

**IN THE GENERAL DIVISION OF
THE HIGH COURT OF THE REPUBLIC OF SINGAPORE**

[2024] SGHC 107

Originating Application No 1165 of 2023

Between

DGE

... Claimant

And

DGF

... Defendant

JUDGMENT

[Arbitration — Award — Recourse against award — Setting aside]

TABLE OF CONTENTS

INTRODUCTION.....	1
FACTS.....	2
THE PARTIES	2
2012 CONTRACT	2
2013 CONTRACT	3
LIMITED WARRANTY	5
DISCOVERY OF BACKSHEET CRACKS	6
THE ARBITRATION	7
THE AWARD.....	8
<i>The Limited Warranty was a Third-Party Warranty.....</i>	<i>8</i>
<i>F's Independent Warranty claim was rejected</i>	<i>10</i>
<i>The AAA backsheets / Modules were defective</i>	<i>10</i>
<i>The Tribunal had jurisdiction over the dispute.....</i>	<i>11</i>
E'S GROUNDS FOR SETTING ASIDE THE AWARD	12
GROUND 1 (RELATING TO THE TRIBUNAL'S JURISDICTION)	14
RELEVANT PROVISIONS	14
E'S CASE	14
F'S CASE.....	15
DECISION	16
GROUND 2 (RELATING TO THE THIRD-PARTY WARRANTY ISSUE).....	20

RELEVANT BACKGROUND	20
<i>Paragraph 63(c) of E's Statement of Rejoinder</i>	20
<i>Witness Statements</i>	22
<i>First day of the Hearing</i>	22
<i>Sixth day of the Hearing</i>	26
<i>Eighth day of the Hearing</i>	27
<i>Final day of the Hearing</i>	28
(1) F's oral closing statement	28
(2) E's oral closing statement	29
(3) Agreed directions on the list of issues and post-hearing briefs	31
<i>Finalised List of Issues</i>	32
<i>PHBs</i>	34
<i>RPHBs</i>	36
E'S CASE	36
F'S CASE	38
DECISION	40
<i>Art 34(2)(a)(i) of the Model Law</i>	40
<i>Art 34(2)(a)(ii) of the Model Law, s 24(b) of the IAA and Art 18 of the Model Law</i>	40
(1) There was no breach of the fair hearing rule	41
(2) There was no prejudice to E	53
<i>Art 34(2)(a)(iii) of the Model Law</i>	56
<i>Art 34(2)(a)(iv) of the Model Law</i>	61
<i>Conclusion</i>	64
GROUND 3 (RELATING TO CL 5.3 OF THE 2013 CONTRACT)	64
RELEVANT BACKGROUND	64

E’S CASE	66
F’S CASE.....	66
DECISION	67
<i>Art 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA</i>	<i>67</i>
<i>Art 34(2)(a)(iii) of the Model Law</i>	<i>69</i>
<i>Art 34(2)(a)(iv) of the Model Law.....</i>	<i>70</i>
<i>Conclusion.....</i>	<i>70</i>
GROUND 4 (RELATING TO THE REPRESENTATIVE SAMPLE ISSUE)	70
E’S CASE	70
F’S CASE.....	71
DECISION	72
<i>Arts 34(2)(a)(ii) and (iii) of the Model Law and s 24(b) of the IAA</i>	<i>72</i>
<i>Arts 34(2)(a)(ii) and (iv) of the Model Law and s 24(b) of the IAA.....</i>	<i>76</i>
<i>Conclusion.....</i>	<i>78</i>
GROUND 5 (RELATING TO THE NO RECALL ISSUE).....	78
E’S CASE	78
F’S CASE.....	78
DECISION	79
GROUND 6 (RELATING TO THE INSUFFICIENT ELECTRICITY, SYSTEM PROTECTION AND NO CONTACT FACTORS)	82
E’S CASE	82
F’S CASE.....	83
DECISION	83
<i>Insufficient Electricity Factor</i>	<i>83</i>

<i>System Protection Factor</i>	86
<i>No Contact Factor</i>	87
<i>Conclusion</i>	88
GROUND 7 (RELATING TO THE SYSTEM DESIGN AND MICROCLIMATE ISSUES)	89
E’S CASE	89
F’S CASE	90
DECISION	90
GROUND 8 (RELATING TO THE CISG DURABILITY ARGUMENT)	92
E’S CASE	92
F’S CASE	93
DECISION	94
<i>Art 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA</i>	94
<i>Art 34(2)(a)(iii) of the Model Law</i>	96
<i>Art 34(2)(a)(iv) of the Model Law</i>	97
<i>Conclusion</i>	98
CONCLUSION	98

This judgment is subject to final editorial corrections approved by the court and/or redaction pursuant to the publisher's duty in compliance with the law, for publication in LawNet and/or the Singapore Law Reports.

DGE

v

DGF

[2024] SGHC 107

General Division of the High Court — Originating Application No 1165 of 2023

Kristy Tan JC
4, 5 April 2024

25 April 2024

Judgment reserved.

Kristy Tan JC:

Introduction

1 HC/OA 1165/2023 (“OA 1165”) is an application by [DGE] (“E”) to set aside the Partial Award on Jurisdiction and Liability dated 17 August 2023 (“Partial Award”) as corrected by the Corrections to the Partial Award dated 2 October 2023 (together, “Award”) issued by a three-member arbitral tribunal (“Tribunal”) in two consolidated arbitrations (“ARB 1” and “ARB 2” respectively, and together, “Arbitration”). The Arbitration is seated in Singapore and conducted under the International Arbitration Act 1994 (“IAA”) and the UNCITRAL Arbitration Rules (with new article 1, paragraph 4, as adopted in 2013) (“UNCITRAL Rules 2013”).

2 [DGF] (“F”) is the claimant and E is the respondent in the Arbitration. F’s claim in the Arbitration was that E supplied photovoltaic (“PV”) modules

(in common parlance, solar panels) with allegedly defective AAA backsheets (ie, backsheets made of a material comprising three layers of polyamide) (“AAA Modules”). The Arbitration was bifurcated into a liability phase and a remedies phase. By the Award, made in the liability phase, the Tribunal found that 365,000 AAA Modules supplied by E were inherently defective. The remedies to be awarded will be determined in the final award. In OA 1165, E advances no less than eight distinct grounds for setting aside the Award.

Facts

The parties

3 F is part of a group of companies that carry out different functions within the construction value chain. F’s main function is to procure and supply building materials, including PV modules, to two group companies that build residential houses in various cities in Country X.¹ E is a company whose business includes manufacturing materials used in the PV industry.²

2012 Contract

4 In September 2012, F inquired if E could supply PV modules.³ E understood that the PV modules purchased by F would be “installed into [F’s] PV systems for the houses it would construct”.⁴ The parties executed a two-page Purchase Agreement dated 25 December 2012 for F’s purchase of 50,000 PV

¹ Affidavit filed by E on 29 November 2023 (“E’s 1st Affidavit”) at exh YLL-1 (“Exh YLL-1”), tab 16: Witness Statement of Mr SS dated 7 August 2020 filed on behalf of F (“Mr SS’ WS”) at para 1.

² E’s 1st Affidavit at para 11.

³ E’s 1st Affidavit at para 13.

⁴ Exh YLL-1, tab 20: Witness Statement of Ms LYA dated 11 February 2021 filed on behalf of E (“Ms LYA’s WS”) at para 15.

modules for US\$7.3m (“2012 Contract”).⁵ The 2012 Contract referred to F as the “Buyer” and E as the “Seller”; referred to an “[E] Limited Warranty” (cl 1); contained an arbitration clause (cl 10); and provided for the agreement to be governed by Singapore law and for the United Nations Convention on Contracts for the International Sale of Goods (opened for signature 11 April 1980), 1489 UNTS 3 (entered into force 1 January 1988) (“CISG”) to apply (cl 10).

2013 Contract

5 On 28 January 2013, the parties further entered into a PV Module Sales Contract for F’s purchase of 450,000 PV modules for US\$59.85m (“2013 Contract”).⁶ The 2013 Contract specified F as the “Buyer” and E as the “Seller”; contained provisions relating to warranty and inspection (cll 1.3 and 5); provided for the agreement to be governed by Singapore law and for the CISG to apply (cl 11); contained an arbitration clause (cl 12); appended a document titled “Limited Warranty for PV Modules” (“Limited Warranty”)⁷ (Appendix 2); and stipulated that the main terms of the contract prevailed over the appendixes in the event of conflict (cl 21). Prior to executing the 2013 Contract, F had proposed amendments to the Limited Warranty, which were rejected by E. E stated that the Limited Warranty was a “standard document insured by [E’s] Insurance company” in respect of which E “can NOT change any words”. The parties agreed instead to the inclusion of what now appears as cl 5.4 in the 2013 Contract.⁸

⁵ Exh YLL-1, tab 36.

⁶ Exh YLL-1, tab 37.

⁷ Exh YLL-1, tab 37 at pp 1768–1772.

⁸ Exh YLL-1, tabs 41 and 42: E-mails exchanged between F and E’s representatives on 28 January 2013; Exh YLL-1, tab 1: Award at [88].

6 I reproduce the relevant terms in cll 1.3 and 5 of the 2013 Contract:

1.3 “Warranty Start Date” means the date of sale to the first customer installing (for their own use) the Goods or starting at the latest 6 months after the Goods arrive on Buyer’s site, whichever occurs earlier.

...

5.1 [E] Limited Warranty

The warranty period for material defects and workmanship is 5 (five) years from the Warranty Start Date.

The warranty period with respect to power output continues for a total of 25 years from Warranty Start Date, the first 12 years at 90% rated power output at STC and the remaining 13 years at 80% rated power output at STC, provided however that STC means the standard test condition which is defined in Limited Warranty for PV Modules as attached hereto.

Other stipulation of warranty is included in Appendix 2-Limited Warranty for PV Modules. If the repair and replacement of Goods cannot be done in accordance with Limited Warranty for PV Modules, Seller shall compensate 100% for defective Goods.

...

5.3 Inspection after Arrival

The Buyer shall claim replacement of defective or damaged products within 30 days calculating from arriving date on Buyer’s site in [Country Z] by showing inspection report by the Buyer. The Buyer shall carry out such inspection in compliance with [E] Visual Inspection Standard (attached hereto as Appendix 3) and EL Judgement Operation Standard (attached hereto as Appendix 4). ...

