to include an express commitment by Claimant to guarantee the availability of the plant for at least 11 months per year for the production of at least 600 MW. Thus, the contract between the Council of Greenacre and Claimant now contains a penalty of US\$ 40,000.00 for each day in which the non-availability of the pump hydro power plant makes it necessary to rely on “dirty energy” from Ruritania to meet an excess of demand which could not be fulfilled by solar or wind energy.
10. As early as in early March 2014, while preparing its participation in the tender process, Claimant had contacted Respondent to enquire about a potential delivery of two R-27V Francis Turbines to be included into the plant should the contract be awarded to Claimant (**Claimant Exhibit C 1**). Respondent was very willing to do so and both Parties signed a Sales Agreement on 22 May 2014, according to which Respondent was to deliver and install two R-27V Francis Turbines should Claimant be awarded the tendered contract (**Claimant Exhibit C 2**).
11. After winning the contract on 15 July 2014, Claimant immediately started with the construction of the pump hydro power plant and managed to finalize it in less than 4 years. In late spring 2018, Respondent delivered and installed the two R-27V Francis Turbines. The plant started operating on 19 September 2018, after the inspection and approval by the relevant authority, which had included a test run of the turbines.
12. On 29 September 2018, the leading daily newsfeed on renewable energy, the Renewable Daily News, published a report about the start of a major fraud case against the CEO of Trusted Quality Steel, one of Respondent’s main suppliers (**Claimant Exhibit C 3**). Apparently, Trusted Quality Steel had delivered steel to its customers with forged documentation concerning the quality control of the steel. The report also mentioned that the delivery of untested steel of lower quality was also the most likely reason for a disconcerting finding at a turbine produced by Respondent and used in the Riverhead Tidal Power Plant. The turbine had to be replaced after only two years of operation due to excessive corrosion and cavitation damage. The damage was of such nature that it required immediate action to avoid a complete destruction of the turbine and the threat of further damage to the generator set or the plant itself. The replacement of the turbine took thirteen months and led to a standstill of the plant which only restarted energy production at the beginning of June this year.

13. On 3 October 2018, after having been informed about this and another article, Ms. Michelle Faraday, Claimant's CEO, immediately contacted Mr. Eric Gilkes, Respondent's chief negotiator, to enquire to what extent the two R-27V Francis Turbines in the Greenacre Plant could be affected by the fraud and to query whether their corrosion resistance being compromised ([Claimant Exhibit C 4](#)). According to the information available, it appears that the characteristics of the special alloy had been altered by heat during the manufacturing process. The change in the characteristics would make the blades in the Francis Turbine R-27V more susceptible to corrosion and breakage.
14. On 4 October 2018, Benoit Fourneyron, Respondent's CEO, replied and tried to dispel all concerns ([Claimant Exhibit C 5](#)). He suggested to wait until the first inspection, to be pulled forward from September 2021 to September 2020, to ascertain whether the turbine runner or the blades were produced from steel of inferior quality and then decide upon the necessary action.
15. Ms. Faraday, who was shocked by the information, immediately contacted the responsible Greenacre councillor, Mr. Gilbert Crewdson, to discuss the issue and possible containment measures. Mr. Crewdson was furious and threatened to terminate the contract between Claimant and Greenacre for the operation of the power plant for cause.
16. In the end, Mr. Crewdson requested Claimant to ask for the installation of two new R-27V Francis Turbines, *i.e.* the turbine runner, fit for the purpose set out in the contract between the parties, *i.e.* with the new alloy for the blades. The exchange was to take place in September-October 2020 during the pulled forward first scheduled maintenance ([Claimant Exhibit C 6](#)).
17. Ms. Faraday immediately informed Mr. Fourneyron of the request. After an exchange of emails, the Parties met on 1 December to discuss and agree to possible solutions for the unfortunate situation created by the inability of Respondent to guarantee the use of a conforming steel. Unfortunately, no agreement could be reached. Respondent was unwilling to agree to the required replacement which would have been necessary to exclude the risk of a longer standstill comparable to that of the Riverhead Plant. Instead, Respondent was merely willing to pull forward the scheduled inspection by one year to examine the status of the turbine and the conformity of the steel used. In an email of 11 December 2018, Mr. Fourneyron further offered to make the necessary preparations that upon a finding of corrosion, the blades could be repaired on site or, if necessary, in Respondent's nearest factory ([Claimant Exhibit C 7](#)).
18. The repair of the turbine blades, however, is unacceptable. Any repair would mean that the turbine, and therewith the plant, would be out of operation for at least four months in case of minor findings or even longer should there be greater damages. At the same time, any repair would only address the symptoms and not the cause, the inferior steel quality. Furthermore, the offer is completely inadequate should it turn out at inspection that the turbine has to be replaced immediately, as happened in the Riverhead Plant. That would close down the Greenacre plant for at least a year, even if Respondent could start construing the new turbine immediately after the inspection.
19. By contrast to these prolonged standstills, the requested exchange of the Turbines during the scheduled inspection would take approximately only three months and remove all risks. Respondent has created the uncertainty and should bear the consequences resulting from it.
20. In addition to the delivery of the new turbine, the Claimant is entitled to damages for the loss of electricity production for each day the removal and new installation of the new turbine will take.

LEGAL EVALUATION

21. The Arbitral Tribunal has jurisdiction.
22. According to the dispute resolution clause in Article 21, Claimant has the right to refer all disputes in relation to the Sales Agreement to arbitration under the LCIA-Rules. Article 21 of the Sales Agreement provides in its pertinent paragraph 2:

“(2) The BUYER has the right to refer any dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, to arbitration under the LCIA Rules, which Rules are deemed to be incorporated by reference into this clause.

The number of arbitrators shall be three. Each Party has the right to nominate one arbitrator while the presiding arbitrator shall be appointed by the LCIA.

The seat, or legal place, of arbitration shall be Vindobona, Danubia.

The language to be used in the arbitral proceedings shall be English.

The governing law of the contract shall be the substantive law of Danubia.”

23. Claimant has a claim against Respondent for the delivery and installation of two replacement turbines due to the non-conformity of the turbines delivered. Respondent had the obligation to deliver and install two R-27V Francis Turbines into the pump hydro power plant in Greenacre. One of the important features of the Francis Turbine was that they were supposed to be extremely corrosion resistant. The turbine’s blades are shaped in a particular way to minimise the danger of cavitation and, thus, should require less maintenance than standard turbines. These characteristics justify the high price which is 10% above that of any other comparable water turbine with a possible output of 300 MW.
24. The delivered turbines most likely do not comply with the corrosion resistant requirement. As the example of the turbine from the Riverhead Tidal Power Plant shows there is the serious threat that it will be corroded in a way that requires immediate action in form of replacement. A breakage of a blade due to corrosion and cavitation damages could have detrimental consequences not only for the turbine itself but for the whole plant.
25. Such a threat in itself already constitutes a fundamental breach of the Sales Agreement between Claimant and Respondent, given the importance of the continuous availability of the Greenacre Pump Hydro Power Plant for the Community of Greenacre and its energy supply as well as for the stability of the grid. Those were known to Respondent when entering into the Sales Agreement. Due to that importance, immediate action is required and Claimant cannot be requested to wait for a repair of the turbines which would take much longer than their immediate replacement.

REQUEST

26. In light of the above, Claimant asks the Arbitral Tribunal for the following orders:

- 1) TurbinaEnergia Ltd is ordered to deliver two substitute R-27V Francis Turbines fit for the purpose set out in the contract between the parties produced;
- 2) TurbinaEnergia Ltd is liable for any damages resulting from the exchange of turbines up to the agreed upon limitation.




Joseph Langweiler

Witness Statement of Johanna Woods

Johanna Woods
Born 4 April 1970

1. I have a degree in physics from the University of Mediterraneo and I have worked for HydroEN since 1 January 2000. Since early 2014, I have been in charge of the Greenacre Project. I have been organizing our participation in the tender process and have been negotiating with the companies upon which we wanted to rely for the construction of the Greenacre Project, like TurbinaEnergia.
2. One of the determinative factors for awarding the tender was a “guarantee” that the pump hydro power plant will have sufficient availability and capacity to provide the additional energy needed whenever the normal sources of renewable energy would not produce sufficient energy. The local authorities wanted to exclude any need to import energy produced by conventional carbon-based methods, in particular, any need to rely on the coal-fired plant in Ruritania. There had been extensive discussions in the local newspapers about the project and possible alternatives. In the end, the crucial element in overcoming the opposition to the construction of the plant was the assurance by the local authorities, that unlike the alternatives, the plant would guarantee a complete reliance on renewable energy. That had been made clear to all participants in the tender process and the relevant documentation and was exactly the reason why we decided to approach TurbinaEnergia. Shortly before, it had announced the launch of their new Francis Turbine R-27V.
3. I am not sure whether the relevant persons at TurbinaEnergia knew all details of the Greenacre Project, including its history concerning a strong opposition against its realisation. I am certain, however, that I shared the tender documents with Mr. Eric Gilkes, the chief engineer and main negotiator of TurbinaEnergia, and Mr. Fourneyron, the CEO of TurbinaEnergia. Thus, they must have been aware of the importance attached by the Community of Greenacre to the largely non-interrupted availability of the plant. In that context, Mr. Fourneyron made suggestions as to the construction of the buildings containing the turbines and the installation of a fixed crane to facilitate inspections and maintenance. In the end, we decided against the installation of such a crane and a larger building which would have costed an additional US\$ 2,000,000.00.

Mediterraneo, 9 June 2019


Johanna Woods

SALES AGREEMENT

Whereas the City of Greenacre (Greenacre) took the decision in 2010 to become a fully self-sustainable community as far as the production and consumption of energy is concerned within the next ten years;

Whereas an important element in Greenacre's green energy strategy to satisfy the local energy demand exclusively by renewable sources is the construction of a pump hydro power plant to be able to equalize imbalances in the supply and demand of wind and solar energy by the use of hydro power;

Whereas Greenacre has invited tenders for the construction of a pump hydro power plant with a potential to produce 600 MW to support its strategy;

Whereas HydroEn plc wants to participate in the tender;

Whereas one of the important considerations for awarding the tender will be to minimise the risk of having to rely on energy produced by non-renewable sources by providing a largely uninterrupted supply of hydro energy;

Whereas due to Greenacre's strategy stated above, the time period between the repair and the maintenance intervals should be lengthy and conversely the repair and maintenance periods should be short;

Whereas TurbinaEnergia Ltd has recently released its new and innovative Francis Turbine R-27V, which due to its characteristics complies with the requirements and considerations as set out in the tender;

The following agreement is concluded:

Article 1: PARTIES

Seller: **TurbinaEnergia Ltd**, Lester-Pelton-Crescent 3, Oceanside, Equatoriana ("**SELLER**").

and

Buyer: **HydroEN plc**, Rue Whittle 9, Capital City, Mediterraneo ("**BUYER**").

Collectively referred to as "**the Parties**".

Article 2: SELLER'S OBLIGATIONS

1. The SELLER undertakes
 - a. to support the BUYER in its participation in the Greenacre pump hydro power plant tender by providing the necessary documentations, by making the necessary statements and by confirming its commitment to the project;
 - b. to produce and deliver to the buyer two of its newly developed Francis Turbine R-27V of 300 MW power each, with the further characteristics as specified in detail in Annex A, should the project be awarded to the BUYER;
 - c. to install the turbines at the plant in Greenacre;

- d. to perform the first inspection of the turbines three years after the start of operation at a date to be agreed between the Parties (after the start of the plant) whereby the inspection shall take place during the summer vacation period in Greenacre, where the energy produced by the other forms of renewables is normally sufficient to meet the decreased demand;
- e. to provide during the anticipated 40 years-lifetime of the turbines the necessary inspection and maintenance works on the basis of a service contract to be agreed between the parties in a manner ensuring a minimum interruption of the availability of the plant for the production of energy.

Article 3: BUYERS OBLIGATION

1. The BUYER undertakes
 - a. to submit a bid for the tender of the Greenacre pump hydro power plant with a power generation unit including as turbines two of the SELLER's Francis Turbine R-27V of 300 MW each;
 - b. to purchase such turbines from the SELLER at the price of US\$ 20 million each, in case the tender is awarded to it;
 - c. to enter into a service contract with the SELLER for the regular inspections and maintenance of the turbines.