...

5.4 Additional agreement on Limited Warranty for PV Modules

The inspection institute required under Limited Warranty for PV Modules shall be either Fraunhofer ISE or TÜV Rheinland.

...

Limited Warranty

7 As the Tribunal observed, unlike the 2013 Contract, the Limited Warranty does not use the words “Buyer” and “Seller”; the terminology used for creating rights and obligations is instead “[E]” and “Customer”.⁹ The chapeau of the Limited Warranty states:

[E] ... warrants its Modules’ performance starting from the date of sale to the *first customer installing (for their own use) the Modules (“Customer”)* or starting at the latest 6 months after Modules dispatch from the [E] factory, whichever occurs earlier (the “Warranty Start Date”). [emphasis added]

8 Under cl 1 (titled “Limited Product Warranty – Five Year Repair or Replacement”), E warranted that the PV modules were “free from defects, if any, in materials and workmanship under normal application, use, installation and service conditions for a period of sixty (60) months from the Warranty Start Date”. Under cl 2 (titled “Limited Peak Power Warranty – Limited Remedy”), E warranted certain power output of the PV modules.

9 Clause 3 provides for certain exclusions and limitations pertaining to warranty claims made to E.

10 Clause 4 (titled “Limitation of Warranty Scope”) excludes other warranties and obligations or liabilities on the part of E:

This Warranty as set forth herein is expressly in lieu of and excludes all other express or implied warranties, including but not limited to warranties of merchantability and of fitness for particular purpose, use, or application, and all other obligations or liabilities on the part of [E]...

⁹ Exh YLL-1, tab 1: Award at [151].

11 Clause 5 (titled “Obtaining Warranty Performance”) sets out how a Customer is to go about making a “claim covered by this Warranty”.

12 Clause 6 (titled “Transferability”) states to whom the warranty is given:

This warranty is extended to the original end-user purchaser, and is also transferable to any subsequent owner of the location or holder of the product when Module(s) remain at their original installed location upon satisfactory proof of succession or assignment. [emphasis added]

13 Clause 8 (titled “Disputes”) is a specific disputes clause that refers to expert determination. It states:

In case of any discrepancy in a warranty-claim, a first-class international testing institute, like Fraunhofer ISE, TÜV Rheinland or Arizona State University, shall be enlisted to judge the claim finally. All fees and expenses shall be born[e] by the losing party, unless otherwise awarded. The final explanation right shall be borne by [E]. [emphasis added]

Discovery of backsheet cracks

14 In 2013, E delivered the PV modules purchased under the 2012 Contract and 2013 Contract (together, “Contracts”) to F in Country Z. F onsold them to two group companies. The PV modules were installed on the rooftops of residential houses built by those companies in Country X.¹⁰ 365,000 of the 500,000 PV modules produced and supplied by E were AAA Modules (*ie*, modules with AAA backsheets). In late 2017, F discovered that the backsheets of PV modules supplied by E and installed in Country X had developed cracks.¹¹ E and F engaged in discussions and negotiations following this discovery.¹²

¹⁰ Exh YLL-1, tab 17: Witness Statement of Mr YA dated 7 August 2020 filed on behalf of F (“Mr YA’s WS”) at paras 7–8.

¹¹ Exh YLL-1, tab 16: Mr SS’ WS at para 26.

¹² Exh YLL-1, tab 1: Award at [111]–[119].

The Arbitration

15 On 23 November 2018, F commenced ARB 1 under the 2012 Contract and ARB 2 under the 2013 Contract against E. The arbitrations were subsequently consolidated.

16 F claimed that E had supplied PV modules with defective backsheets that had developed cracks. F's claims against E were for: (a) breach of E's obligation under cl 1 of the 2012 Contract, cl 5.1 of the 2013 Contract and cl 1 of the Limited Warranty to supply PV modules which were free from material defects; (b) breach of E's obligation under Art 35 of the CISG to deliver PV modules of quality conforming with the Contracts, which included fitness for the purposes for which PV modules would ordinarily be used; (c) breach of E's obligation under s 14 of the Sale of Goods Act 1979 ("SOGA") to supply PV modules of satisfactory quality, which included fitness for the purposes for which PV modules are commonly supplied, safety and durability; (d) breach of E's common law duty of care; and (e) misrepresentation.¹³

17 E's defences included that cl 4 of the Limited Warranty had the effect of excluding F's claims under Art 35(2) of the CISG and s 14 of the SOGA. E also argued that the Tribunal did not have jurisdiction over the dispute because cl 8 of the Limited Warranty operated as either a precondition to, or carve-out from, arbitration under the arbitration clauses in cl 10 of the 2012 Contract and cl 12 of the 2013 Contract ("Arbitration Clauses").¹⁴

¹³ Exh YLL-1, tab 3: ARB 1 Statement of Claim ("SOC") at paras 79–85, 100 and 102–105; and tab 4: ARB 2 SOC at paras 86–91, 106 and 108–111.

¹⁴ Exh YLL-1, tab 5: ARB 1 Statement of Defence ("Defence") at paras 120, 127 and 214–223; and tab 6: ARB 2 Defence at paras 114, 121 and 208–217.

18 The hearing of the liability phase of the Arbitration (“Hearing”) took place over ten days from 10–14 and 17–21 October 2022. On the first day, the Tribunal raised an issue of whether the Limited Warranty was a third-party warranty that was to be invoked by the end-user of the PV modules (“Third-Party Warranty”) as opposed to applying between E and F (“Third-Party Warranty Issue”). F conveyed its position, on the final day of the Hearing, that: (a) the Limited Warranty was a Third-Party Warranty; (b) F dropped its claim under the Limited Warranty; and (c) cl 1 of the 2012 Contract and cl 5.1 of the 2013 Contract gave rise to an independent warranty apart from the Limited Warranty (“Independent Warranty”) under which F also claimed against E. E objected to F taking these new positions. Notwithstanding, the Third-Party Warranty Issue was included in the finalised list of issues to be addressed in the parties’ Post-Hearing Briefs (“PHBs”) and Reply Post-Hearing Briefs (“RPHBs”). The parties addressed E’s procedural objections to the raising of the Independent Warranty claim and the Third-Party Warranty Issue, as well as substantive arguments on these matters, in their PHBs and RPHBs.

The Award

19 I summarise the key findings and determinations made in the Award, to be elaborated at the relevant junctures.

The Limited Warranty was a Third-Party Warranty

20 The Tribunal found that the Limited Warranty was a Third-Party Warranty and could not be relied upon between the parties in the Arbitration (at [234] and [260(a)]). The text of the Limited Warranty indicated that it was not addressed to F: (a) cl 6 extended the warranty to the “original end-user purchaser”. That was not F. F incorporated the PV modules into its PV systems for installation in its customers’ residences (at [218]–[219]); (b) the parties to

the Limited Warranty were identified as “[E]” and “Customer”, in contrast to the Contracts which denoted E as “Seller” and F as “Buyer” (at [219]); (c) the definition of “Warranty Start Date” turned on the date of sale of the PV modules “to the first customer installing [them] (for their own use)”, consistent with the arrangement for F to provide PV systems incorporating the modules for the “use” of its customers (at [220]); and (d) cl 2 referred to both “Customer” and “end-user Customer” as being equivalent (at [220]). Clause 1 of the 2012 Contract and cl 5.1 of the 2013 Contract, which referred to the Limited Warranty, constituted contractual promises by E to F. An enforceable warranty from the manufacturer was a well-established means for F to give assurance to its own customers about the quality of the component parts in the PV systems installed (at [221]). The Limited Warranty provided for the procedure to determine claims which, if in its interests, F could enforce for the benefit of its customers (at [222]). E’s argument that F was the “first customer” under the Limited Warranty because F had installed PV modules at its factory in Country Z was rejected as legally and factually misconceived (at [223]–[228]).

21 While F took the position that the Limited Warranty was a Third-Party Warranty on the final day of the Hearing and this “was not pleaded, nor raised in the opening, nor addressed in the evidence” (at [229]), E had been given a fair opportunity to address this issue (at [231]). The Tribunal raised this issue of interpretation on the first day of a two-week hearing, before the examination of any witnesses (at [56]). E’s opportunity to deal with the issue extended to any factual dimension of interpretation, including the objective contractual context. Evidence of subjective intent, which E claimed it was unable to adduce, would not have assisted in determining the relevant context (at [232]). The adequacy of the opportunity was reinforced by the fact that it was “almost inconceivable that any contextual facts could lead to a conclusion directly opposite to an

express statement, such as that found in [cl 6 of the Limited Warranty], as reinforced by the whole text” (at [233]). The parties had the opportunity to address the issue more fulsomely in their extensive post-hearing briefs (at [56]).

F’s Independent Warranty claim was rejected

22 The Tribunal “believe[d] that E did have adequate opportunity to address the issue of the Independent Warranty” but found it “unnecessary to express a concluded opinion” (at [235]–[247]). The Tribunal rejected F’s claim that there was an Independent Warranty based on cl 1 of the 2012 Contract and cl 5.1 of the 2013 Contract (at [252]–[254] and [256]–[258]). The only ‘independent warranty’ given to F was in cl 5.3 of the 2013 Contract, which provided that F, after inspecting the PV modules, could make a claim for replacement of “defective or damaged products” within 30 days of their arrival at F’s factory in Country Z; however, that was not what was done here (at [255] and [260(c)]).

The AAA backsheets / Modules were defective

23 After extensively canvassing the evidence and submissions, the Tribunal concluded that the AAA backsheets / Modules were inherently defective (at Section VIII). First, the AAA backsheets were inherently defective because they were inherently susceptible to degradation and/or cracking (at [357], [395(a)] and [400(c)]). Second, the AAA Modules were inherently defective in two respects (at [395(b)], [400(c)] and [422]): (a) they were not durable, in view of the rate of degradation of their component AAA backsheets (at [368]); and (b) they were a safety hazard, in view of a real connection between backsheet cracks in AAA backsheets and electrical current leakage (at [389]).

24 The Tribunal rejected E's defences, including E's defence that F had failed to prove that the cracking in the AAA Modules was due to an inherent defect and not (a) the microclimatic conditions to which the modules were subjected and (b) F's PV systems design (at [457]–[467]).

F succeeded in its claim under Art 35(2) of the CISG

25 The Tribunal found that cl 4 of the Limited Warranty did not limit or exclude F's CISG claims because the entire Limited Warranty (including cl 4) was a Third-Party Warranty that did not operate between E and F (at [402]–[404]). The Tribunal found that E had breached Arts 35(2)(a) and (b) of the CISG. The AAA Modules were not fit for purpose because they were inherently defective in terms of both durability and safety, and could not be onsold (at [412]–[443]). In light of the determination on F's CISG claim, F was not entitled to claim certain other reliefs and/or it was unnecessary to determine if F's other causes of action were viable (at [444]–[455]).

The Tribunal had jurisdiction over the dispute

26 The Tribunal found that it had jurisdiction to hear and determine the dispute in the Arbitration (at [550]). Given the Tribunal's finding that the Limited Warranty was a Third-Party Warranty, cl 8 of the Limited Warranty only provided a method for resolving disputes about warranty claims by third-party consumers against E (at [538]). The incorporation by reference of the Limited Warranty into the Contracts did not change this view (at [539]–[547]). In any event, to the extent that cl 8 could be said to modify the Arbitration Clauses, whether by imposing a precondition or carve-out, this was only in respect of "any discrepancy in a warranty-claim" as stated in cl 8. This meant warranty claims made under the Limited Warranty, but F was no longer making

such claims in the Arbitration. There was no basis to extend the definition of “warranty-claim” under the Limited Warranty to include F’s Independent Warranty claim, which, in any event, the Tribunal had rejected (at [548]).

E’s grounds for setting aside the Award

27 E’s eight grounds for setting aside the Award are:

- (a) Ground 1: The Tribunal had no jurisdiction to decide the dispute.
- (b) Ground 2: The Tribunal should not have considered or determined the Third-Party Warranty Issue.
- (c) Ground 3: The Tribunal should not have considered or decided that cl 5.3 of the 2013 Contract was an ‘independent warranty’ given to F that did not cover latent defects.
- (d) Ground 4: The Tribunal failed to consider and address whether the 60 modules that F sent to Fraunhofer ISE (“Fraunhofer”) for testing (“F’s Fraunhofer Tests”) were a representative sample of all 365,000 AAA Modules (“Representative Sample Issue”).
- (e) Ground 5: The Tribunal failed to consider and address F’s failure to recall the AAA Modules or inform its customers of any defect or safety hazard in the AAA Modules (“No Recall Issue”).
- (f) Ground 6: The Tribunal failed to consider and address the following factors regarding the possibility of an electric shock:
 - (i) whether any leakage electrical current flowing to an exposed surface on the backsheet would be extremely low due to the high volume resistivity of ethylene vinyl acetate (“EVA”),

and in hypothetical weather conditions involving rain heavy enough to cause water to get onto the backsheets, there was unlikely to be sufficient sunlight to generate a high enough voltage to cause an electric shock (“Insufficient Electricity Factor”);

(ii) whether any potential risk of an electric shock can be averted or reduced through other common features of PV systems and active protection devices (“System Protection Factor”); and

(iii) whether there was no real risk of a person coming into accidental physical contact with an affected PV module, and whether any leakage electrical current flowing to an exposed surface on the backsheet would not flow to conductive mounting hardware which were not to be directly attached onto the backsheet (“No Contact Factor”).

(g) Ground 7: The Tribunal failed to consider and address the effect of the following factors on the degradation of the AAA backsheets:

(i) the design of F’s PV system in which the AAA Modules were incorporated (“System Design Issue”); and

(ii) the microclimatic conditions to which the AAA Modules were subjected in F’s PV system (“Microclimate Issue”).

(h) Ground 8: The Tribunal should not have considered or decided on F’s argument that the AAA Modules were not durable as an aspect of F’s claim under Art 35 of the CISG (“CISG Durability Argument”).

28 E relies variously on Arts 34(2)(a)(i), (ii), (iii) and (iv) of the UNCITRAL Model Law on International Commercial Arbitration 1985 (“Model Law”) and s 24(b) of the IAA as the legal bases for setting aside the Award on the above grounds. At the hearing of OA 1165, E placed the most weight on Ground 2, and was content to rest on its written submissions for Grounds 3 to 8. I will address each ground in turn.

Ground 1 (relating to the Tribunal’s jurisdiction)

Relevant provisions

29 The Arbitration Clause in cl 10 of the 2012 Contract states:

... Any dispute, controversy or claim arising out of or relating to this Agreement, or the breach, termination or invalidity thereof will be submitted for arbitration to the Singapore International Arbitration Cent[re] under UNCITRAL Arbitration Rules. ...

30 The Arbitration Clause in cl 12 of the 2013 Contract states:

All disputes in connection with this Contract or the execution thereof shall be settled through amicable negotiations. In case no settlement can be reached, the disputes may then be submitted for arbitration by three arbitrators to the Singapore International Arbitration Cent[re] under UNCITRAL Arbitration Rules. ...

31 Clause 8 of the Limited Warranty is reproduced at [13] above.

E’s case

32 E claims that the Tribunal had no jurisdiction over the disputes in the Arbitration. The Contracts incorporated the Limited Warranty. Clause 8 of the Limited Warranty requires “any discrepancy in a warranty-claim” to be submitted to a “first-class international testing institute” for final

determination.¹⁵ Clause 5.4 of the 2013 Contract, which specifies Fraunhofer or TÜV Rheinland as the “inspection institute required under Limited Warranty”, was included as a result of the parties specifically negotiating cl 8 of the Limited Warranty.¹⁶ Clause 8 operates as a precondition to, or carve-out from, arbitration in respect of “disputes relating to technical issues (but not legal issues) arising from the Modules”, *ie*, whether the PV modules “malfunction[ed] or bec[a]me inoperative due to defect in material or workmanship” during the warranty period (as stated in cl 1 of the Limited Warranty). It is sensible for technical disputes to be referred to testing institutes, which are technical experts. Any non-technical and legal issues are to be determined by arbitration.¹⁷ As cl 8 was not complied with, the Award should be set aside under Arts 34(2)(a)(i) and/or (iii) of the Model Law.¹⁸

F’s case

33 F argues that the application of cl 8 of the Limited Warranty is limited to warranty claims made under cll 1 and 2 of the Limited Warranty. As F no longer made any claim under the Limited Warranty, cl 8 is inapplicable to the dispute.¹⁹ Even if the Limited Warranty is applicable, any conflict between the Arbitration Clauses in the Contracts and cl 8 of the Limited Warranty must be resolved in favour of the former. Clause 21 of the 2013 Contract provides for the supremacy of the terms of the 2013 Contract over the Limited Warranty.²⁰

¹⁵ E’s Written Submissions dated 21 March 2024 (“EWS”) at para 85.

¹⁶ EWS at para 86.

¹⁷ EWS at paras 94–95 and 98.

¹⁸ EWS at paras 111 and 112.

¹⁹ F’s Written Submissions dated 21 March 2024 (“FWS”) at paras 29(c) and 33(d).

²⁰ FWS at para 29(d).

Further, nothing in the wording of the Arbitration Clauses suggests that cl 8 of the Limited Warranty created a precondition to, or carve-out from, arbitration.²¹

Decision

34 I am to determine *de novo* E’s challenge to the Tribunal’s jurisdiction (*AKN and another v ALC and others and other appeals* [2015] 3 SLR 488 (“*AKN*”) at [112]). In my view, this challenge can be disposed of shortly by a determination of the scope of cl 8 of the Limited Warranty. This is because, regardless of whether the Limited Warranty is a Third-Party Warranty and whether cl 8 of the Limited Warranty operates as a precondition to, or carve out from, arbitration, cl 8 can only possibly apply in respect of the particular matters covered by its scope. As I will explain, none of the matters determined by the Tribunal in the Arbitration fell within the scope of cl 8, and therefore, on no view can it be said that the Tribunal did not have jurisdiction.

35 In my judgment, the application of cl 8 is limited to warranty claims made *under the Limited Warranty*, as opposed to, as E claims, “any disputes relating to technical issues ... arising from the [PV modules]” (whether arising under the Limited Warranty or otherwise).²² This must be so because cl 8 specifically refers to “any discrepancy in a *warranty-claim*” [emphasis added]. While the term “warranty-claim” is not explicitly defined in the Limited Warranty, the interpretation that it refers to a warranty claim made under the Limited Warranty is borne out when cl 8 is read with and in the context of the other clauses in the Limited Warranty.

²¹ FWS at paras 29(e)–(f).

²² EWS at para 95.

36 First, cl 3(a) states: “*Warranty claims*, in any event, shall be filed in writing to [E] or its authorized distributors within the applicable warranty period and not beyond the last day of the applicable period of time *as stated above*” [emphasis added]. Clauses 1 and 2 “stated above” provide, respectively, for a Limited Product Warranty and a Limited Peak Power Warranty, which are in effect for specified periods of time from the Warranty Start Date. The warranty claims contemplated under the Limited Warranty are thus claims under the two specific warranties stipulated in cll 1 and 2 of the Limited Warranty.

37 Second, cl 4 states: “*This Warranty as set forth herein* is expressly in lieu of and excludes all other express or implied warranties ...” [emphasis added]. The capitalised term “Warranty” clearly refers to the warranties given in cll 1 and 2 of the Limited Warranty. Given that cl 4 purports to exclude “all other express or implied warranties” *apart from the warranties under the Limited Warranty*, the reference to “warranty-claim” in cl 8 (and to which cl 8 applies) can only refer to a claim made under the Limited Warranty.

38 Third, cl 5 details steps that a Customer must take “[i]f the Customer has a justified ***claim covered by this Warranty***” [emphasis added in italics and bold italics]. The reference to a “warranty-claim” in cl 8 must similarly refer to a claim “covered by”, *ie*, made under, the Limited Warranty. It would make no sense for the Limited Warranty to cover only claims made under the warranties stipulated in cll 1 and 2 of the document, but for cl 8 within the same document to apply to claims not covered by the Limited Warranty.