[...]

Article 4: PURCHASE PRICE

1. The purchase price for each of the turbines is US\$ 20 million.
2. The BUYER will make an advance payment of US\$ 10 million, *i.e.* 5 million per turbine, 2 weeks after it has informed the SELLER that it has been awarded the tender.
3. Six months thereafter another US\$ 15 million, *i.e.* US\$ 7,5 million per turbine, will become due.
4. The remainder will be paid after installation of the turbine and the passing of the acceptance test.

[...]

Article 18: ACCEPTANCE TEST

[...]

Article 19: LIQUIDATED DAMAGES and LIMITATION OF LIABILITIES

1. Any delay in delivery will entitle BUYER to liquidated damages of US\$ 40,000.00 per day up to an amount of 10% of the purchase price.
2. During the guarantee period of 4 years after the acceptance test SELLER shall pay liquidated damages in the amount of US\$ 40,000.00 for any day during which the Greenacre Pump Hydro Power Plant is not available to operate with at least 60% of its nominal capacity due to reasons connected with the non-conformity of the turbines or other problems connected with the turbines for which SELLER is responsible. The overall amount of liquidated damages may not exceed US\$ 5 million.
3. No liquidated damages are due for up to 50 days of downtimes or reduced production capacity associated with the first regular inspection which should take place in the third year of operation.
4. BUYER is entitled to claim and prove higher actual damages.

5. Damage claims for indirect and consequential damages are excluded. Claims for loss of profit are limited to US\$ 10 million.
6. The overall amount of damages, liquidated and actual, is limited to US\$ 20 million.

Article 20: TERMINATION FOR CAUSE

1. BUYER is entitled to terminate the contract in case SELLER commits a fundamental breach of contract.
2. For the avoidance of doubt the following breaches shall be considered to be fundamental
 - a. Inappropriate payments to any employee of Buyer
 - b. Delay in delivery of more than 200 days
 - c. Third failure of the acceptance test
 - d. Other breaches which deprive BUYER of what it is entitled to expect under the contract.

Article 21: DISPUTE RESOLUTION

1. The courts in Mediterraneo have exclusive jurisdiction over any dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, subject to the BUYER's right to go to arbitration pursuant to paragraph 2.
2. The BUYER has the right to refer any dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, to arbitration under the LCIA Rules, which Rules are deemed to be incorporated by reference into this clause.

The number of arbitrators shall be three. Each Party has the right to nominate one arbitrator while the presiding arbitrator shall be appointed by the LCIA.

The seat, or legal place, of arbitration shall be Vindobona, Danubia.

The language to be used in the arbitral proceedings shall be English.

The governing law of the contract shall be the substantive law of Danubia.

Article 22: MISCELLEANOUS

1. After the successful passing of the acceptance test, both Parties will enter into negotiations for a service contract for the maintenance of the machinery.
2. This document contains the entire agreement between the Parties.

22 May 2014



Johanna Woods



Benoit Fourneyron

How stainless is Mr. Steel?

Yesterday, the long-awaited trial against Mr. Steel, the former CEO of Trusted Quality Steel, and Ms. Chen, its lead quality controller started with the opening statement of the prosecution.

For years, Trusted Quality Steel had been one of the leading producers of all types of high-quality steels used in various industries. In particular, turbine producers had purchased large quantities of steel from Trusted Quality Steel. In early summer 2018, in the context of a dawn raid by the competition authorities investigating a cartel between several steel producers, it was discovered that for certain types of alloy steels, quality certificates had either been forged or had been issued without any examination by TechProof, a well-known quality and certification entity.

It turned out that the lead quality controller for steel alloys at TechProof, Mr. Maddoff, was the stepbrother of Ms. Chen's husband. According to the prosecution, Mr. Maddoff issued at least half of the certificates for the steel charges of Trusted Quality Steel without having made the necessary examination. Nevertheless, he charged Trusted Quality Steel for these examinations. The saved costs were then distributed between him and Ms. Chen. It is unclear to what extent Mr. Steel knew about the fraud and was even part of the scheme.

There are rumors that the scheme was originally devised by Mr. Steel to conceal purported quality problems encountered by Trusted Quality Steel with its new production line which had been installed in February 2015. Due to failed quality tests for steel alloy no. 3456 Trusted Quality Steel was not able to meet delivery deadlines and had to pay high penalties. It seems likely that those quality issues were not limited to the steel alloy no. 3456 but also affected other alloys which are important for the turbine industry.

That would explain the well-reported incident in May 2018 at the Riverhead Tidal Power Plant in Equatoriana. During an inspection it was discovered that the blades of the recently installed Francis Turbine R-27V were so badly affected by corrosion that they had to be replaced immediately after only 2 years. That unplanned standstill of the Tidal Power Plant lasts already for more than 3 months and has led to serious problems in the energy supply in that region of Equatoriana. According to our sources it will take at least another 6 months until a new turbine has been produced and installed.

The turbine had been produced by TurbinaEnergia, one of the world's leading turbine producers, which, however, obtained 80% of the steel from Trusted Quality Steel. The following investigation revealed that the steel had lost some of its anticorrosion characteristics due to being exposed to extreme heat. Whether that occurred during the production of the steel or during the construction of the turbine is not yet clear.

The issue poses a severe problem for the turbine industry. Following the incident at the Riverhead Tidal Power Plant, Mr. Maddoff, who is on the run, apparently managed to create additional documentation which makes it now impossible for many deliveries to determine which charges of steel were actually tested and had the necessary quality and which not.

For Trusted Quality Steel the problem is aggravated by the fact that apparently Ms. Chen also tried to leave no traces of the fraud. According to our sources, it is thus presently extremely difficult for turbine industry customers of Trusted Quality Steel to determine which of their turbines are produced with untested charges of steel.

RENEWABLES DAILY NEWS

29 September 2018



From: HydroEN <hydroEN@hydroEN.me>
Sent: 3 October 2018, 10:04 a.m.
To: Turbina Energia <turbinaenergia@turbinaenergia.eq>
Re: Acceptance Test / Report about Riverhead Tidal Power Plant

Dear Mr. Gilkes,

I trust you are doing well.

I would like to inform you that the Greenacre Pump Hydro Power Plant including your turbine successfully passed its acceptance test two weeks ago and is producing energy since then.

Yesterday, however, my assistant provided me with a very worrying article in last month's edition of Hydro-Energy-Worldwide concerning extreme corrosion and abrasion problems in a TurbinaEnergia turbine installed at Riverhead Tidal Power Plant. According to the article, the turbine had to be replaced after only two years of operation as it could apparently not be excluded that blades would break and destroy the whole generator set or other parts of the plant!!!

The author of the article presumed a connection with the previously discovered fraud at Trusted Quality Steel which allegedly is one of your major suppliers.

I hope that the two Francis Turbines R-27V included into our Greenacre Pump Hydro Power Plant are not produced with steel from Trusted Quality Steel affected by the fraud. As you know from our discussion, the uninterrupted availability of the Greenacre Pump Hydro Power Plant is of utmost importance for HydroEN in light of its commitment to the Community of Greenacre. It plays an important role in the Green Energy Strategy of Greenacre.

Could you please update me as soon as possible about the problems at the Riverhead Tidal Power Plant and whether that may also affect the turbines in the Greenacre Pump Hydro Power Plant? I will be travelling the whole of this week but will be available for a call next Monday and Tuesday the whole day.

Kind regards,

Michelle Faraday

Michelle Faraday

CEO

HydroEN plc

Rue Whittle 9, Capital City

Mediterraneo

T: (0)146 9346355

Email: m.faraday@hydroEN.me

From: Turbina Energia <turbinaenergia@turbinaenergia.eq>
Sent: 4 October 2018, 8:25 am
To: HydroEN <hydroEN@hydroEN.me>
Re: RE: Acceptance Test / Report about Riverhead Tidal Power Plant

Dear Ms. Faraday,

Thank you very much for your email to Mr. Gilkes, who had forwarded it to me.

I would like to assure you that we take your concerns very seriously and deal with them at management level. You can imagine that we were shocked when the Office for Organized Business Crimes contacted us with the information that we had been defrauded by one of our core suppliers of metals and had been provided with forged examination certificates. We immediately started to investigate which deliveries were affected by that forgery and to trace the turbines in which the steel from the relevant charges had been used.

Unfortunately, it turned out during these investigations that due to falsified documents from our supplier and a mistake in our internal product management system, it is not possible to determine with certainty whether the turbines delivered to you were produced from steel which had been part of the fraud.

We can assure you, however, that there is no need for immediate action, despite the disconcerting findings in turbines at the Riverhead Tidal Power Plant. A team of my engineers is still investigating the root causes for the considerable corrosion and cavitation damages of that turbine. As the turbine had been produced from steel delivered by Trusted Steel Company which had not been tested, it seems very likely that the damages are associated with the quality of the steel.

Even in the worst case scenario, that the two Francis Turbines R-27V are produced with the steel from Trusted Quality Steel and that steel is of an inferior quality, the design and the manufacturing process of your turbines make it extremely unlikely that they will be affected by corrosion and cavitation damages to the same extent as the turbine in the Riverhead Tidal Power Plant, which is exposed to salt water.

Consequently, my suggestion to you is that we wait until the first inspection and opening of the turbine which we should pull forward by a year to September 2020 and then examine the turbine and in particular its runner in detail. We would allocate several days more for a thorough investigation of the turbine including detailed metallurgical examinations of the blades. The extra costs for such additional investigation would be borne by us irrespective of the outcome of the investigation.

Pulling forward the next planned inspection by a year instead of taking any immediate action accommodates your well understood interest in a smooth operation of the plant with as little downtimes as possible. At the same time, we do not run any unnecessary risks.

Should the inspection reveal an increased corrosion and cavitation damages, or should the metallurgical examination discover any problems, we could then plan a complete overhaul of the turbine for one of the following years depending on the gravity of the mistakes. For that purpose, the turbine would have to be removed from the building and would have to be transported to our nearest construction side.

I hope that answers your most pressing questions and I will call you at the beginning of next week to answer any further questions you may have.

Sincerely,
Benoit Fourneyron

Benoit Fourneyron
Chief Executive Officer

TurbinaEnergia Ltd
Lester-Pelton-Crescent 3
Oceanside
Equatoriana
T: (0)214 6698053
Email: fourneyron@turbinaenergia.eq

Witness Statement of Michelle Faraday

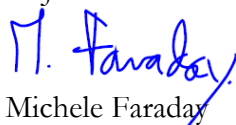
1. I was born on 9 June 1961, and since 1 January 2014, I have been the CEO of HydroEN plc. The pump hydro power plant in Greenacre was the first major project which was acquired during my time as CEO. Thus, I have been involved in the negotiations more than I usually would be and have a clear recollection of the facts, in particular, the various discussions and meetings I had with the Greenacre councilor, Mr. Gilbert Crewdson, and Respondent's CEO, Mr. Benoit Fourneyron.
2. Mr. Fourneyron's email of 4 October 2018 was a shock to me. The information that Respondent could not exclude with any certainty that the turbines delivered had been produced with steel which had not been tested as to its corrosion resistance and might be defective was very disconcerting news. I immediately contacted Mr. Crewdson to inform him about the problem. He is not only the Greenacre councilor responsible for the project but also the CEO of the local energy company, which at the same time operates the local grid and the transmission systems. Mr. Crewdson was furious and threatened to terminate the contract with us, should we not ensure the contractually agreed availability of the plant.
3. There had been considerable opposition to the construction of the Greenacre Pump Hydro Power Plant by local groups. They criticized the high cost associated with the plant and the environmental impact of the considerable construction works for the creation of the two reservoirs and the necessary buildings. One of the central arguments of Mr. Crewdson's campaign to gain the necessary support for the project was the promise that the plant would allow the community to become completely carbon-free in its energy production and consumption.
4. After the project had been approved in the council and the tender had been awarded to us, the criticism did not stop. In particular, it was alleged that contrary to the promises of Mr. Crewdson, the plant would not permit carbon produced energy to be fully replaced. In an interview in the local newspaper given three days after the tender had been awarded, one of the major critics of the project had accused the supporters of the project of lying concerning the promise of a fully carbon-free energy production. She alleged that on average the plant would have a downtime of 2-3 months per year for maintenance and inspection works, during which time the missing energy would have to be bought at high prices from the coal-fired power plant in Ruritania. While the whole article was based on incorrect assumptions and purposefully distorted facts, Mr. Crewdson apparently considered it necessary to react to that for political reasons.
5. He approached us on 28 July 2014 and asked for an amendment of the original contract awarded on 15 July 2014. He wanted to create an additional incentive for us to keep such downtime periods as short as possible. While the issue of short downtimes had been an important consideration during the tender process since February 2014, it had not been included in the contract awarded in the form of an "availability guarantee". On 3 August 2014, after a short discussion, we agreed on a very unusual availability guarantee with a penalty clause in return for higher prices for the reserve capacity provided. The relevant clause 8 in our contract with the Community provides now as follows:

“HydroEN guarantees an availability of the Greenacre plant of at least 335 days per year with a production capacity of 500 MW. Every third year the availability guarantee is reduced to 305 days to allow for the necessary inspections.

In cases of breach of this guarantee HydroEN has to pay a penalty of US\$ 20,000.00 per day. The amount is increased to US\$ 40,000.00 for those days where due to the non-availability of the plant, energy has to be procured from other non-renewable sources to meet the demand.”

6. Mr. Crewdson was very happy about the clause. It provided him with a convincing argument against the false allegation of the critics of the project. In early August, he presented the clause in a power point presentation during a podium discussion at the town hall in Greenacre.
7. We considered the deal to be very favorable to us. We obtained a higher price for maintaining a reserve capacity of 600 MW in return for taking over a risk which we considered to be easily manageable. On the basis of our experience and the specific features of the new turbines provided by Respondent, we were nearly certain that we would be able to reach the availability quota and, thus, avoid any penalty payment. Consequently, we did also not approach Respondent to discuss the issue or request any changes in our contract with Respondent, in particular in relation to the liability cap. I do not know whether Respondent knew of the clause or not. I am, however, certain that the description of the project in the tender documentation mentioned the objective of the Community of Greenacre to resort to a fully sustainable green energy supply.
8. In my discussion with Mr. Crewdson, we looked at all possible alternatives and the risks and downtimes associated with each of them, including the political repercussions. We finally came to the conclusion that the only acceptable solution would be to pull forward the first inspection from September/October 2021 by one year and require Respondent to use that inspection to directly replace the turbine runner, as that is the part of the turbine which had the highest likelihood of being affected by additional corrosion and cavitation. Only a direct replacement could exclude the risk of a prolonged standstill of the whole plant or at least a 50% reduction in production. The replacement, if properly planned and performed in three shifts, could be done within three months, if a new runner would already be available at the time of inspection.
9. We originally also considered pulling the inspection forward to September/October 2019. In the end we decided against it. Respondent would most likely not have been able to provide two new turbine runners by that time. The runners take at least nine months pure construction time and Respondent’s production slots had already been squeezed by the unforeseen need to provide a new turbine for the Riverhead Plant. Furthermore, installation might have been difficult during that time due to the festivities for the 250th anniversary of Mediterraneo’s independence.
10. At the same time the suggestion made by Respondent subsequently to pull forward the inspection by a year to first thoroughly examine the turbine and then repair or replace it, if needed, was not an option. Any repair, in particular if done at one of the premises of Respondent, would lead to a downtime of at least six months. Consequently, the overall costs associated with a repair for both parties to the Sales Agreement were most likely higher than the overall costs of a replacement, if one takes into account the penalty Claimant has to pay to Greenacre and the loss of revenue during the prolonged downtime.

28 June 2019


Michele Faraday



From: Turbina Energia <turbinaenergia@turbinaenergia.eq>
Sent: 11 December 2018, 6:09 p.m.
To: HydroEN <hydroEN@hydroEN.de>
Re: Request for Replacement of Turbines

Dear Ms. Faraday,

I would like to follow up on the discussions we had during our meeting on 1 December 2018 and your requests to replace the two turbine runners during the pulled forward next inspection in September/October 2020.

As I already explained to you during the meeting, the costs for the production of a new runner with blades would be a minimum of 4 million per runner. Furthermore, the production would take around a year, while blocking our production line. We are naturally very sorry about the situation created by the fraud of Trusted Quality Steel. Irrespective of that, you cannot expect us to produce a runner worth 4 million USD as a replacement for a runner which may be perfectly fine, merely because, as of today, it cannot be excluded that the runner or its blades are made of a defective steel and are more prone to corrosion than originally planned.

Thus, we maintain our position that we should first examine during the inspection in September/October 2020 whether the turbine runner shows any signs of unusual corrosion or cavitation damage pointing to problems with the steel used before we take any corrective action. Should the turbines turn out to be defective, and we do not believe they are, we will then decide whether it is required to replace the runner completely or whether the affected blades can be repaired. The latter is certainly our preferred option and the one mandated by the law. In our view, any major repair would have to be carried out in one of our factories. Due to the limited space in the turbine and generator building it is impossible to set up a proper repair shop at the Greenacre plant. You are correct in your assumption that any major repair would take between 4 and 7 months depending on the gravity of the damages and the need to move the turbines to our premises.

We very much regret that such a long delay may put you in a very uncomfortable situation due to the history of the plant, the penalty clause in the contract with the Community and the additional loss of revenues from possible energy sales. We can naturally not evaluate whether your assertion that such a downtime or reduced production due to repair works would lead to losses for you between US\$ 5 and 7 million, other than to note it seems high to us. To a considerable extent, such losses are the result of the unusual penalty clause in your contract with the Community of Greenacre. As we are not party to that contract it cannot affect our direct relationship or determine the selection of suitable remedies.

As I already told you during our meeting, for us, the costs associated with a replacement of the turbine runner would be at least US\$ 1 million higher than those associated with their repair. To what extent that is due to the limitation of liability in Art. 19 of our contract is irrelevant in this context as it is the direct consequence of the Parties' agreement.

I hope you understand our position. I would like to reiterate our offer to pay for any of the costs directly associated with bringing forward of the inspection and the additional metallurgical examinations.

Furthermore, due to an unexpected major delay in another hydro power project for which we were supposed to deliver four turbines of a nearly identical configuration to yours, I can also offer you now to produce for you and at your expense, two turbine runners by August 2020 at a preferential price.

Should the inspection in 2020 then show, against our expectation, that the existing turbine runners have to be replaced, we would rebuy these two new runners from you and install them at our expenses as replacements for the two existing runners at the Greenacre Project. That would at least avoid any further delay.

That offer, however, does not change anything in regard to our evaluation that a replacement of the turbine runners in September/October 2020 is not necessary. Even if defective steel has been used and the runner and the blades are affected by corrosion or cavitation pitting, the risk that the turbine has to be replaced immediately is very limited and below 5%. That is not meant to downplay your concerns that the breaking of blades or other relevant structural parts may destroy the whole turbine and even the generator set which would close down the plant for more than a year. However, we consider such a scenario to be extremely unlikely.

Should you have any further question, please do not hesitate to contact me.

Sincerely,
Benoit Fourneyron

Benoit Fourneyron
Chief Executive Officer

TurbinaEnergia Ltd

Lester-Pelton-Crescent 3

Oceanside

Equatoriana

T: (0)214 6698053

Email: fourneyron@turbinaenergia.eq

CONFIDENTIAL
By courier

HydroEN plc
Rue Whittle 9
Capital City
Mediterraneo

TurbinaEnergia Ltd
Lester-Pelton-Crescent 3
Oceanside
Equatoriana

31 July 2019

Dear Madam/Sir
Arbitration No: 1982

1. I acknowledge receipt, by courier and by email today, of four copies of a Request for Arbitration, dated 31 July 2019 from Joseph Langweiler, for the Claimant (***the Request***), a copy of which has been delivered to the Respondent by courier. I should be grateful if, as soon as possible, the Claimant would provide documentary proof of actual delivery (as required by Article 1.1(vii) of the Rules).
2. I also acknowledge receipt of a cheque for £1,750 in respect of the LCIA's registration fee, for which a receipted invoice is enclosed with the Claimant's copy of this letter.
3. I should be grateful if the Respondent would confirm that we may send correspondence relating to this arbitration by email and/or by fax and, if so, confirm the email address(es) and fax number that should be used.
4. I should also be grateful if the Respondent would provide full contact details for its legal representative, if any, including postal address, email address, telephone number and fax number. Unless we are instructed otherwise, correspondence will be with the parties' legal representatives, without copy to the parties themselves.
5. The Request was accompanied by a bundle of copy documents, in respect of which we are principally concerned, for present purposes, with an agreement headed "***Sales Agreement***" dated 22 May 2014 and stated to have been made between TurbinaEnergia Ltd and HydroEN plc (***the Agreement***).
6. The parties and their representatives are asked promptly to advise the LCIA of any issues of which they are aware, or of which they become aware during the course of the arbitration, that might impact the ability of any party to this arbitration to pay deposits when directed or otherwise to participate in the arbitration. In particular, the parties and their representatives are asked, having duly investigated the issue, to advise us of any restrictions, sanctions or embargoes that affect any party, whether directly or indirectly (including financial sanctions, by which any funds or other economic resources belonging to, held by or controlled by them, or an associated entity or body,

have been frozen or which provide that no funds or economic resources shall be made available to them, and any sectoral sanctions). Unless otherwise advised by the parties and/or their representatives, the LCIA shall proceed on the understanding that no such restrictions, sanctions or embargoes apply.

7. In filing the Request, the Claimant invokes the provisions of Art. 21.2 of the Agreement (**the Arbitration Clause**), which provides as follows:

"(2) The BUYER has the right to refer any dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, to arbitration under the LCIA Rules, which Rules are deemed to be incorporated by reference into this clause.

The number of arbitrators shall be three. Each Party has the right to nominate one arbitrator while the presiding arbitrator shall be appointed by the LCIA.

The seat, or legal place, of arbitration shall be Vindobona, Danubia.

The language to be used in the arbitral proceedings shall be English.

The governing law of the contract shall be the substantive law of Danubia"

8. The Arbitration Clause provides that disputes to which it is applicable are to be resolved by arbitration under the LCIA rules. The LCIA rules in force at the date of the commencement of the arbitration are the LCIA Arbitration Rules (2014) (**the Rules**), a copy of which is enclosed. The parties' attention is drawn to the Schedule of Arbitration Costs and they are asked to note that the LCIA's administrative charges are incurred at hourly rates as from the filing of the Request. Further information about the LCIA and the services we provide are available at www.lcia.org.
9. The Arbitration Clause provides that there are to be three arbitrators, one to be nominated by each of the parties and the third and presiding arbitrator to be selected by the LCIA. In its Request, the Claimant nominates, as arbitrator, Claire Burdin, to whom we shall write, in due course, for confirmation that she is willing and able to accept appointment.
10. In accordance with Article 2 of the LCIA Rules, the Respondent may submit a Response within 28 days of the date of receipt by the Registrar of the Request or from payment of the registration fee. Failure to deliver any or any part of a Response shall not (by itself), however, preclude the Respondent from denying any claim, or from advancing any defence or cross-claim in the arbitration. However, failure to deliver a Response within time would constitute an irrevocable waiver of the Respondent's opportunity to nominate or propose any arbitral candidate.
11. Article 6.1 of the Rules provides that, where the parties are of different nationalities, sole arbitrators or chairmen are not to be appointed if they have the same nationality as any party (the nationality of the parties being understood to include that of controlling shareholders or interests (Article 6.2)), unless the party who is not of the same nationality as the sole arbitrator or chairman has agreed in writing otherwise.
12. For the purposes of Article 6.1, I understand the Claimant to be a company incorporated in Mediterraneo; the Respondent to be a company incorporated in Equatoriana. Would the parties please advise, at their earliest opportunity, whether we should be considering any other nationalities in light of the provisions referred to above, concerning controlling shareholders or interests, and, if so, briefly state the reason we should do so.