39 In fact, as pointed out by F, E appears to have implicitly conceded this interpretation when E argued in its written submissions that the phrase “any discrepancy in a warranty-claim” (in cl 8 of the Limited Warranty) referred to any disputes relating to whether the PV modules “malfunction[ed] or bec[a]me

inoperative due to defect in material or workmanship during the period of sixty (60) months from the Warranty Start Date”²³ (which are the terms of the Limited Product Warranty given in cl 1 of the Limited Warranty).

40 E argues that because the Limited Warranty is incorporated by reference into the Contracts, cl 8 of the Limited Warranty thus somehow applies to all technical claims brought by F in connection with the Contracts.²⁴ I do not agree. I accept that the Limited Warranty was incorporated by express reference into the Contracts (*Bintai Kindenko Pte Ltd v Samsung C&T Corp and another* [2019] 2 SLR 295 at [58]). However, as a matter of construction, there is no reason to change the meaning or the scope of the application of cl 8 of the Limited Warranty because the Arbitration Clauses in the Contracts and cl 8 of the Limited Warranty can operate coherently and consistently with each other. The Arbitration Clauses would cover disputes arising from non-Limited Warranty claims. Where these involve technical issues, the parties are at liberty to engage testing institutes and technical experts to provide evidence, which was precisely the course taken in the Arbitration (to no disadvantage of E, as noted by the Tribunal²⁵). There is thus no reason to depart from the clear and express wording of the Limited Warranty to expand the scope of cl 8 to non-Limited Warranty claims. For completeness, I do not think the fact that cl 5.4 of the 2013 Contract was included after the parties’ negotiation on cl 8 of the Limited Warranty, has the effect of expanding the scope of cl 8 of the Limited Warranty; cl 5.4 of the 2013 Contract simply narrowed the choice of inspection institutes “under [the] Limited Warranty” to Fraunhofer and TÜV Rheinland. If anything, the specific reference in cl 5.4 of the 2013 Contract to the “Limited Warranty”

²³ EWS at para 95.

²⁴ EWS at para 98.

²⁵ Exh YLL-1, tab 1: Award at [549].

reinforces the parties' intention for the procedure under cl 8 of the Limited Warranty to apply only to Limited Warranty claims.

41 Turning to the disputes that were before and determined by the Tribunal, I find that they did not fall within the scope of cl 8 of the Limited Warranty.

42 First, F brought claims under the Contracts and the Limited Warranty, the CISG and the SOGA and for breach of common law duty of care and misrepresentation (see [16] above). Of these, F's CISG, SOGA, common law breach of duty and misrepresentation claims were clearly not claims made under the Limited Warranty. Clause 8 of the Limited Warranty did not apply to them.

43 Second, in relation to F's contractual claim, F abandoned its claim under the Limited Warranty. The Limited Warranty claim was thus no longer before and not determined by the Tribunal.

44 Third, while the Tribunal decided the following issues relating to the Limited Warranty: (a) whether the Limited Warranty was a Third-Party Warranty;²⁶ (b) whether the Limited Warranty was incorporated into the 2012 Contract;²⁷ and (c) whether the Tribunal had jurisdiction over F's claims in light of cl 8 of the Limited Warranty,²⁸ these *issues of law* were not *claims* under the Limited Warranty. Clause 8 of the Limited Warranty did not apply to them.

45 Fourth, while the Tribunal also determined whether there were other 'independent' warranties (apart from the Limited Warranty) arising under the

²⁶ Exh YLL-1, tab 1: Award at [218]–[234].

²⁷ Exh YLL-1, tab 1: Award at [193]–[199].

²⁸ Exh YLL-1, tab 1: Award at [536]–[550].

Contracts (see [22] above), these issues did not relate to the Limited Warranty. Clause 8 of the Limited Warranty did not apply to them.

46 It follows therefore that all of the matters that were ultimately before and determined by the Tribunal in the Arbitration fell within the scope of the Arbitration Clauses, which are widely framed and should be generously construed (*Larsen Oil and Gas Pte Ltd v Petroprod Ltd (in official liquidation in the Cayman Islands and in compulsory liquidation in Singapore)* [2011] 3 SLR 414 at [19]). I thus conclude that the Tribunal had jurisdiction over the disputes in the Arbitration. Given this conclusion, it is unnecessary to comment on E’s asserted legal bases under the Model Law for its jurisdictional challenge.

47 I decline to set aside the Award on Ground 1.

Ground 2 (relating to the Third-Party Warranty Issue)

Relevant background

Paragraph 63(c) of E’s Statement of Rejoinder

48 In E’s Statements of Defence (“Defence”), one argument pleaded by E was that F’s Limited Warranty claim failed because the “Warranty Start Date” as defined in the Limited Warranty was “the date of sale to the first customer installing (for their own use) the Modules (“Customer”)”. F was the “Customer” under the Limited Warranty as it had installed and incorporated the PV modules into its own PV systems in its factory in Country Z. The Warranty Start Date was thus the date the Contracts were executed. F had not satisfied certain requirements specified in the Limited Warranty for making a claim under the Limited Warranty within the applicable warranty period (ARB 1 Defence at paras 132–136 and ARB 2 Defence at paras 126–130).

49 In F’s Statement of Reply (“Reply”),²⁹ one of F’s responses was that the Warranty Start Date was not the date on which the Contracts were executed because F was not the “Customer” under the Limited Warranty. F was expressly defined as the “Buyer” in the 2013 Contract. In addition, E’s contention treated F as the “first customer”, which made no sense as F was the one and only buyer under the Contracts. F also did not install the PV modules “for their own use” because F onsold them to its group companies for installation on the rooftops of residential houses built in Country X (at paras 48–52 and 55).

50 In E’s Statement of Rejoinder (“Rejoinder”),³⁰ E reiterated that the Warranty Start Date was the date of the Contracts on the basis that F was the “customer” in the definition of “Warranty Start Date” and under the Limited Warranty (at paras 57 and 63–64). E argued, in para 63(c) of its Rejoinder, that F would have no standing to claim under the Limited Warranty if it was not the “Customer” as alleged:

As a concomitant, if [F] is indeed not the “Customer” as alleged, then it follows that [F] has no standing to make any claim against [E] under the Limited Warranty. The terms of the Limited Warranty exclusively refer to the “Customer” and is expressly extended only to “the original end-user purchaser” and “transferable to any subsequent owner of the location or holder of the product when the Module(s) remain at their original installed location upon satisfactory proof of succession or assignment” (see Clause 6 of the Limited Warranty). According to its own case and submissions, [F] falls into none of the categories of persons, i.e. of “Customer”, “end-user purchaser” or “subsequent owner”, and accordingly has no standing to claim under the Limited Warranty against [E]. [emphasis in original; footnote in original omitted]

51 E’s argument in para 63(c) of its Rejoinder was reiterated in E’s written opening statement where E submitted that: “if [F] is indeed not the “Customer”

²⁹ Exh YLL-1, tab 7.

³⁰ Exh YLL-1, tab 8.

as alleged, then it follows that [F] has no standing to make any claim against [E] under the Limited Warranty” [emphasis in original] (at para 36).³¹ This point was picked up by the Tribunal on the first day of the Hearing (see [55] below).³²

Witness Statements

52 In the parties’ witness statements, the parties set out their discussions, negotiations and correspondence leading up to the execution of the Contracts, including the few instances where drafts of contractual documents were exchanged.³³ This history and the parties’ communications when the dispute arose were summarised in the Award (at [65]–[95] and [109]–[120]).

First day of the Hearing

53 The parties had submitted to the Tribunal “a draft of the agreed list of issues” on 19 September 2022 (“Pre-Hearing Draft LOI”),³⁴ but there was no finalised list of issues going into the Hearing. The presiding arbitrator (“Chairman”) noted at the outset that: “We may need to revise the list of issues depending on the course of the proceedings.”³⁵

³¹ Exh YLL-1, tab 10.

³² Exh YLL-1, tab 70: Transcript, 10 October 2022 (“Day 1 Transcript”) at pp 50:23–51:4.

³³ Filed by E – Exh YLL-1, tab 20: Ms LYA’s WS at paras 7–40; tab 21: Witness Statement of Mr LXR dated 11 February 2021 at paras 18–43; tab 28: Third Witness Statement of Ms LYA dated 17 July 2022 at paras 6–24; tab 29: Third Witness Statement of Mr LXR dated 17 July 2022 at paras 6–8; and tab 34: Fourth Witness Statement of Mr LXR dated 26 September 2022 at paras 23–24. Filed by F – Exh YLL-1, tab 16: Mr SS’ WS at 8–25; tab 17: Mr YA’s WS at paras 9–17; tab 24: Third Witness Statement of Mr SS dated 16 February 2022 at paras 3–5 and 17; tab 25: Third Witness Statement of Mr YA dated 18 February 2022 at paras 3–13; and tab 32: Fourth Witness Statement of Mr YA dated 9 September 2022 at paras 10–11.

³⁴ Exh YLL-1, tab 57.

³⁵ Exh YLL-1, tab 70: Day 1 Transcript at p 3:6–7.

54 After F’s counsel, Mr Lai Yew Fei (“Mr Lai”), made his oral opening statement in the morning, the Tribunal raised the Third-Party Warranty Issue:³⁶

[FIRST ARBITRATOR]: ... Mr Lai, there is an issue in my mind which *affects both parties in different ways* about the limited warranty. ...

I really don’t understand the case on the limited warranty and I will need assistance from both of you. The warranty in this sense is a warranty, as a terminology, that is used throughout the world by every producer of any physical object. Any time you buy anything, you get a warranty. That warranty has got nothing to do with the arcane common law of contracts distinguishing a warranty from a condition. It also has nothing to do between the purchaser – say, the retail shop, most of these – there are millions of these every day throughout the world. They are all called warranties. They are issued by say, retail shops or other distributors, and they are something given by the manufacturer of a good to the purchaser to distribute. It’s got nothing to do – that contract here is of that kind, the limited warranties of that kind. Your client is the purchaser. It’s not a customer. It is not the ultimate end user. I mean, apparently you use some for testing purposes in [Country Z], five or whatever it was, fine, if you win on the warranty you get compensation for those five. That kind of warranty cannot be extended to anything else. I don’t know what we are doing here. *It is just not an arrangement relevantly for the respondent that can claim the exclusion clause in it*, and in your case, *I don’t think it is a promise that is made to you*. It is a promise that is made for you to pass on to your customers, and that is the way it works throughout the world. As I said, there are a million of these a day happening all the time. It has nothing to do between the manufacturer and the retail shop or the distributor.