13. In accordance with Article 24 of the LCIA Rules, we will direct the parties, at regular intervals over the course of the arbitration, to pay deposits by way of advance on account of the Arbitration Costs. Generally, we direct deposits to be paid in GBP into an account ending 5962. If the parties are asked to pay money into a different account, we would ask that they please telephone us for confirmation before making any payment.
14. Data held by the LCIA in respect of this arbitration, including, but not limited to, details of the parties and their representatives, will be held in accordance with the LCIA's privacy policy, which is available on our website (www.lcia.org).
15. The LCIA reserves the right to destroy, following the conclusion of the arbitration, all documents submitted to it during the course, and for the purposes, of the arbitration, unless a party has requested, in writing, the return of the documents it has submitted, or that have been submitted on its behalf, in which case, the cost of returning such documents will be borne by the party requesting their return.
16. I look forward to hearing from the parties in response to the matters raised above.

Yours faithfully

Sarah Lancaster
Registrar

encs. (not reproduced)

JULIA CLARA FASTTRACK

Advocate at the Court
14 Capital Boulevard
Oceanside
Equatoriana
Tel. (0) 214 77 32 Telefax (0) 214 77 33
fasttrack@host.eq

By email and courier

Ms Sarah Lancaster
London Court of International Arbitration
70 Fleet Street
London EC4Y 1EU
United Kingdom

30 August 2019

HydroEN plc v. TurbinaEnergia Ltd
LCIA/1982

Dear Ms Lancaster,

I hereby indicate that I represent RESPONDENT in the above referenced arbitral proceedings. A power of attorney is attached.

Please find enclosed RESPONDENT's Response to the Request for Arbitration, a copy of which has been sent directly to CLAIMANT.

RESPONDENT agrees to communicate with LCIA by email only. Emails may be sent to fasttrack@host.eq. For the purposes of Art. 6 LCIA Rules, no other nationalities than Mediterranean and Equatorian need to be considered.

RESPONDENT nominates as its arbitrator

Pravin Deriaz, Chemtou Drive, Oceanside, Equatoriana.

Could you please take the necessary steps for his confirmation.

Kind regards,



Julia Clara Fasttrack

Attachments:

Response to the Request for Arbitration with Exhibits

Power of Attorney (not reproduced)

CV of Pravin Deriaz under Art. 5.4 LCIA-Rules (not reproduced)

cc. Joseph Langweiler



JULIA CLARA FASTTRACK

Advocate at the Court
14 Capital Boulevard
Oceanside
Equatoriana
Tel. (0) 214 77 32 Telefax (0) 214 77 33
fasttrack@host.eq

Response to the Request for Arbitration

(pursuant to Article 2 LCIA Rules 2014)

in the Arbitral Proceedings

HydroEN plc v. TurbinaEnergia Ltd

30 August 2019

Introduction

1. In its Request for Arbitration, CLAIMANT summarizes the facts largely accurately with some convenient omissions. The conclusions drawn from these facts and CLAIMANT's legal evaluation are, however, devoid of any legal basis.
2. First, the Arbitral Tribunal lacks jurisdiction to hear the case as there is no valid arbitration agreement. Second, CLAIMANT has no claim against RESPONDENT for the delivery of a replacement turbine. CLAIMANT has not even alleged that the two Francis Turbines R-27V installed at the Greenacre Pump Hydro Power Plant are affected by extraordinary corrosion and or damages created by cavitation, let alone proven it. Thus, there is at present absolutely no basis for any non-conformity claim. Even if such a claim existed, as it is not the case, CLAIMANT could only require the repair of the turbine and not its replacement by a new turbine.

Facts

3. In early 2014, CLAIMANT approached RESPONDENT to enquire about a possible purchase of two of RESPONDENT's newest models of Francis Turbines, the R-27V. Presented in 2013 to the general public, the R-27V is the top model of RESPONDENT's turbines. Due to the special shape of the blades, the way they are allocated, and the steel alloy used, the turbine has not only a slightly higher efficiency than ordinary turbines but also a higher corrosion and cavitation resistance. Due to this latter feature, the inspection and maintenance intervals for the R-27V could be extended from 2 to 3 years for the short inspections and from 12 to 13 years for the interim inspection while a main inspection should be done every 26 years. (**Respondent Exhibit R 1**).
4. The turbines were to be included in CLAIMANT's bid for the Greenacre Pump Hydro Power Plant. The power plant was supposed to be the final building block in the very ambitious Green Energy Project which the Community of Greenacre had decided upon in 2010. Due to the extensive media coverage of the project, RESPONDENT was very pleased about the enquiry as it provided an ideal showcase for the features of the new Francis Turbine R-27V.
5. The tender documents which were shown to RESPONDENT by CLAIMANT contained no unusual features. It appeared, however, that for the customer, the permanent availability of the



plant was an important issue. The preliminary construction plans shown to RESPONDENT's CEO, Mr. Benoit Fourneyron, however, still had considerable potential to reduce possible negative effects of necessary inspections on the availability of the plant. Mr. Fourneyron pointed that out to Ms. Woods and made two concrete proposals. In the end, however, the plant was built as planned (**Respondent Exhibit R 2**).

6. When it became apparent that RESPONDENT probably had been defrauded by Trusted Quality Steel, RESPONDENT took immediate actions to clarify the situation. Unfortunately, it turned out that the use of the different charges of steel provided by Trusted Quality Steel could not be traced with certainty. In particular, it was impossible to determine whether the turbines installed at the Greenacre Plant were produced with steel of the required quality.
7. Before RESPONDENT had the time to contact CLAIMANT to discuss further steps to clarify the situation, Ms. Faraday, CLAIMANT's CEO, wrote to Mr. Gilkes asking for the necessary clarification (**Claimant Exhibit C 4**).
8. Mr. Fourneyron answered immediately (**Claimant Exhibit C 5**). He suggested that even in a worst-case scenario, there was no need for immediate action. Thus, he suggested a thorough examination of the turbines at the first regularly scheduled inspection which should be pulled forward by a year to autumn 2020. RESPONDENT was willing to pick up the costs for all the additional work irrespective of the outcome of the inspection.
9. Shortly thereafter, Ms. Faraday, who had apparently spoken with the Mr. Gilbert Crewdson, the Greenacre councilor in charge, came back with the completely unreasonable request that the turbines should be exchanged during that inspection in 2020 (**Respondent Exhibit R 3**).
10. RESPONDENT naturally rejected such request as it would already have been difficult for Respondent to produce the new turbine runners required by that time, as at the time no production slots were available. In an effort to find an acceptable solution, RESPONDENT suggested to meet in person at RESPONDENT's premises in Equatoriana (**Respondent Exhibit R 4**). The meeting took place on 1 December 2018, but no agreement could be reached.
11. On 9 December 2018, RESPONDENT was informed that due to severe geological problems, one of the projects for which it was supposed to provide four turbines would be delayed by at least two years. As the turbine runner of that project had nearly identical features to that of the Greenacre project, there would have been at least the possibility available to produce turbine runners in time for the inspection in September/October 2020. With his email of 11 December 2018, Mr. Fourneyron summarized the position of the Parties and informed Ms. Faraday about the new option (**Claimant Exhibit C 7**). In the ensuing negotiation, CLAIMANT was unwilling to accept the offer to produce two turbine runners for the account and risk of CLAIMANT and finally initiated these proceedings.

Legal Considerations

Lack of Jurisdiction

12. The Arbitral Tribunal lacks jurisdiction to decide the case. The arbitration clause is invalid as it is one-sided and clearly favors CLAIMANT.

13. Asymmetric dispute resolution clauses are highly controversial in practice. While such clauses seem to be admissible in Mediterraneo, courts in numerous jurisdictions have considered such clauses to be invalid, as they unduly favor one of the parties. That also applies to the courts in Equatoriana, where RESPONDENT is based, - RESPONDENT being the party which is negatively affected by the clause.
14. Under Danubian arbitration law there is, so far, no direct precedent on the issue of asymmetrical dispute resolution clauses. Nevertheless, the courts in Danubia have shown in other areas that they consider an equal treatment of the parties to be of crucial importance. In the context of appointment of arbitrators in multiparty situations, the Court of Appeal has stated that an equal influence of all parties on the composition of the arbitral tribunal forms part of Danubian public policy. Referring to the “Siemens-Dutco decision” of the French Supreme Court, the Court of Appeal had refused the enforcement of an award from Mediterraneo rendered by a three member tribunal in which claimant had appointed its own arbitrator while the three respondents had to agree on a joint arbitrator. As they could not do so the administering institution appointed their arbitrator. Furthermore, Article 18 of the Danubian Arbitration Law, which is a verbatim adoption of Article 18 of the UNCITRAL Model Law, explicitly stipulates that in relation to all procedural questions the parties should be treated equally. Why should that be different in relation to jurisdictional issues?

Substance

15. CLAIMANT’s claim for replacement of the two turbines is completely baseless. First, the turbines are conforming to the contract. CLAIMANT, who bears the burden of proof has not proven that the turbines are affected by corrosion or that there is an extraordinary amount of cavitation. The mere fact that it cannot be excluded that the turbines may have been produced from a charge of steel that has not been properly examined and is not in line with the required specifications, does not render the turbines non-conforming. The remote possibility of a defect is something completely different than a defect.
16. In addition, CLAIMANT cannot rely on the findings in relation to the turbine at the Riverhead Tidal Plant. That the turbine delivered by RESPONDENT was exchanged as a matter of courtesy after 2 years of operation due to damages caused by corrosion and cavitation does not prove anything in relation to the present turbines. The Riverhead Tidal Plant is a completely different project, involving, for example, the much more corrosive salt-water, relating to a different turbine set up, produced from a different charge of steel.
17. Furthermore, in the present case it is not even certain that the steel came from a charge which had not been examined, let alone that it is defective.
18. Second, even if the inspection would reveal an unusual amount of corrosion, RESPONDENT would only be obliged to repair the turbine. An up-front replacement could not be required under Art. 46 CISG. Neither can such an entitlement be deduced from the law nor from the contract.
19. The exclusion of any loss of profit in the contracts speaks more for the opposite.
20. With its next submission, RESPONDENT will submit a report by the expert retained by it showing that:

- a. the two turbines for the Greenacre Pump Hydro Power Plant as well as the whole setting cannot be compared to those of the Riverhead Tidal Plant so that the findings in relation to the latter cannot justify any predictions in relation to the state of the Greenacre turbine; and
- b. even in the unlikely case that the blades were affected by unusual corrosion and resulting cavitation, that would for the next 4 years at most result in the danger or a loss of productivity but not in a complete loss of a turbine or the whole generator set, let alone the alleged scenario of the destruction of the whole plant.

Requests for Relief

21. In light of the above RESPONDENT requests the Arbitral Tribunal to make the following orders:
 - a. To decline jurisdiction;
 - b. To reject the claim for the delivery and installation of two replacement turbines;
 - c. To order CLAIMANT to bear the costs of this arbitration.

J.C. Fasttrack

Julia Clara Fasttrack

GREENACRE CHRONICLE

| Politics | Business | Crime and the latest news from Greater Greenacre |

25 August 2013

News from the Hydro Power Fair

GREENACRE • Yesterday the Hydro Energy, the biggest trade fair for all products relating to the production of hydro energy, opened its doors. Like in previous years, the number of participants presenting their products and services has increased considerably, showing the growing importance of hydro power. For the first time, the Community of Greenacre was represented at the trade fair with Greenacre Renewable Engineering, the engineering office responsible for the planning of the controversial Greenacre Pump Hydro Power Plant Project. Its general manager, Mr. Blue, told us that the trade fair was a unique opportunity for the company to present the project and the know-how existing in Greenacre for hydro power generation.

According to him, the interest generated in the project already on the first day was worth the participation in the fair. He was confident that after the latest amendments to the project proposal, it would win the necessary support of the Community

Council. In Mr. Blue's view, there was no alternative to the pump hydro power plant if Greenacre really wanted to achieve the ambitious goal underlying its 2010 Green Energy commitment to satisfy the complete energy demand by energy coming from renewable sources without endangering grid stability.

One of yesterday's highlights was the presentation by TurbinaEnergia of its newest top model of hydro turbines, the R-27V. Due to its innovative design and the materials used, it has an increased efficiency. According to the well-known cavitation expert Prof. Tim John, who attended the presentation as guest of TurbinaEnergia, the increased corrosion and cavitation resistance of the R-27V made it possible to increase the inspection and maintenance intervals by 1 or 2 years. In his view that also justified the premium price which was 10% above that of its direct competitor, Gorlov's T-9.6.1C, which so far had been the most expensive turbine in the market.

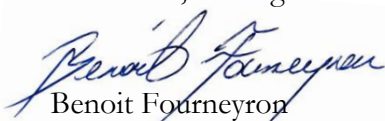
Witness Statement of Benoit Fourneyron

1. I was born on 9 June 1961 and I am the CEO of TurbinaEnergia Ltd since 2011.
2. In early 2014 Ms. Woods contacted me concerning the purchase of two of our brand-new Francis Turbine R-27V for the inclusion into HydroEN's bid for the Greenacre Pump Hydro Power Plant. She provided me with the original tender documents and informed me that they had considered our turbine due to its specific environmentally-friendly design and the longer inspection and maintenance intervals. The present standard for inspections of turbines is as follows:
 - minor primarily visual inspection of the turbine every 2nd year, which takes approximately 2-3 weeks per turbine if no repair is necessary;
 - a medium size inspection with an opening of the turbines every 12 years, which takes about 8 weeks per turbine; and
 - a major revision of the turbines every 25 years, which may take between three to six months depending on the findings and the size of the plant. Should the plant be sufficiently spacious that a proper repair shop may be set up in the plant and should the producer have the necessary equipment for that, most repair works could be operated at the plant itself saving up to two weeks of transportation time for each turbine. In all other cases, the turbine has to be removed from the plant to be transported to the producer's premises where the necessary works take place and will thereafter be transported back to the premises to be reinstalled.
3. TurbinaEnergia's new R-27V Francis Turbine has extended inspection intervals to 3 years for the minor inspections, 13 years for the medium size inspections and 26 - 28 years for the major revision.
4. The tender documents emphasized the importance of minimal downtimes which according to Ms. Woods, had to do with existing resistance to the project. Also the Model Contract attached to the tender document referred in its Preamble to the "operators' commitment to reduce all types of downtimes to the absolute minimum". Ms Woods told me that they had planned to carry out all maintenance works during the holiday time in September/October where the likelihood that the power plant would be needed for providing energy or stabilizing the grid was the lowest.
5. Ms. Woods told me further that in light of Greenacres fixation on fully excluding the need to purchase carbon-based energy the longer inspection intervals of our R-27V could be an argument to be selected in the tender process. Later in the negotiations she also wanted my comments on the preliminary construction planning of the plant. As it is usual for such plants, the two turbines were positioned at the end of a single penstock through which the water was flowing between the two reservoirs. Each turbine could be shut off from the penstock by a valve which allowed its inspection while the other turbine was producing energy. During the inspection work at the

penstock, however, the whole plant had to be shut down. In light of the space available at the site, I explained to her that there were two options which could considerably improve the availability of the plant. The first was to install the turbines in two completely independent energy production circles. Thus, one turbine could be available to produce 300 MW while the other one was examined and maintained. The second was the construction of a much larger generation building with fixed maintenance equipment to facilitate inspections of the turbines and allow at least minor repairs on site. In the end, HydroEN did not follow any of the suggestions but constructed the plant according to its original planning. Ms. Woods told me that this had been a commercial decision by HydroEN's management following a preliminary calculation of my suggestions and their further discussions with the representatives of the Community of Greenacre. I was told that my two proposals would have increased the construction costs for the plant by 2.5% (larger turbine house) respectively 15% (two penstocks). The estimates sounded high but not completely unreasonable.

6. During my negotiations with Ms. Woods, we fairly quickly agreed on the commercial terms. It took us some time to agree on the dispute resolution clause and the limitation of liability clause. In the end, after numerous unsuccessful efforts to agree on a balanced arbitration clause, I accepted the one-sided dispute resolution clause and the liquidated damages clause in return for HydroEN's consent to the limitation of liability and the inclusion of an entire agreement clause. For us the limitation of liability clause is crucial, as major breakdowns with prolonged downtime are extremely rare in practice but when they occur could lead to damages in the amount which could threaten economic survival. That applies in particular to cases like the present where the turbines are used in a plant operating in an environment where political considerations may have a strong influence on the energy prices.
7. I was very surprised about the approach adopted by HydroEN in the negotiations leading to this arbitration. HydroEN is a valuable client for us and the project is a showcase for our new R-27V Francis Turbine. In light of that, we made the very generous offer to pick up the additional costs for the opening of the turbine and the intensified examination in 2020 irrespective of the outcome of that investigation.
8. In my view, it is more likely that there will be no extraordinary corrosion or corrosion induced cavitation damages than the opposite. However, even if they are damaged, the likelihood that those damages require a complete overhaul of the turbine or even the provision of a replacement turbine is below 5 % as will be shown in the expert report by Mr. Tim John. In light of that, I found the request to organize the replacement of the turbine, the non-conformity of which had not yet been proven, absolutely extraordinary. The production of such a turbine would cost us at least US\$ 14 million. And even the production and installation of a new turbine runner would cost at least US\$ 4 million.

Oceanside, 25 August 2019


Benoit Fourneyron



From: HydroEN <hydroEN@hydroEN.me>
Sent: 6 October 2018, 10:25 a.m.
To: Turbina Energia <turbinaenergia@turbinaenergia.eq>
Re: Replacement of Turbine

Dear Mr Fourneyron,

Thank you very much for replying to my email of 3 October 2018 to Mr. Gilkes. While I understand that you have been defrauded by one of your suppliers, I am shocked that TurbinaEnergia is unable to determine with certainty which charge of steel had been used to produce the two R-27V Francis Turbines included in the Greenacre plant.

I immediately informed the relevant persons in Greenacre about that fact and discussed the various alternatives to deal with the problem. There was a common view that the only possible solution is to pull forward the first inspection originally planned for 2021 to September/October 2020 and to use the time to replace the turbine delivered by a completely new turbine made out of steel which complies with the requirements of the contract. If the production of complete turbines is not possible by 2020 due to a lack of production slots, at least the turbine runner must be replaced. The runner is the part of the turbine on which a deficient steel will have the greatest impact. The replacement should be possible within a period of 10 to 12 weeks working in 3 shifts and full time.

As the example of the Riverhead turbine shows, it may well be that corrosion and cavitation damages make an immediate replacement in 2020 necessary. In such a case, we cannot wait for another year until you have produced a new turbine runner with the plant being unable to produce any power as the use of the old turbine carries the risk of damaging the generator or the whole plant in a way that would shut it down for an even longer time.

Mr. Crewdson, the Greenacre councilor in charge of the program, made clear that any other solution than an immediate replacement in 2020 is unacceptable for Greenacre and would probably result in the termination of the contract between Greenacre and HydroEN.

Kind regards

Michelle Faraday

Michelle Faraday
CEO
HydroEN plc

Rue Whittle 9, Capital City
Mediterraneo
T: (0)146 9346355
Email: m.faraday@hydroEN.me



From: Turbina Energia <turbinaenergia@turbinaenergia.eq>
Sent: 10 October 2018, 11:38 a.m.
To: HydroEN <hydroEN@hydroEN.me>
Re: Email of 6 October 2018

Dear Ms Faraday,

Thank you very much for your email of 6 October 2018 to which I would like to reply. I understand your concerns and your annoyance of having to deal with this matter shortly after a successful start of the Greenacre plant.

Nevertheless, you will probably not be surprised that we cannot replace two turbine runners, let alone two complete turbines, each of which is worth US\$ 20 million merely for the remote possibility that they have been produced with steel which has not the promised corrosion stability.

At present, we would physically not be in the position to do so, even if that could be required from us. In September, we have just started the production of the first two turbines for another pump hydro power plant to be finished in early 2021, for which we have to deliver four turbines. Thus, our production capacities are fully booked until at least October 2020. Only thereafter, some production capacity will be available again.

To avoid sending emails forth and back, I would suggest that we meet in person to discuss possible solutions, preferably at our production site, so that I can dispel your concerns that immediate action is necessary. Unfortunately, due to the problems created by the fraud of Trusted Steel Company, I could only offer a date in early November. In my view, it could be a good idea to have Mr. Crewdson or any other representative of Greenacre participating in the meeting.

Sincerely,
Benoit Fourneyron

Benoit Fourneyron
Chief Executive Officer

TurbinaEnergia Ltd
Lester-Pelton-Crescent 3
Oceanside
Equatoriana
T: (0)214 6698053
Email: fourneyron@turbinaenergia.eq

CONFIDENTIAL
By Courier & By Email

Joseph Langweiler
Advocate at the Court
75 Court Street
Capital City
Mediterraneo

Langweiler@lawyer.me

Julia Clara Fasttrack
14 Capital Boulevard
Oceanside
Equatoriana

fasttrack@host.eq

15 September 2019

Dear Madam/Sir
Arbitration No: 1982

The parties are hereby notified that, pursuant to Article 5 of the LCIA Rules, the LCIA Court has appointed:

Claire Burdin
Johan Segner Avenida
Capital City
Mediterraneo;

Pravin Deriaz
Chemtou Drive
Oceanside
Equatoriana; and

Prof. Viktoria Kaplan
Mariahilfer Straße 212
1011 Vindobona
Danubia.

to be the Tribunal in this arbitration, with Prof. Viktoria Kaplan presiding.

I enclose a copy of the form of appointment, the arbitrators' curricula vitae, and their statements of independence and availability.

Each arbitrator will charge for her time at GBP 350, which rates are permitted by the LCIA's Schedule of Costs.

In accordance with Article 14.1 of the Rules, the parties and the Tribunal are now encouraged to make contact as soon as practicable, but no later than 21 days from receipt of this letter.

Unless otherwise agreed between or jointly proposed by the parties in writing, or directed by the Tribunal, within 28 days of receipt of this notice, the Claimant shall deliver to the Tribunal and all other parties (copied to the Registrar, in accordance with Article 13.3 of the Rules): (a) its written election to have its Request treated as its Statement of Case; or (b) its written Statement of Case pursuant to Article 15.2.

I remind the parties that, under Article 24.3 of the LCIA Rules, save for exceptional circumstances, the Tribunal shall not proceed with the arbitration (including making contact under Article 14.1) without first ascertaining that the LCIA is or will be in requisite funds. The LCIA has now received from the parties the initial deposit directed on 30 August 2019.

Lastly I should note that the LCIA is content to receive soft copies only of correspondence, submissions and other documents during the course of this arbitration, unless otherwise advised. Should you wish to send to us a file that is too large to transmit by email, please let us know.

Yours faithfully

Sarah Lancaster

encs. Form of Appointment

cc: Claire Burdin, by email only
Pravin Deriaz, by email only
Prof. Viktoria Kaplan, by email only

LCIA

IN THE MATTER OF AN ARBITRATION

BETWEEN

HYDROEN PLC

Rue Whittle 9
Capital City
Mediterraneo

Claimant

AND

TURBINAENERGIA LTD

Lester-Pelton-Crescent 3
Oceanside
Equatoriana

Respondent

APPOINTMENT OF ARBITRAL TRIBUNAL

WHEREAS

1. The LCIA has been informed that a dispute has arisen between the above-named parties out of a Sales Agreement dated 22 May 2014 (***the Agreement***);
2. by a Request for Arbitration, dated 31 July 2019, from Joseph Langweiler, the Claimant requested arbitration of the dispute, invoking the provisions of Article 21.2 of the Agreement which provides as follows:

“(2) The BUYER has the right to refer any dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, to arbitration under the LCIA Rules, which are deemed to be incorporated by reference into this clause.

The number of arbitrators shall be three. Each Party has the right to nominate one arbitrator while the presiding arbitrator shall be appointed by the LCIA.

The seat, or legal place, of arbitration shall be Vindobona, Danubia.

The language to be used in the arbitral proceedings shall be English.”