And, when you look at the structure here of the difference in time, the difference in terminology, the difference in timing, mainly the six months, if you don’t get it out of [sic] quick enough, then the warranty start date starts running, otherwise it is when the customer installs it. And all of these distinctions indicate that we’ve been down what – I am not yet convinced it is an appropriate track for either of you, in the sense that *you*

³⁶ Exh YLL-1, tab 70: Day 1 Transcript at pp 45:23–49:5.

rely on it for one purpose and the respondent relies on it for another purpose.

I want to put it on the table. You may or may not want to respond to it straight away. At this stage I need a lot of convincing that the limited warranty has got anything to do with your contractual relationship between the parties before us.

CHAIRMAN: It might be wise to think about what [the First Arbitrator] has said and – unless you wish to answer now and come back with a considered view on it. But it is entirely up to you whether you wish to answer straight away or not.

MR LAI: I will speak first. Thank you, [First Arbitrator] for the point and the note. I will take that into account. I will look into it, for sure. I have some initial views but let me go a bit deeper into it before I give my full views and response, if I may be given some time.

CHAIRMAN: Of course.

[SECOND ARBITRATOR]: If I may hasten to add that of course the views of [the First Arbitrator] are not fully formed and fixed views at all, nor do they represent the entire tribunal, but *it is an issue which has occurred to us and we're very anxious to hear from you on that and also from the other side*, and we'll see where it goes.

MR LAI: I understand. And it pertains to the limited warranty document.

...

CHAIRMAN: So, as I understand it, *the consequences of the suggestion, of the question posed by [the First Arbitrator], if it were accepted by the tribunal, would mean that what would be left essentially for the tribunal would be to consider the claims based on the CISG[,] Sale of Goods Act, your negligence claim and possibly your misrepresentation claim* but it is a matter which you should think about, as indeed the tribunal must carefully consider too. We can proceed when you've had an opportunity to think about it further.

[emphasis added]

55 E’s counsel, Mr Tan Chee Meng SC (“Mr Tan”), then presented his oral opening statement. He began by addressing what the First Arbitrator had said:³⁷

MR TAN: ... I also note what [the First Arbitrator] has stated. I will try and address it in passing, but there are bigger issues that will have to be considered in greater detail. We have proceeded quite firmly on the limited warranty only because that was the case that was advanced by the claimant, right. *We will certainly look at the other aspects and implications raised by this tribunal in the course of these proceedings.*

...

[FIRST ARBITRATOR]: Can I ask whether you deleted the sentence in the original opening statement we got... where *you say “If the claimant’s submission is correct, then they would have no standing to sue under the limited warranty because they are not a party to it”?* That’s in your submission.

MR TAN: Yes. *That was in the context of – perhaps to some extent in the context of what you have just articulated, in the sense that who is this warranty for? Is the warranty meant for [F] as the buyer or is the warranty intended as the customers of [F]? And that’s why I say there are greater implications that I would like to look at in particular.*

[emphasis added]

56 Later in his oral opening statement, Mr Tan expressed that E took the position that the Limited Warranty applied between E and F (*ie*, was not a Third-Party Warranty):³⁸

MR TAN: ... I should say first and foremost that our position on the limited warranty is in response to the pleaded position of the claimants. There is no question that the claimants considered themselves to be bound and had acted consistently with that position, to be bound by the limited warranty and the terms and conditions therein. When you look at the negotiations between parties leading to the 2013 contract, there were

³⁷ Exh YLL-1, tab 70: Day 1 Transcript at pp 50:8–51:11.

³⁸ Exh YLL-1, tab 70: Day 1 Transcript at pp 82:12–83:17.

obvious references to limited warranty, and the extension in the course of the limited warranty was something that was incorporated in clause 5.4 of the 2013 contract. *So the position that we now take is that the limited warranty is a warranty between [F] and [E].*

Now, if, indeed, the limited warranty doesn't bind parties but was intended for the customers of [E], then the entire pleaded case takes a new complexion, what locus standi does [F] have to sue [E] for this contract, right? But I'm going to proceed on the basis of the parties' pleaded case and depending on what my learned friend will say in response to [the First Arbitrator] this morning, I reserve my position to respond accordingly.

CHAIRMAN: Yes, I think it is entirely appropriate to proceed on the basis of the pleaded case.

MR TAN: Yes.

CHAIRMAN: What occurred this morning was a question which was a very interesting question, and of course *the tribunal looks forward to receiving the parties' comments.* You may say – well, you will say whatever you want to say and if any consequences flow from that, we will deal with them.

[emphasis added]

Sixth day of the Hearing

57 On the sixth day of the Hearing, the Chairman reminded the parties of the Third-Party Warranty Issue:³⁹

CHAIRMAN: ... The other matter is the matter which was raised by [the First Arbitrator] about the warranty, the limited warranty, which is in an appendix to the 2013 agreement. And we would like responses from the parties on that. That will certainly have to be dealt with before we break and terminate – end the hearing. Do counsel have anything they can offer on their views with regard to the warranty issues? Mr Lai?

³⁹ Exh YLL-1, tab 74: Transcript, 17 October 2022 (“Day 6 Transcript”) at pp 104:3–105:16.

MR LAI: We are still pondering over that issue deeply. We haven't arrived at a landing point on that yet. Perhaps we could update the tribunal on Friday?

CHAIRMAN: I mean, there are few possibilities, as far as I see it. One is that one or both parties wish to put argument on it. *It was touched on in one of the earlier pleadings but just touched on, referred to.* In which case we would want the post-hearing briefs to consider it. *If neither party wish to pursue that line of argument, then the tribunal may or may not wish to deal with it in the award. The tribunal hasn't decided and won't decide until we hear parties' submissions.*

MR TAN: It is the claimant's claim, and I think the issues raised by [the First Arbitrator] has a greater impact on the claimants than us. Therefore, it may be useful, in the interests of time and effort, if the claimant could let us know their position. Not the full arguments, but whether they are pursuing or not pursuing the line as highlighted by [the First Arbitrator].

CHAIRMAN: Yes. *If the claimant were not pursuing it, that does raise an interesting question, and that is whether the tribunal could deal with it in the award when neither party had advocated it to any considerable extent, although it has been touched on and it being a question of law, not fact, as to what is the true import of the warranty. The tribunal may well be entitled to deal with it even though the parties did not wish to make or put forward substantive arguments on it.* But the tribunal has made no decision and will not today, certainly. So in a sense, the ball is in your court, Mr Lai, to come back to us.

[emphasis added]

Eighth day of the Hearing

58 On the eighth day of the Hearing, the Tribunal reminded Mr Lai that it was awaiting F's views on the Third-Party Warranty Issue.⁴⁰

⁴⁰ Exh YLL-1, tab 76: Transcript, 19 October 2022 at p 99:13–24.

Final day of the Hearing

(1) F's oral closing statement

59 On the final day of the Hearing, during F's oral closing statement, Mr Lai conveyed F's position that, based on its terms, the Limited Warranty was a Third-Party Warranty.⁴¹ Mr Lai relied on, among other terms, cl 6 of the Limited Warranty which states: "This warranty is extended to the original end-user purchaser...".⁴²

60 Mr Lai next addressed the implications that F's position on the Third-Party Warranty Issue had on F's claims under the Limited Warranty. He began by acknowledging E's pleading in its Rejoinder that if F was not the "Customer" under the Limited Warranty, the Limited Warranty did not apply to F and F had no standing to invoke the Limited Warranty (see [50] above).⁴³ He further acknowledged that if the Limited Warranty did not apply to F, it would be "difficult" for F to pursue its claim under the Limited Warranty.⁴⁴ He then expressly confirmed that F was no longer pursuing claims for breach of warranty under the Limited Warranty.⁴⁵ However, he contended that cl 1 of the 2012 Contract and cl 5.1 of the 2013 Contract provided for a "standalone" warranty, separate from the Limited Warranty, which F would still pursue.⁴⁶

⁴¹ Exh YLL-1, tab 77: Transcript, 21 October 2022 ("Day 10 Transcript") at p 10:3–10.

⁴² Exh YLL-1, tab 77: Day 10 Transcript at pp 10:24–11:18.

⁴³ Exh YLL-1, tab 77: Day 10 Transcript at p 14:10–16.

⁴⁴ Exh YLL-1, tab 77: Day 10 Transcript at p 16:18–25.

⁴⁵ Exh YLL-1, tab 77: Day 10 Transcript at pp 17:3–12 and 19:25–20:8.

⁴⁶ Exh YLL-1, tab 77: Day 10 Transcript at pp 15:24–16:9 and 17:5–18:19.

(2) E's oral closing statement

61 In E's oral closing statement, Mr Tan expressed that F's position was "new" and "rather surprising".⁴⁷ He asserted that it would "cause severe prejudice to [E] if [F] were to change their case at this stage of the proceedings in the post-hearing brief".⁴⁸ The Chairman questioned why there would be prejudice to E, given that F was *dropping* claims (under the Limited Warranty), and the following exchange took place:⁴⁹

CHAIRMAN: How would that cause you severe prejudice? The claimant put forward a claim and alleged various causes of action, as it were. One was on the limited warranty, a second one was on the [CISG], the third on the Sale of Goods Act, a fourth on the misrepresentation, et cetera. Now they've dropped their cause of action based on the limited warranty – although I say they have substituted a cause of action based on the warranty and the contract, not in the appendices. But dropping a cause of action, how does that prejudice you other than costs?

MR TAN: Well, it does, because *when you look at the limitation of the warranty scope, there is an exclusion in clause 4 of the limited warranty* –

CHAIRMAN: Yes.

MR TAN: – to Sale of Goods Act and CISG.

CHAIRMAN: Yes.

MR TAN: As to whether the limited warranty applies or not is partly a question of law and partly a question of fact. If I may refer you to slide 85.

[FIRST ARBITRATOR]: What is the question of fact?

MR TAN: The question of fact is the relationship which [F] and/or [E] has to the definition of "customer" in their limited warranty. And we are entitled to ask and explore the issue of transferability in clause 6 of the limited warranty, ... which is the warranty is extended to the

⁴⁷ Exh YLL-1, tab 77: Day 10 Transcript at p 23:7–13.

⁴⁸ Exh YLL-1, tab 77: Day 10 Transcript at p 63:10–13.

⁴⁹ Exh YLL-1, tab 77: Day 10 Transcript at pp 63:19–68:14.

original end user purchaser. So who is the end user purchaser? That is not an area that we were exploring with any of their witnesses.

[FIRST ARBITRATOR]: What witness could you ask about that?

MR TAN: I could have asked [Mr SS] as to what position they had taken. Because to me it was quite clear that the position they had taken was between the buyer and the seller. If they are now taking the position that it is an issue between the third party purchasers of their contract, I would like to know how that works out. I would like to know how that position is sustainable. Because *our position is, under the limited warranty, there is a limitation in terms of their causes of action under SOGA and CISG.*

[FIRST ARBITRATOR]: I understand that, but that is a legal point. What I'm finding difficult to understand is the question of fact for me to decide.

MR TAN: If you look at slide 86, sir.

[FIRST ARBITRATOR]: Yes, I've looked at that.

MR TAN: Yes, the interpretation of contract, it is not purely a question of law. *Interpretation of contract involves a factual matrix that has to be placed, or parties' pre and post-conduct.*

[FIRST ARBITRATOR]: At the time of entry into the contract.

MR TAN: I beg to differ. At the time of entry into contract, and the Singapore cases have also demonstrated that post-contract behaviour is also relevant.

[FIRST ARBITRATOR]: Yes, I do know that. That is not the context. Anyway, I'm looking forward to being educated on the Singapore law.

...

CHAIRMAN: ... I'm not sure you've completely answered my question about how dropping a cause of action has affected you. I realise that you rely on an exclusionary provision in the limited warranty. So, just looking at this as a logical matter, if a claim based on limited warranty is withdrawn, *that doesn't* – or does it, I don't think it does – *prevent you from saying, no, the limited warranty is between the claimant and the respondent, and we rely on an exclusion in the limited warranty as a defence.*

MR TAN: I take a different view because the limited warranty, the withdrawal of which has got implications, it has got implications in terms of the claims that [F] can – the defence of the claims that [F] can mount against us. And I think I’m entitled to ask [F’s] witnesses in terms of the basis upon which they say they are now mounting a claim outside of the limited warranty. That is factual.

CHAIRMAN: But, Mr Tan, *from the outset, the claimant put a whole series of claims on CISG, sale of goods, negligence, et cetera. So if they dropped the limited warranty, the CISG has stood from the beginning, the Sale of Goods Act claim has stood from the beginning.* I’m not saying it is a good claim, but a claim made at the outset. I don’t completely follow your reasoning at this point of time.

MR TAN: Yes, I hear your concerns and I will address this in greater detail.

CHAIRMAN: That’s why we’ve got the post-hearing brief.

MR TAN: That’s right.

[emphasis added]

(3) Agreed directions on the list of issues and post-hearing briefs

62 Before the Hearing ended, there was detailed discussion on how the list of issues was to be prepared and finalised, and what the parties’ post-hearing briefs were to address.

63 The Tribunal directed that *the post-hearing briefs were to be based on the list of issues*, and the list of issues had to be sighted and *approved or settled by the Tribunal*. Crucially, the parties *agreed* to this:⁵⁰

CHAIRMAN: ... Now, the format of the post-hearing brief was going to be predicated on the list of issues, but the tribunal hasn’t yet got your revised list of issues and *the tribunal will only order post-hearing submissions based on the list of issues once we have sighted and approved it or settled it.*

⁵⁰ Exh YLL-1, tab 77: Day 10 Transcript at pp 71:4–20 and 73:23–74:10.

So I think it is desirable to *have a list of issues which is agreeable to the tribunal and, as I said, if necessary, settled by the tribunal*. So I think [that is] the first step in the process. And, assuming we do have an agreed list of issues, *are we agreed that the post-hearing brief should deal with those issues as set down in the list?*

MR TAN: Yes, sir.

CHAIRMAN: Mr Tan, Mr Lai?

MR LAI: Yes. We will try to adhere to the list of issues, except that – yes, we will try to adhere to the list.

...

CHAIRMAN: If you are unable to agree on any aspect of the list of issues, then, of course, *you can put in your competing views. So this will have to be settled by the tribunal.* ...

I guess the date for the lodgement of the brief and the reply brief will be dependent on the date when you agree on the – will commence from the date – time period should commence on the date from which you agree the list of issues.

MR TAN: Well, I would prefer that we have a date set for agreement, *failing which we will just refer to the tribunal.*

...

[emphasis added]

Finalised List of Issues

64 On 5 November 2022, the parties exchanged their respective drafts of the proposed list of issues.

65 In F’s 5 November 2022 draft list of issues,⁵¹ F did not include any reference to the Third-Party Warranty Issue as F had confirmed at the Hearing

⁵¹ Affidavit filed by F on 17 January 2024 (“F’s 2nd Affidavit”) at exh SS-2, tab 9.

that it was dropping its claim based on the Limited Warranty, and so far as F was concerned, there was no longer an issue about the Limited Warranty.⁵²

66 In E's 5 November 2022 draft list of issues,⁵³ E stated as an undisputed issue (at s/n 2) that "[F] has confirmed that it is withdrawing its claim under the Limited Warranty, both under the 2012 and 2013 Contracts". E did not expressly state the Third-Party Warranty Issue, but framed as an issue (at s/n 7):

... the relevance, if any, [of] the context and factual matrix leading up to, and following the 2012 and 2013 Contracts, including but not limited to:

- a. negotiations between parties on the terms of the Limited Warranty and the 2012 and 2013 Contracts;
- b. the terms of [the] Contracts / Limited Warranty;
- c. conduct of the parties following the 2012 and 2013 Contracts.

67 F understood by s/n 7 of E's 5 November 2022 draft list of issues that E wanted the Tribunal to decide the Third-Party Warranty Issue.⁵⁴ Thus, when F sent E a consolidated and revised draft list of issues on 8 November 2022,⁵⁵ F included (at s/n 5): "Whether the Limited Warranty is a third party warranty that is to be invoked by the end user" (*ie*, the Third-Party Warranty Issue).

68 On 8 November 2022, E replied to F to reject F's 8 November 2022 draft list of issues on the basis that F had *omitted* many of the issues that had been set out in E's 5 November 2022 draft list of issues. E asserted that it had sought to provide a detailed list of major issues and sub-issues and that F's 8 November

⁵² F's 2nd Affidavit at para 34(a).

⁵³ F's 2nd Affidavit at exh SS-2, tab 10.

⁵⁴ F's 2nd Affidavit at para 34(c).

⁵⁵ F's 2nd Affidavit at para 34(d) and exh SS-2, tab 12.

2022 draft “continue[d] to provide only the broad issues in dispute; omitting any sub-issues”.⁵⁶ Notably, E did not specify any objection to the *inclusion* of the Third-Party Warranty Issue in F’s 8 November 2022 draft list of issues.

69 On 8 November 2022, the parties sent their respective drafts of the list of issues to the Tribunal,⁵⁷ in line with the Tribunal’s direction that in the absence of agreement, individual proposals were to be provided.⁵⁸

70 On 11 November 2022, the Tribunal issued its approved list of issues (“Finalised List of Issues”).⁵⁹ The Finalised List of Issues noted that F withdrew its claim under the Limited Warranty under both Contracts. It specified as an issue (at s/n 5): “Whether the Limited Warranty is a third party warranty that is to be invoked by the end user” (*ie*, the Third-Party Warranty Issue).

PHBs

71 The parties filed their PHBs on 20 January 2023.

72 In F’s PHB,⁶⁰ F duly submitted that the Limited Warranty was a third-party warranty to be invoked by the end-user only and did not apply between E and F (at paras 99–104 and 108). F argued that the Independent Warranty existed pursuant to cl 1 of the 2012 Contract and cl 5.1 of the 2013 Contract and advanced the Independent Warranty claim (at paras 105–122). F added that insofar as E sought to rely on the Limited Warranty to argue that the Tribunal

⁵⁶ F’s 2nd Affidavit at exh SS-2, tab 13.

⁵⁷ F’s 2nd Affidavit at exh SS-2, tabs 14 and 15.

⁵⁸ F’s 2nd Affidavit at exh SS-2, tab 11.

⁵⁹ F’s 2nd Affidavit at exh SS-2, tab 16.

⁶⁰ Exh YLL-1, tab 12.

had no jurisdiction, the argument was misplaced as the Limited Warranty did not apply between E and F; in any event, F was no longer making any “warranty claim” under the Limited Warranty (at para 227).

73 In E’s PHB,⁶¹ E argued that F’s new claim for breach of an Independent Warranty on the premise that the Limited Warranty only applied to E’s end-customers and not F, was unpleaded, out of the scope of submission to the Tribunal and should be dismissed outright (at Section III(C)). E submitted that it would be “a breach of natural justice and cause real prejudice to [E]” to allow F to raise the claim. This was because contractual interpretation is a mixed question of fact and law (at paras 228–230). E cited two main categories of evidence it could purportedly have sought and/or led, *viz*, (a) evidence in relation to the warranty that F issued to its end-users; and (b) evidence from the parties on “whether [they] truly considered whether the Limited Warranty was a third-party warranty which did not apply to [F]” (at para 231):

Indeed, [E] could have sought production of the actual warranty issued by [F] to its end-users, or cross-examine[d] [F’s] witnesses on the same. Questions could be asked on whether [F’s] end-user warranty applied to the whole PV system, or separately for each component, or whether the Limited Warranty was transferred. These questions would have a bearing on the assessment of the interpretation now put forth by [F]. In addition, [E] could have introduced relevant rebuttal evidence in respect of whether the parties truly considered whether the Limited Warranty was a third-party warranty which did not apply to [F]. As [E’s] counsel had highlighted in oral closing submissions, questions could have been put to for example, Mr [SS], regarding the position [F] had taken in respect of the Limited Warranty. [footnote in original omitted]

74 E also made arguments on why, as a matter of contractual interpretation, the Limited Warranty applied to F (at paras 238–246).

⁶¹ Exh YLL-1, tab 13.