3. in the Request, the Claimant nominated, as arbitrator, Claire Burdin;
4. by letter from Julia Clara Fasttrack, the Respondent filed a Response dated 30 August 2019, in which the Respondent nominated, as arbitrator, Pravin Deriaz.

NOW

Pursuant to Article 5 of the LCIA Rules, the LCIA Court **HEREBY APPOINTS**

Claire Burdin
Johan Segner Avenida
Capital City
Mediterraneo;

Pravin Deriaz
Chemtou Drive
Oceanside
Equatoriana; and

Prof. Viktoria Kaplan
Mariahilfer Straße 212
1011 Vindobona
Danubia

to be the Tribunal in this arbitration, with Prof. Viktoria Kaplan presiding.

Signed:

Paula Hodges QC
President
LCIA Court

Date: 15 September 2019



Prof. Viktoria Kaplan
Mariahilfer Straße 212
1011 Vindobona
Danubia

By email and courier

Joseph Langweiler
Advocate at the Court
75 Court Street
Capital City
Mediterraneo

Julia Clara Fasttrack
Advocate at the Court
14 Capital Boulevard
Oceanside
Equatoriana

cc. LCIA

Arbitral Proceedings HydroEN plc v. TurbinaEnergia Ltd

19 September 2019

Dear Colleagues,

First of all, I would like to thank you for the consent to my appointment.

The Arbitral Tribunal would like to discuss with you in a TelCo on 3 October 2019 the further conduct of the proceedings after having familiarized itself with the file.

Kind regards,

For the Arbitral Tribunal



Prof. Viktoria Kaplan
Presiding Arbitrator

Claire Burdin
Johan Segner Avenida
Capital City
Mediterraneo

By email and courier

Joseph Langweiler
Advocate at the Court
75 Court Street
Capital City
Mediterraneo

Julia Clara Fasttrack
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14 Capital Boulevard
Oceanside
Equatoriana

cc. LCIA

Arbitral Proceedings HydroEN plc v. TurbinaEnergia Ltd

21 September 2019

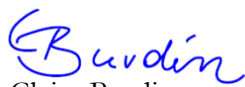
Dear Colleagues,

After a first reading of the file, I have the impression that Respondent wants to submit with its next submission an expert report by Prof. Tim John.

Should that be the case and in the interest of utmost transparency I would like to make the following disclosure:

Prof. John and my husband are presently engaged in a lawsuit against each other concerning the ownership and the validity of a patent relating to a production process for turbine steel. The patent and the dispute have no relationship to the present arbitration, the products concerned or other parties involved.

Kind regards,



Claire Burdin

Joseph Langweiler

Advocate at the Court
75 Court Street
Capital City
Mediterraneo
Tel (o) 146 9845; Telefax (o) 146 9850
Langweiler@lawyer.me

Via Email

Claire Burdin
Pravin Deriaz
Prof. Viktoria Kaplan

cc. LCIA

23 September 2019

Dear Members of the Arbitral Tribunal,

Respondent seems to engage in a bad faith strategy to frustrate Claimant's request for a replacement of the turbines during the planned inspection in September/October 2020 by trying to derail the proceedings and delay the issuance of an award to a time after the inspection or when it would at least no longer be possible to produce the turbines needed for replacement.

There can be few other explanations for Respondent's obviously unjustified challenge of the Arbitral Tribunal's jurisdiction. As rightly stated by Respondent, such clauses are valid under the law of Mediterraneo and it is not at all obvious what relevance the arbitration law of Equatoriana should have for the validity of the dispute resolution clause. It is governed by Danubian arbitration law, which is as a verbatim adoption of the UNCITRAL Model Law, and which is based on the principle of party autonomy. As both Parties extensively discussed the clause and clearly consented to it, the courts in Danubia will most likely uphold the clause, contrary to the allegations by Respondent.

Even more concerning is the selection of the expert Prof. John. Respondent must have been aware that Prof. John and the husband of Ms. Burdin, who is a leading expert in turbine engineering, have been involved for nine months as opponents in a litigation concerning the ownership of a patent. Thus, it seems obvious that the appointment of Prof. John primarily serves the purpose of creating a ground for a challenge of the arbitrator nominated by Claimant and thereby delay the proceedings. The Arbitral Tribunal should not allow such behavior and exclude Prof. John and any evidence given by him from these proceedings or at least order Respondent to provide a statement that it will not challenge Ms. Burdin for her connection to Prof. John.

Pursuant to Article 18.3 and 18.4 of the LCIA Rules the Arbitral Tribunal has the power to refuse the addition of a counsel if that "could compromise the composition of the Arbitral Tribunal or the finality of the award". That must apply *a fortiori* to a nomination of an expert, if the primary purpose of his nomination is exactly that.

Sincerely yours,



Joseph Langweiler

JULIA CLARA FASTTRACK

Advocate at the Court
14 Capital Boulevard
Oceanside
Equatoriana
Tel. (0) 214 77 32 Telefax (0) 214 77 33
fasttrack@host.eq

Via Email and Courier

Claire Burdin
Pravin Deriaz
Prof. Viktoria Kaplan
cc. LCIA

27 September 2019

Dear Members of the Arbitral Tribunal,

RESPONDENT strongly objects to CLAIMANT's unjustified request to exclude RESPONDENT's expert.

The Arbitral Tribunal lacks any authority to exclude Prof. John. Such an exclusion would not only violate the right to equal treatment, allowing each party to select the expert it wants, but also violate RESPONDENT's right to properly present its case. Prof. John is one of a handful of English-speaking experts world-wide which have worked on both issues which are allegedly relevant in the present case, corrosion in steel and cavitation in water turbines which may be due to corroded blades. That is also known to CLAIMANT.

That RESPONDENT only contacted Prof. John after it had received the Request for Arbitration with the nomination of Ms. Burdin is not a sign of bad faith but merely due to the fact that there was no need before to approach an expert for an expert report. During the negotiations, RESPONDENT had already mentioned that, according to the latest work of Prof. John, the new generation of turbines minimise the likelihood of a major incident due to corrosion induced cavitation to an extent, that the existing insurances for standstill should be recalculated.

RESPONDENT cannot exclude that CLAIMANT also knew about the connection between Ms. Burdin and Prof. John and actually appointed Ms. Burdin hoping thereby to exclude Prof. John as a possible expert.

Equally, RESPONDENT will not renounce its right to challenge Ms. Burdin for her lack of independence. Without further information, RESPONDENT cannot determine with certainty whether the existing contacts make a challenge of Ms. Burdin necessary. They definitely justify a close scrutiny of Ms. Burdin's behavior to see whether she is negatively influenced by the contacts.

Contrary to CLAIMANT's allegation neither that nor RESPONDENT's challenge of the Tribunal's jurisdiction constitute "bad faith". They are merely an exercise of basic rights. It is telling that CLAIMANT makes allegations of bad faith but behaves itself in a way which raises considerable concerns as to the ethics of its behavior. Ms. Burdin is one of the best-known proponents of a wide notion of non-conformity in the context of Art. 35 CISG. Contrary to the prevailing view in Mediterraneo which requires actual non-conformity of the goods, she has advocated in two articles published in 2016 and 2017 that the mere "suspicion of defects" is sufficient in many cases to render the goods non-conforming. That this is exactly the untenable position CLAIMANT is taking in this case is probably not surprising.



CLAIMANT has keep reiterating during our negotiations its interest in complete transparency and that it had submitted in its contract with Greenacre to arbitration applying the UNCITRAL Rules on Transparency. Should CLAIMANT truly have been interested in transparency that would have been a good occasion to be transparent! Why should CLAIMANT be able to select its arbitrator according to its preferences helping his case while RESPONDENT should be prevented from selecting an expert to properly present its case?

Kind regards,



Julia Clara Fasttrack

Prof. Viktoria Kaplan
Mariahilfer Straße 212
1011 Vindabona
Danubia

By email and courier

Joseph Langweiler
Advocate at the Court
75 Court Street
Capital City
Mediterraneo

Julia Clara Fasttrack
Advocate at the Court
14 Capital Boulevard
Oceanside
Equatoriana

cc. LCIA

Arbitral Proceedings HydroEN plc v. TurbinaEnergia Ltd

4 October 2018


Dear Colleagues,

The Arbitral Tribunal appreciates your cooperation during yesterday's TelCo.

Please find attached Procedural Order No. 1 which is based on the discussion during the TelCo.

Kind regards,

For the Arbitral Tribunal


Prof. Viktoria Kaplan
Presiding Arbitrator

PROCEDURAL ORDER NO 1

of 4 October 2019

in the Arbitral Proceedings HydroEN plc v. TurbinaEnergia Ltd (LCIA/1982)

- I. Following the receipt of the file from the LCIA on 20 September 2019 and the Parties' additional submissions of 23 and 27 September 2019, the Arbitral Tribunal held a telephone conference with both Parties on 3 October 2019 discussing the further conduct of the proceedings.
- II. The Arbitral Tribunal takes note of the fact that in the telephone conference of 3 October 2019 both Parties agreed:
 - to conduct the proceedings on the basis of the 2014 Arbitration Rules;
 - that RESPONDENT will submit its expert report by Prof. John one week before the hearing and that it will only become part of the file if the Arbitral Tribunal admits the evidence by Prof. John, in which case he shall be heard, if needed on 20 April;
 - that RESPONDENT would take the necessary measures to ensure that in case the Arbitral Tribunal did order the replacement of the turbines by the end of April, it could still comply with that order;
 - that the costs associated with such measures would have to be borne by CLAIMANT should the Arbitral Tribunal reject the claim;
 - to reserve the final decision on costs for a separate cost award.
- III. In the light of these agreements and considerations the Arbitral Tribunal hereby makes the following orders:
 1. In their next submissions and at the Oral Hearing in Vindobona (Hong Kong) the Parties are required to address the following issues:
 - a. Does the Arbitral Tribunal have jurisdiction to hear the case or is the Arbitration Agreement invalid?
 - b. Should the Arbitral Tribunal order the exclusion of the expert suggested by RESPONDENT, Prof. John?
 - c. Has RESPONDENT breached the contract by delivering turbines which are non-conforming in the sense of Article 35 CISG?
 - d. In case of a breach of contract, is CLAIMANT entitled to request the delivery of replacement turbines?

The Parties are free to decide in which order they address the various issues. **No further** questions going to the merits of the claims should be addressed at this stage of the proceedings, in particular no questions relating to the claim for damages.

2. For their submissions the following Procedural Timetable applies:
 - a. CLAIMANT's Submission: no later than 5 December 2019;
 - b. RESPONDENT's Submission: no later than 23 January 2020.



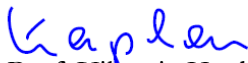
3. The submissions are to be made in accordance with the Rules of the Moot agreed upon at the telephone conference.
4. It is undisputed between the Parties that Equatoriana, Mediterraneo and Danubia are Contracting States of the CISG and Member States of the New York Convention. The general contract law of all three countries is a verbatim adoption of the UNIDROIT Principles on International Commercial Contracts. Danubia has adopted the UNCITRAL Model Law on International Commercial Arbitration with the 2006 amendments (Article 7 – Option 1).
5. There is consistent jurisprudence in all the countries concerned that in sales contracts governed by the CISG, the latter also applies to the conclusion and interpretation of the arbitration clause contained in such contracts, in so far as the applicable arbitration law does not contain any conflicting provisions.
6. In the event, Parties need further information, Requests for Clarification must be made in accordance with para. 29 of the Rules of Moot no later than 24 October 2019 via their online party (team) account. No team is allowed to submit more than ten questions.
7. Where an institution is participating in both Hong Kong and Vienna, the Hong Kong team should submit its questions together with those of the team participating in Vienna via the latter's account on the Vis website.

Clarifications must be categorized as follows:

- (1) Questions relating to the Parties involved and their business.
 - (2) Questions relating to the Greenacre Pump Hydro Power Project.
 - (3) Questions relating to the turbines and the two relevant hydro power turbines.
 - (4) Questions relating to the negotiation, drafting and conclusion of the arbitration clause.
 - (5) Questions relating to the negotiation, drafting and conclusion of the remainder of the contract.
 - (6) Questions concerning the cost and duration of the inspection/repair/replacement of the turbine including the costs associated with downtimes.
 - (7) Questions concerning the applicable laws and rules.
 - (8) Other questions.
- IV. Both Parties are invited to attend the Oral Hearing scheduled for 4th – 9th April 2020 in Vindobona, Danubia (23rd – 29th March 2020 in Hong Kong). The details concerning the timing and the venue will be provided in due course.

Vindobona, 4 October 2019

For the Arbitral Tribunal



Prof. Viktoria Kaplan

Presiding Arbitrator



PROCEDURAL ORDER NO 2

of 1 November 2019

in the Arbitral Proceedings HydroEN plc v. TurbinaEnergia Ltd (LCIA/1982)

1. **What are the company sizes of RESPONDENT and CLAIMANT?** CLAIMANT is operating in over 100 countries and has more than 25,000 employees and an annual turnover of 4.3 billion US\$. RESPONDENT produces its turbines with 400 employees in Equatoriana and 150 employees in Danubia and has an annual turnover of 180 million US\$. The transport to the plant in Danubia, which is closer to the Greenacre Pump Hydro Power Plant, would take 10 days one way, the transport to Equatoriana 24 days.
2. **Who drafted the Sales Agreement?** After the Parties had agreed on the main commercial terms, CLAIMANT submitted a first draft which already included the asymmetrical dispute resolution clause. CLAIMANT tries to include such a clause in all of its contracts. In the majority of its disputes with suppliers CLAIMANT considers a certain publicity of the dispute to be in its interest, in particular to put some pressure upon suppliers which normally do not want to discuss defects in their products in open courts. At the same time, CLAIMANT wants to maintain the option to go to arbitration if it has either an interest in confidentiality itself or the perceived other advantages of arbitration outweigh the benefits of court proceedings in the particular dispute. Consequently, CLAIMANT rejected RESPONDENT's request to have a symmetrical arbitration or dispute clause. In relation to liability, CLAIMANT then accepted the limitation of liability upon which RESPONDENT insisted in return for a right to liquidated damages. The Sales Agreement does not contain any further clause regarding the remedies available.
3. **What is the purpose of the acceptance test and can the passing of the test verify that the two turbines do not have quality problems?** The purpose of the acceptance test conducted by CLAIMANT is to examine over a period of one week of continuous operation whether the turbines operate properly and have the agreed upon output at the time of testing. While extraordinary cavitation at the time of the test can be detected the test is not suitable to make any findings as to corrosion resistance or the quality of the steel used. For those latter findings it would be necessary to open the turbine again and eventually take samples of the steel for a thorough metallurgical examination. Such a thorough metallurgical examination would require the destruction and subsequent replacement of operating parts. Even during later inspections, a thorough examination of the steel would only be made if the turbine and in particular the turbine runner would show extraordinary signs of corrosion or abrasion and it would be necessary to determine the cause for such findings.
4. **Did the parties intend to lower the standard for fundamental breach under Article 25 CISG, in accordance with Article 6 CISG, by omitting the word "substantially" from Article 20 paragraph 2(d) of their Sales Agreement?** Yes. Both considered it, however, to be unlikely that the right would be exercised. In extreme cases CLAIMANT would be faced with the problem to have to look for a new supplier which due to the lead time for turbine production would lead to considerable delay which was obviously not in CLAIMANT's interest.
5. **Did the documentation that was handed over by RESPONDENT to CLAIMANT with the turbines, include the certificate of the quality of steel?** The turbines were

delivered with a statement by RESPONDENT that they were produced with certified steel but not with an original certificate for the quality of the steel.

6. **Do the two turbines in the Greenacre Pump Hydro Power Plant deviate from the specification in Annex A of the contract in any other aspect than the uncertain quality of the steel (and the possible effects thereof)?** Not that it is presently known.
7. **Could the other alloys affected by the quality fraud referred to in the newspaper article (CLAIMANT Exhibit C 3) have been used for the R-27V Francis Turbine?** Yes.
8. **Has any member of the tribunal had relevant expertise or worked on issues of corrosion in steel and cavitation in water turbines which may be due to corroded blades?** All three members are lawyers, but Ms. Burdin is well known for her expertise in energy disputes and people are aware of her marriage to Mr. Burdin who is one of the leading engineers for turbine production and steel alloys used for that. Previously, Ms. Burdin has been involved in two other arbitrations concerning hydro energy plants and cavitation problems which involved none of the parties or persons which may play a role in this arbitration.
9. **Was CLAIMANT aware of the fact that Claire Burdin had a particularly wide view of the “non-conformity” concept?** Yes. Ms. Burdin had written two well-known and controversial articles about the “suspicion of defects” as non-conformity under Article 35 CISG referring to a high-pressure gas turbine in a gas-fired thermo power plant as an example.
10. **Does Ms. Burdin’s husband have a financial interest in the outcome of the litigation with Prof. John?** Mr. Burdin, who is an engineer, receives every year around US\$ 5,000 from the co-ownership of the patent which Prof. John challenges due to an alleged lack of inventive step. Ms. Burdin who is not a patent lawyer does not represent her husband in the case, but naturally discusses the matters with him. The judgment in the case is expected in late April.
11. **Was Ms. Burdin aware prior to the dispute that the RESPONDENT had a relationship with Prof. John?** No.
12. **Did RESPONDENT initiate a formal challenge of Ms. Burdin to the LCIA Court, the Arbitral Tribunal and all other parties until 5 October 2019?** No, but it reiterated in a letter to the LCIA on 5 October 2019 that the decision not to challenge Ms. Burdin for the contacts revealed so far should not be understood as a waiver of the right to challenge Ms. Burdin. RESPONDENT would keep Ms. Burdin under close scrutiny due to the potentially relevant relationship to the expert and exercise its right to challenge her, should her behavior during the arbitration show that her independence and impartiality is affected by the patent litigation, in particular the outcome of the case.
13. **Was the CLAIMANT present at the Hydro Energy trade fair mentioned in the Greenacre Chronicle article (RESPONDENT’s Exhibit R 1)?** Yes. CLAIMANT had a stand at the trade fair and its Chief Operating Officer (COO) also attended the presentation of the R-27V by TurbinaEnergia. Afterwards, the COO not only had a short discussion with Mr. Crewdson who informed him about the planned hydro power project in Greenacre but also with Prof. John about the qualities of the new turbine. CLAIMANT’s management was, however, not positively aware of Prof. John’s contacts to Ms. Burdin when they appointed Ms. Burdin as its arbitrator. There had, however, been an article in the local newspaper in

Mediterraneo in December 2018 which reported about the patent litigation between Mr. Burdin and Prof. John as it could affect the production of a local producer of turbines for gas-powered thermo power plants. That article formed the basis of RESPONDENT'S allegation that it could not be excluded that CLAIMANT knew about the connection between Ms. Burdin and Prof. John. Furthermore, Prof. John had mentioned the case casually during a break in one of the Riverhead Tidal Power Plant meetings to one of his former assistants who was the project manager for that project but was not involved in the Greenacre project.

14. **Had Prof. John any role in dealing with turbine problems at the Riverhead Tidal Power Plant?** Yes. After the discovery of the defects and RESPONDENT'S decision to replace the complete turbine as its safe operation until the next inspection could not be guaranteed, the operators of the Riverhead Tidal Power Plant had decided on 5 August 2018 to hire Prof. John as their advisor to supervise the replacement of the turbine in the plant. They had been in contact with him before due to his article published in January 2018 in which he had suggested that for the new generation of turbines the fees for the standstill insurance should be recalculated.
15. **When was Prof. John hired by RESPONDENT?** RESPONDENT signed the official retainer with Prof. John, a national of Equatoriana, residing in Danubia, on 20 August 2019. There had, however, already been previous contacts with Prof. John concerning the corrosion and abrasions of the turbine in the Riverhead Tidal Power Plant since September 2018. RESPONDENT had been informed on 25 August 2018 by the authorities about the fraud committed by Trusted Quality Steel. It passed that information to Prof. John on 19 September 2018 after internal investigations had revealed that steel from Trusted Quality Steel had been used for the Riverhead turbines. From the end of September 2018 onwards, when it had been confirmed that the cause for the excessive corrosion and the abrasion had been the steel used which did not meet the certified quality requirements, there had been extensive discussions about the steel to be used for the replacement turbines and the possible causes for the extraordinary corrosion and abrasion in the two turbines in the Riverhead Tidal Power Plant. During a break in a meeting in November 2018 concerning the progress made with the replacement turbine for the Riverhead Tidal Power Plant, RESPONDENT'S representative and Prof. John discussed the possible effects of the steel problems for other turbines not used in salt-water. Prof. John stated that based on his experience he would assume that such turbines, even if produced with the same deficient steel, would be much less affected by corrosion and abrasion. He assumed, that only in 5% of the cases corrosion and abrasion would be of such an extent that the turbines could not operate for at least six to ten years but would have to be replaced immediately after the first inspection. Prof. John made, however, clear that though he was fairly confident about his assumption it would have to be verified by proper testing. The operators of the Riverhead Tidal Power Plant had no objections against the retainer of Prof. John by RESPONDENT in this arbitration.
16. **Did RESPONDENT already provide Prof. John with documents which are part of these arbitration proceedings?** Prof. John was given CLAIMANT'S Request for Arbitration and subsequently RESPONDENT'S Response but not the letter accompanying both submissions. He did not know that Ms. Burdin was the arbitrator nominated by CLAIMANT.
17. **Are there other experts available in the field of hydro power plants that could work as a substitute for Prof. John?** There are three other well-known experts available who speak English and have comparable qualifications and experience in arbitration or litigation. RESPONDENT has, however, never worked with any of these other experts. By contrast, there is a close contact with Prof. John as two of his former assistants have been working

for RESPONDENT since 2005 and are now at the second management level directly below the board of management. Therefore, Prof. John has been invited to the presentation of the new R-27V turbine in 2013. Furthermore, the two former assistants were hired in 2005 as the result of their work as tribunal appointed experts jointly with Prof. John in an arbitration in 2004 in which RESPONDENT had been involved. At the time RESPONDENT had been impressed by the expert evidence provided by Prof. John.

18. **Has RESPONDENT been implementing any test to examine the quality of the steel received?** No. RESPONDENT relies on the certificates issued by the independent and certified companies such as TechProof which are usually supplied with the steel by the producer.
19. **When were the turbines delivered and installed?** Delivery of the R-27V took place on 20 May 2018 and the installation was finalized on 20 August 2018 when the turbines were properly connected to the generator.
20. **When was RESPONDENT informed by the authorities about the fraud by Trusted Quality Steel?** The authorities informed RESPONDENT on 25 August 2018 about the discoveries made from the materials taken during the dawn raid on 26 June 2018. As different people had been responsible for the turbines in the Riverhead Tidal Power Plant and the Greenacre Pump Hydro Power Plant and the information about the fraud had reached the CEO's office during his annual leave no conclusions had been drawn before the start of the acceptance test on 12 September 2018 as to whether the turbines at the Greenacre plant could have been affected. If the notice had not reached TurbinaEnergia during the holiday time it seems likely that the threat of a use of potentially defective steel would have been noticed before the start of the acceptance test.
21. **Have there been any other incidents involving steel produced by Trust Quality Steel, except for the Riverhead incident?** No further incidents are known, but that may also be due to the fact that turbine producers do not want to report about problems encountered with their turbines.
22. **Are there certificates signed by Mr. Maddoff that are linked to the Greenacre project?** That cannot be answered due to the loss of data by RESPONDENT.
23. **Are there any discrepancies between the Renewables Daily News (CLAIMANT Exhibit C 3) and the Hydro-Energy-Worldwide article mentioned in CLAIMANT Exhibit C 4?** No, and the report is reliable.
24. **What evidence is the CLAIMANT relying on while asserting that the steel has been "most likely" negatively affected?** CLAIMANT's conclusion is solely based on the fact that Trusted Quality Steel was RESPONDENT's main supplier providing around 70% of the steel used at the time.
25. **Was the mistake made by the RESPONDENT's internal product management essential to the non-identification of the frauded steel alloy?** In 2017, an employee had accidentally erased a number of back-up files for the years 2015 - 2017. Subsequently, RESPONDENT's IT system including its internal product management had been hacked and most of the data had been frozen and could not be retrieved from a back-up. Without the loss of data, it would at least have been possible to determine which charges of steel were used for the production of which turbine and thus to determine whether steel from Trusted Quality Steel had been used or not. However, as reports had been forged by Trusted

Quality Steel it cannot be excluded that it would still not have been possible to determine whether the particular charge had been properly examined or not.