RPHBs

75 In F’s RPHB,⁶² F reiterated why the Limited Warranty was a Third-Party Warranty (at para 101). F also submitted that its Independent Warranty claim had been raised in the pleadings and the Finalised List of Issues and that E’s allegation of breach of natural justice was baseless (at paras 104–109).

76 In E’s RPHB,⁶³ E maintained that F should not be allowed to pursue its Independent Warranty claim or its position that the Limited Warranty was a Third-Party Warranty (at paras 113(b) and 220). E submitted that the parties’ contemporaneous correspondence showed that they had considered the Limited Warranty applicable between E and F (at paras 113(c), 118 and 127(d)). The terms of the Limited Warranty were also consistent with F being a “Customer” under the Limited Warranty (at paras 113(c) and 121–124). F’s interpretation of the Limited Warranty as a Third-Party Warranty would also result in a commercially insensible outcome as “the parties could not have intended multiple concurrent liability / compensation where [E] is liable to [F] and all down-stream customers at the same time, for the same defect” (at para 125).

77 Against the above background, I set out the parties’ cases in OA 1165.

E’s case

78 E submits that the Tribunal’s comments on the first day of the Hearing did not mean that the Third-Party Warranty Issue was in play as F did not then take a position on the issue. The Tribunal confirmed that it was “entirely appropriate” for E to proceed on the basis of F’s pleaded case. The issue was

⁶² Exh YLL-1, tab 14.

⁶³ Exh YLL-1, tab 15.

only put in play on the final day of the Hearing when F took the position that the Limited Warranty was a Third-Party Warranty. By then, the evidentiary hearing had closed, “and notwithstanding [E’s] objections, the Tribunal did not give any opportunity to [E] to inquire into and lead evidence on the issue”.⁶⁴ Further, F did not apply to amend its claim, and E was not given an opportunity to file a responsive amended defence and introduce evidence on an amended claim.⁶⁵ Citing *CAJ and another v CAI and another appeal* [2022] 1 SLR 505 (“*CAJ*”), *Phoenixfin Pte Ltd and others v Convexity Ltd* [2022] 2 SLR 23 (“*Phoenixfin*”) and *JVL Agro Industries Ltd v Agritrade International Pte Ltd* [2016] 4 SLR 768 (“*JVL*”), E asserts that where this process is not followed, the new issue falls outside the scope of the submission to arbitration.⁶⁶

79 E submits that it suffered prejudice as it could have adduced further evidence on the Third-Party Warranty Issue, which could show that F’s interpretation was unmeritorious. E cites as examples of “relevant evidence”:⁶⁷

... documents in relation to the parties’ negotiations on the Limited Warranty and cross-examining [F’s] witnesses on those negotiations, seeking production of the actual warranty issued by [F] to its end-users and cross-examine [F’s] witnesses on the same, or industry practices in relation to warranties [*sic*].

80 E submits that because the Tribunal accepted F’s position on the Third-Party Warranty Issue, the Tribunal found that it had jurisdiction; F was entitled to bring claims under the CISG as the exclusion in cl 4 of the Limited Warranty did not apply; and F’s failure to comply with the requirements for a valid claim under the Limited Warranty “did not debar [F’s] claim”. If the Tribunal had “not

⁶⁴ EWS at para 69.

⁶⁵ EWS at para 67.

⁶⁶ EWS at paras 61–66.

⁶⁷ EWS at para 77.

allowed” the Third-Party Warranty Issue, E’s defences based on the Limited Warranty must be considered by the Tribunal and that could reasonably have made a difference to the Tribunal’s decision on liability.⁶⁸

81 For these reasons, E submits that the Award should be set aside under (a) Art 34(2)(a)(ii) of the Model Law, s 24(b) of the IAA and Art 34(2)(a)(iv) read with Art 18 of the Model Law as E did not have a reasonable opportunity to present its case on the Third-Party Warranty Issue;⁶⁹ (b) Art 34(2)(a)(iii) of the Model Law as the Third-Party Warranty Issue was outside the scope of the submission to arbitration;⁷⁰ and (c) Art 34(2)(a)(iv) of the Model Law for non-adherence to the agreed arbitral procedure in Art 20(2) of the UNCITRAL Rules 2013 and paras 20 and 74 of the Tribunal’s Procedural Orders No 1 in ARB 1 and ARB 2 (“PO1s”) as F did not plead its position on the Third-Party Warranty Issue.⁷¹ E also invokes, without elaboration, Art 34(2)(a)(i) of the Model Law.⁷²

F’s case

82 F submits that E had a reasonable opportunity to present its case on the Third-Party Warranty Issue. It was clear from the Tribunal and Mr Tan’s statements on the first day of the Hearing that the issue was a live one in the Arbitration.⁷³ E could have asked any witness any question regarding the Third-Party Warranty Issue if it truly wished to do so.⁷⁴ E also had, and availed itself

⁶⁸ EWS at para 81.

⁶⁹ EWS at para 72.

⁷⁰ EWS at paras 67 and 71.

⁷¹ EWS at paras 78–80.

⁷² EWS at para 5(a).

⁷³ FWS at paras 50–56.

⁷⁴ FWS at paras 57–58.

of, the opportunity to address the Third-Party Warranty Issue in E's PHB and RPHB.⁷⁵ Even if there was a breach of natural justice, E has not suffered any prejudice.⁷⁶ The Tribunal considered it "almost inconceivable" that any of the matters E claimed to have been deprived of an opportunity to raise would have led to a different conclusion on the Third-Party Warranty Issue given the express text of the Limited Warranty.⁷⁷

83 F submits that the Third-Party Warranty Issue fell within the terms of the submission to arbitration as the issue was (a) raised on the first day of the Hearing and the Tribunal consistently reminded the parties to address it; (b) highlighted in E's 5 November 2022 draft list of issues at s/n 7 and contained in the Finalised List of Issues; and (c) addressed in the parties' PHBs and RPHBs.⁷⁸ At the hearing of OA 1165, Mr Lai further referred to E's pleading in para 63(c) of its Rejoinder that F would have no standing to claim under the Limited Warranty if it was not the "Customer" under the Limited Warranty (see [50] above). I understand his point to be that the Third-Party Warranty Issue raised by the Tribunal was not something entirely new.

84 F submits that there was no non-compliance with the agreed arbitral procedure. Paragraph 74 of the POIs provides for a party to advance a new allegation or argument "in exceptional circumstances, with leave of the Tribunal". The Tribunal had granted the parties leave to address the Third-Party Warranty Issue when it asked the parties to do so.⁷⁹ The agreed arbitral

⁷⁵ FWS at paras 61–64.

⁷⁶ FWS at paras 70–71.

⁷⁷ FWS at para 72.

⁷⁸ FWS at paras 75–84.

⁷⁹ FWS at paras 89–93.

procedure in para 74 of the POIs supersedes Art 20(2) of the UNCITRAL Rules 2013.⁸⁰ Even if there had been non-compliance, the Tribunal's decision would not have been different and E has suffered no prejudice.⁸¹ In any event, E never complained about any breach of the agreed arbitral procedure during the Arbitration and is thus barred from doing so now.⁸²

Decision

Art 34(2)(a)(i) of the Model Law

85 E's objections under Ground 2 do not relate to the validity or existence of the parties' arbitration agreements. E has not explained how it is proceeding on Art 34(2)(a)(i) of the Model Law and I discern no basis for E to do so.

Art 34(2)(a)(ii) of the Model Law, s 24(b) of the IAA and Art 18 of the Model Law

86 E relies on Art 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA, having regard to Art 18 of the Model Law, to assert that it had no reasonable opportunity to present its case on the Third-Party Warranty Issue, which is a breach of the fair hearing rule of natural justice. While Art 18 refers to a party having a "full opportunity" to present its case, this simply confers a right to a reasonable opportunity to do so (*JVL* at [145]). In addition to (a) identifying the rule of natural justice allegedly breached, E must establish (b) how it was breached, (c) how the breach was connected to the making of the Award, and (d) how the breach prejudiced its rights (*Soh Beng Tee & Co Pte Ltd v Fairmount Development Pte Ltd* [2007] 3 SLR(R) 86 ("*Soh Beng Tee*") at [29]).

⁸⁰ FWS at para 96.

⁸¹ FWS at para 94.

⁸² FWS at para 95.

(1) There was no breach of the fair hearing rule

87 In respect of the second requirement in *Soh Beng Tee*, I find that E had a reasonable opportunity to present its case on the Third-Party Warranty Issue and there was thus no breach of the fair hearing rule.

88 In my judgment, the Third-Party Warranty Issue became a live issue when the Tribunal put it in play in the morning of the first day of the Hearing. The First Arbitrator expressed the view that the Limited Warranty was a Third-Party Warranty. He highlighted that the Third-Party Warranty Issue “affect[ed] both parties” albeit in “different ways”.⁸³ If the Limited Warranty was a Third-Party Warranty, the implications were that (a) F would not be able to claim on it (“I don’t think it is a promise that is made to [F]”;⁸⁴ the Chairman similarly observed that what would be “left” were the non-Limited Warranty claims⁸⁵; and (b) *E would not be able to rely on the exclusion clause (cl 4) in the Limited Warranty* (“[i]t is just not an arrangement relevantly for the respondent that can claim the exclusion clause in it”⁸⁶). While the First Arbitrator did not require the parties to respond to the issue straightaway, he unequivocally stated that he “put it on the table”⁸⁷ (see [54] above). The Second Arbitrator concurred that: “it is an issue which has occurred to us and we’re very anxious to hear from [F] on that and also from the other side”.⁸⁸ While he added that the First Arbitrator’s views were “not fully formed and fixed” and did not “represent the entire

⁸³ Exh YLL-1, tab 70: Day 1 Transcript at p 45:23–25.

⁸⁴ Exh YLL-1, tab 70: Day 1 Transcript at p 47:2.

⁸⁵ Exh YLL-1, tab 70: Day 1 Transcript at pp 48:21–49:2.

⁸⁶ Exh YLL-1, tab 70: Day 1 Transcript at pp 46:24–47:1.

⁸⁷ Exh YLL-1, tab 70: Day 1 Transcript at p 47:19.