26. **When was RESPONDENT made aware of the inclusion of the penalty clause in the tender agreement between CLAIMANT and the city of Greenacre?** RESPONDENT was informed about the penalty clause during a meeting in January 2018.
27. **Why were the turbines in the Riverhead Tidal Power Plant checked after only two years, considering that the inspections were set for three years after installation?** The R-27V Francis Turbine was originally construed for use in freshwater pump hydro power stations and RESPONDENT had no previous experience with the use of its turbines in saltwater. Since the owner of the Riverhead Tidal Power Plant did not insist on long inspection intervals and had no previous experience with tidal power plants itself it was agreed that the first inspection would take part after two years followed most likely by three years sequences.
28. **What is the production capacity of RESPONDENT regarding R-27V Francis Turbines?** RESPONDENT had ten production lines in its two plants which can operate at the same time. If they are all ten used for R-27V Turbines, the production of each turbine would last for twelve months.
29. **How many Francis Turbines R-27V has RESPONDENT produced and installed?** In addition to the turbines in the Riverhead Tidal Power Plant which were the first sold, and those in the Greenacre project which were the fourth set of turbines, 6 other turbines out of which four were installed in a project in Ruritania and are due for inspection in December 2020 and two were installed in a project in Danubia which will be inspected for the first time in January 2021.
30. **In which manufacturing process would the exposure to extreme heat have the potential of affecting the anticorrosive features of the steel?** In both manufacturing processes, *i.e.* that of the production of the steel and that of the production of the turbines. The main difference is that when the excessive heat exposure already occurs during the production of the steel the complete charge is defective. If it occurs during the production of the turbine during welding it may be that only particular parts are affected where excessive heat is used during welding.
31. **Is it possible that TurbinaEnergia could have produced either or both of the Greenacre turbines without using any steel from Trusted Quality Steel?** Yes. Each turbine is made of a separate batch of steel delivered and at the time of production there was sufficient steel from other producers potentially available that the turbines could have been produced with that steel.
32. **Can it be assumed that the metal used in the turbines will corrode faster in saltwater compared to freshwater?** There is certainly a high likelihood. On the other hand, the Greenacre turbines have to handle a much higher pressure from the waterhead when in use.
33. **If the RESPONDENT is obliged to replace the turbines, can we be sure that the steel used in the replacement turbines will in no case have forged documentation concerning the quality control of the steel and therefore have the required quality?** Yes. After being informed about the fraud, RESPONDENT returned all steel it had received from Trusted Quality Steel and thereafter only purchased from different suppliers.

34. **What exactly does CLAIMANT request to exchange – the whole R-27V Francis Turbines or their runners?** CLAIMANT would prefer to have the whole turbine replaced. Should that not be possible, it wants at least the replacement of the turbine runner with its blades which is that part of the turbine which is exposed to the greatest stress. Consequently, it is the part which is the most susceptible for corrosion and abrasion and the greatest likelihood (estimated at 5% by the expert Prof. John based on his experience but without detailed examination) of needing replacement already after two years, if produced with defective steel. For all other parts, the likelihood that they have to be replaced already during the first inspection is extremely small but cannot be excluded completely.
35. **What would the metallurgical examination necessary to prove the deficiency of the steel require and when would it be undertaken?** Depending on the extent of corrosion discovered after the opening of the turbine the intensity of the examination would differ. If the corrosion discovered during the inspection is within the limits which can still be considered normal, an examination could be done with a handheld device after the turbine has been opened at the Greenacre Hydro Power Plant. Should the corrosion or abrasion be greater than expected at least three of the most affected parts would be removed from the turbine and would have to be sent to an outside laboratory to undergo a thorough examination as to the composition of the steel and the allocation of the various alloy atoms within the steel, in particular around welding joints. The examination would lead to the destruction of the parts which would then have to be replaced in the turbine by identical parts to be joined by welding.
36. **Does RESPONDENT have any other projects where turbines with the same characteristics as in Greenacre would be needed?** In principle, every turbine is to a certain extent customized for the particularities of each plant. However, the turbines produced for Greenacre could easily be used for other plants but would most likely not reach optimal results in relation to output, unless all parameters of that plant were identical.
37. **What is the production and installation time of one turbine?** Provided sufficient personnel and production slots are available each turbine could be produced within eight months in three shifts per day. That can, however, only be done for six turbines at any time. If all production lines are in use the production will take 12 months. Installation as well as deinstallation of one turbine will take between five and six weeks. Due to the size of the turbine house in Greenacre at least for two weeks of this installation time only one turbine can be installed while for the rest parallel works are possible. An ordinary inspection where the turbine is merely opened but not deinstalled will take three weeks.
38. **Will RESPONDENT be able to produce the turbines by September 2020 if the Tribunal orders replacement in April and how will it achieve it?** Yes, due to the fact that the non-customized parts of the turbine have already been produced for the delayed project and could be used for the replacement turbines for the Greenacre project.
39. **What is the "preferential rate" being offered by the RESPONDENT for the replacement turbines which are nearly identical to the R-27V turbines?** They were offered a reduction on the normal price of 4 million US\$ of 10%.
40. **What is the amount of the revenue from possible energy sales per a month?** The amount fluctuates considerably depending on the actual sales. Greenacre Energy, the local energy supplier and presently the only customer of CLAIMANT, pays a stable monthly fee of 300,000 US\$ independent of any actual use for the reserve capacity of 500 MW which CLAIMANT provides and its contribution to grid stability irrespective of whether energy is produced or not. In addition, Greenacre Energy pays CLAIMANT for the energy produced

and used by it, if the demand exceeds the supply of wind and solar energy. The revenue to be generated by that depends on the price paid by CLAIMANT for pumping the water into the reservoir on the hilltop and the price paid by Greenacre Energy for the energy used. In its internal planning CLAIMANT has calculated with an average of 300,000 US\$ per month.

41. What are the costs associated with the various scenarios for the parties involved?

In light of the uncertainty as to the outcome of the inspection and the remedial actions which have to be taken both parties have agreed to make internal calculations for several scenarios based on joint assumptions as to rough costs associated with the various investigative and corrective measures, prospective loss of profit per day of downtime (average 20,000 US\$) and penalties to be paid to the Community of Greenacre due to the downtime (average 30,000 US\$) (see Appendix I). Both Parties are aware that such assumption may prove to be wrong due to developments of the market and do not take into account other reputational or political losses and effects and the figures are simplified averages not taking into account fluctuations in demand or the costs for inspections. Nevertheless, the Parties have agreed that these figures may influence the arbitral tribunal in its decision should it consider the costs to be relevant. Furthermore, while both parties agree to the overall costs associated with each scenario they differ in relation to the who has to bear such costs in light of the contractual provisions in particular the cap and the limitations in relation to lost profit. The first scenario is based on CLAIMANT's request to prefabricate turbine runners while for the other scenarios decisions are only taken on the basis of the findings of the inspection. The percentages have been agreed on a preliminary basis between the Parties and are based on estimates by the Parties but may have to be verified by the respective experts.

42. Would Greenacre invoke the penalty clause in the Sales Agreement already at the inspection and reparation in September/October 2020? Yes.

The project has been highly controversial and is under close scrutiny of the general public in Greenacre. Due to elections in 2021 no politician wants to be seen to be lenient towards a major company. Thus, it is very likely that Greenacre Energy, which has taken over the rights of the Community of Greenacre arising under the original agreement, will ask for a penalty, but will probably agree to apply the more lenient third year standard of availability of 305 days to calculate the penalty. Furthermore, while Greenacre Energy in principle has the right to terminate the contract for cause it is unlikely that it will do so in the present case. There is no alternative source of energy supply available at present. It can be assumed, however, that with the need to purchase energy from the plant in Ruritania the officials in Greenacre will put considerable pressure upon CLAIMANT and ask for concessions in other areas.

43. To what extent can RESPONDENT recover any losses caused by replacement of turbines from Trusted Steel? That is not yet clear.

Due to the problems encountered with the steel and the involvement in a cartel which both make Trusted Quality Steel open to damage claims it cannot be excluded that the extent of such claims would result in a need to file for insolvency.

44. Are the two stacks of additional batteries (each with 50 MW) recharged with the excess energy from the solar and wind energy? Yes.

45. What would the damages amount to if the turbine of the Greenacre Hydro Power Plant would break due to the corrosion and cavitation problems? Should a blade of the turbine break it is highly likely the whole turbine would be so severely damaged by the blade and the water pressure that it would have to be replaced. That would require the production of a completely new turbine, which would take between eight and twelve months, unless

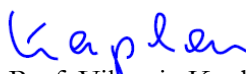
certain parts have already been prefabricated. In the past, there have been cases where the destruction was not limited to the turbine and its inner parts but also affected the complete plant due to a complete destruction of the outer part of the turbine resulting in an uncontrolled water spill into the turbine house. In such cases the repair of the plant often took several years and would lead to costs which were close to those for the construction of the plant.

46. **Is the reference in RESPONDENT's Exhibit R 4 to "Trusted Steel Company" referring to Trusted Quality Steel? Yes.**
47. **Is the Arbitration Law of Mediterraneo and Equatoriana also based on the UNCITRAL Model Law? Yes.**
48. **What are the rules regarding the burden of proof in the relevant jurisdictions? In all three countries the prevailing view is that in international sales contracts governed by the CISG, the CISG also governs the burden of proof.**
49. **Do Equatoriana and Mediterraneo have a bilateral agreement for the enforcement of foreign judgements? Yes.**
50. **Are Mediterraneo, Equatoriana and Danubia contracting states to the Hague Choice of Courts Convention? Yes.**
51. **What is the reputation of the courts of Mediterraneo? They have a good reputation and there is no doubt that they would guarantee a fair trial. Consequently, RESPONDENT has no problems submitting to those courts.**
52. **Is equal treatment of the parties in regard of asymmetrical agreements of crucial importance and therefore part of the public policy in Equatoriana? Yes.**
53. **Is the CISG considered to be part of "Danubian Substantive Law" as selected in Article 21 Sales Agreement? Yes.**
54. **For the purposes of Articles 28 and 45 of the CISG, and Article 7.2.2 of the UNIDROIT Principles, are there any provisions under Danubian law that would prevent a court from entering a judgment for specific performance for a similar contract? No.**
55. **Are CLAIMANT and RESPONDENT free to use the calculations of damages and refer to them in their arguments? Yes.**
56. **Will the teams get access to the expert report one week before the oral hearings? No.**

The Arbitral Tribunal would like to apologize for the wrong date in the letter by which Procedural Order No 1 was sent. It should be dated 4 October 2019.

Vindobona, 2 November 2019

For the Arbitral Tribunal


Prof. Viktoria Kaplan
Presiding Arbitrator

APPENDIX I
to Procedural Order
No 2

Scenario	Period of Downtime	Penalty	Loss per Day	Loss per Month	Penalty per Month	Loss and Penalty in Total	Subsequent Acquisition Costs	Repair Costs	Total Costs	Estimated Likelihood
	months	months	US \$	US \$	US \$	US \$	US \$	US \$	US \$	%
1. Prefabrication of both turbines	3	1	20.000	600.000	900.000	2.700.000	8.000.000		10.700.000	
2. Inspection, without findings	2		20.000	600.000		1.200.000			1.200.000	25%
3. Inspection, minor repairs required	6	4	20.000	600.000	900.000	7.200.000		3.000.000	10.200.000	35%
4. Inspection, considerable repairs required	9	7	20.000	600.000	900.000	11.700.000		5.000.000	16.700.000	35%
5. Inspection, replacement required	12	10	20.000	600.000	900.000	16.200.000	8.000.000		24.200.000	5%

Table 1: Internal Calculations of the Parties