⁸⁸ Exh YLL-1, tab 70: Day 1 Transcript at p 48:13–16.

tribunal”,⁸⁹ this referred to the First Arbitrator’s view that the Limited Warranty *was* a Third-Party Warranty. The Second Arbitrator simply meant that the Tribunal had not pre-determined the Third-Party Warranty Issue; not that the Third-Party Warranty Issue need not be addressed (see [54] above). The Chairman reinforced that the parties “should think about”⁹⁰ and provide their “considered view”⁹¹ on the issue (see [54] above). The statements of all three members of the Tribunal were to clear and consistent effect: *the parties were directed to address the Third-Party Warranty Issue.*

89 During E’s oral opening statement which followed, E proceeded to *stake its position on the Third-Party Warranty Issue*. Mr Tan averred: “the position that we now take is that the limited warranty is a warranty between [F] and [E]”⁹² (see [56] above). E must have taken the position that the Limited Warranty was not a Third-Party Warranty because *E wanted to rely on the terms of the Limited Warranty as part of its positive case against F*. Specifically, it was part of E’s *defence* to F’s CISG and SOGA claims that cl 4 of the Limited Warranty excluded those claims (see [17] above). At this juncture, it was clear that if F chose to abandon its Limited Warranty claim, the only party left advancing any positive case on the Limited Warranty would be E. It would then be for E to prove that the Limited Warranty was not a Third-Party Warranty but applied between E and F. The following two options were open to E from the first day of the Hearing:

⁸⁹ Exh YLL-1, tab 70: Day 1 Transcript at p 48:12–13.

⁹⁰ Exh YLL-1, tab 70: Day 1 Transcript at p 49:3.

⁹¹ Exh YLL-1, tab 70: Day 1 Transcript at p 48:1.

⁹² Exh YLL-1, tab 70: Day 1 Transcript at p 82:18–24.

(a) First, E could adopt the case strategy of hoping that F would maintain its Limited Warranty claim and hoping that the Tribunal would thus not inquire further into the Third-Party Warranty Issue. However, E would have to bear the risk that F would drop its Limited Warranty claim, as F was free to do, in which case the burden would fall on E to establish that the Limited Warranty was not a Third-Party Warranty if E wished to continue invoking the Limited Warranty against F.

(b) Another case strategy option was to assess what further steps (if any) E needed to take to prove that the Limited Warranty applied between E and F and to promptly take those steps in the course of the Hearing (which had just begun), so as to secure E's own positive case on and defence arising from the Limited Warranty. This would include questioning the witnesses on the Third-Party Warranty Issue, if E thought such a course was legally relevant. E possessed the opportunity and relevant information to go down this path – after all, the witnesses had already covered in their witness statements the genesis of the Contracts and their communications regarding the Limited Warranty (see [52] above); and E had already obtained in discovery prior to the Hearing an order for F to produce all documents that made express reference to the Limited Warranty before 25 January 2013, including “internal records / correspondence of [F] and/or its employees”.⁹³

90 As it turned out, E chose the former option and decided to wait and see what position F would take. In the meantime, E decided to proceed on the basis of F's pleaded Limited Warranty claim. Insofar as E was free to choose its tactical and strategic responses to the Tribunal's raising of the Third-Party

⁹³ Exh YLL-1, tab 69 at p 2239.

Warranty Issue, it was, as the Chairman remarked to Mr Tan, “entirely appropriate to proceed on the basis of the pleaded case”.⁹⁴ However, the Chairman’s comment did not mean that the Third-Party Warranty Issue was not in play until F conveyed its position on the issue. The Chairman went on to reiterate that “the tribunal look[ed] forward to receiving the parties’ comments”,⁹⁵ confirming that the Third-Party Warranty Issue was already a live issue (see [56] above).

91 On the sixth day of the Hearing, the Chairman reminded the parties that the Tribunal would like responses on the Third-Party Warranty Issue. Mr Tan suggested that “it may be useful, in the interests of time and effort” for F to convey its position on the issue.⁹⁶ While acknowledging that “the ball [was] in [Mr Lai’s] court” to come back to the Tribunal, the Chairman also alluded to the possibility of the Tribunal addressing the Third-Party Warranty Issue in its arbitral award even if neither party made substantive arguments on it, but stated that the Tribunal had not decided on that⁹⁷ (see [57] above). Again, I do not understand the Chairman’s statements to mean that the Third-Party Warranty Issue was not in play until F conveyed its position on the issue. The Chairman was simply conveying that the Tribunal had not pre-determined how it would deal with the Third-Party Warranty Issue. In fact, the Chairman signalled the possibility of the Tribunal addressing the issue even in the absence of substantive arguments from the parties, given the Tribunal’s view that the issue involved a question of law. At this juncture, it was open to E to re-assess whether its wait-and-see approach was the appropriate strategy if E believed

⁹⁴ Exh YLL-1, tab 70: Day 1 Transcript at p 83:9–10.

⁹⁵ Exh YLL-1, tab 70: Day 1 Transcript at p 83:13–15.

⁹⁶ Exh YLL-1, tab 74: Day 6 Transcript at pp 104:25–105:2.

⁹⁷ Exh YLL-1, tab 74: Day 6 Transcript at p 105:5–16.

there was evidence to be adduced that was relevant to proving that the Limited Warranty applied between E and F.

92 On the final day of the Hearing, F took the position that the Limited Warranty was a Third-Party Warranty and dropped its claim under the Limited Warranty (see [59]–[60] above). E purported in its oral closing statement that the Third-Party Warranty Issue involved questions of fact on the parties’ pre- and post-contractual conduct (see [61] above). That being E’s position, E could have applied, in the course of or even on the final day of the Hearing (which took only half a day), to adduce any further relevant evidence or to seek more time to do so. Given that such an application was never made by E (much less rejected by the Tribunal), I do not think E’s submission that “notwithstanding [E’s] objections, the Tribunal did not give any opportunity to [E] to inquire into and lead evidence on the issue”⁹⁸ accurately reflects the Tribunal’s conduct of the proceedings. To the extent E contends that it needed to adduce evidence to address the Third-Party Warranty Issue, I find that E had a reasonable opportunity to do so. As the Court of Appeal stated in *CJA v CIZ* [2022] 2 SLR 557 (“*CJA*”): “there is a difference between ... a party having no opportunity to address a point ... and a party failing to recognise or take the opportunity which exists”; the latter does not involve a breach of the requirement that a party be given a reasonable opportunity to present its case (at [75]).

93 Further, E had and took the fullest opportunity to address the Third-Party Warranty Issue substantively in its PHB and RPHB (see [74] and [76] above).

94 I disagree with E’s submission that its opportunity to present its case on the Third-Party Warranty Issue was in any way hampered because F did not

⁹⁸ EWS at paras 69 and 75.

amend its pleadings to plead that the Limited Warranty was a Third-Party Warranty.⁹⁹ In my view, there is a qualitative difference between a party advancing a new claim, defence or positive case, and a party abandoning a claim along with the premises underlying that claim. I emphasise that this was a situation where F only did the latter. Once F withdrew its Limited Warranty claim, the only party advancing a positive case on the Limited Warranty, by way of a defence premised on the same, was E. By asserting that cl 4 of the Limited Warranty excluded F's CISG and SOGA claims, E effectively made the anterior averment that the Limited Warranty applied between E and F. E bore the burden of proving this. F did not need to assert that the Limited Warranty was a Third-Party Warranty for the purposes of any of its remaining claims. It was only because E maintained that the Limited Warranty applied between E and F, that F *reactively joined issue* with E on this point. It was also not F's position that any extrinsic facts were relevant to the contractual interpretation of the Limited Warranty. F was content to rest on legal arguments on the Third-Party Warranty Issue, and there is nothing objectionable about the parties developing and responding to legal arguments in their written closing submissions. In these circumstances, if any amendment of pleadings was necessary, it would be for E to first plead the purported extrinsic facts on which it relied to advance its defence that (cl 4 of) the Limited Warranty applied between E and F, before there would be any call for F to file a responsive pleading. The position can be tested this way. If, from the start of the Arbitration, F never made any claim under the Limited Warranty, it would be E pleading in its Defence that the Limited Warranty applied between E and F and that cl 4 of the Limited Warranty barred F from bringing its CISG and SOGA claims. E cannot now turn its burden on its head and contend that it was

⁹⁹ EWS at para 74.

incumbent on F to first amend F's pleadings, when all F did was to abandon its claim under the Limited Warranty. The situation in the present case can be distinguished from those in *CAJ*, *Phoenixfin* and *JVL*.

95 In *CAJ*, the respondent had sought in the arbitration liquidated damages for the appellants' delay in the completion of a plant. In their written closing submissions, the appellants raised for the first time a defence claiming an extension of time so as to reduce the amount of liquidated damages payable ("EOT Defence"). The EOT Defence was based on a condition in the parties' agreements which provided that the time for completion could be extended if the delay was due to any act, omission, default or breach of the agreements by the respondent's subsidiary. The respondent objected to the appellants raising the EOT Defence. The tribunal accepted the EOT Defence. The award was partially set aside on the basis that by ruling on the EOT Defence, the tribunal exceeded the scope of the parties' submission to arbitration and/or the award had been made in breach of natural justice. The Court of Appeal pointed out that the EOT Defence required evidence to be led to: (a) identify the act, omission, default or breach of contract by the respondent's subsidiary; (b) explain how the appellants were delayed by such act, omission, default or breach; (c) explain what a fair and reasonable period of extension would be to reflect the delay caused to the appellants; and (d) explain that the appellants had used their reasonable efforts to minimise such delay (at [29]). It was in this context that the Court of Appeal held that the correct procedure would have been for the tribunal to invite submissions from the parties as to whether an amendment to the pleadings to include the EOT Defence should be allowed (at [40]), and that absent the appellants being allowed to amend their defence to plead the EOT Defence, "any invitation by the [t]ribunal to the parties to submit on an unpleaded point would equally be a breach of natural justice" (at [60]).

The Court of Appeal emphasised that it was “not concerned here with a legal or technical defence which can be determined without reference to evidence (*eg, the proper construction of a written contractual provision*)” [emphasis added] (at [60]).

96 In *Phoenixfin*, the respondent had claimed in the arbitration for payment under a “Make-Whole Clause” for the first appellant’s breach of their agreement. Prior to the evidentiary hearing, the first appellant applied to amend its Defence and Counterclaim to include a defence that the amount claimed by the respondent was a penalty (“Penalty Issue”). The respondent objected to the amendment application. On the third day of the evidentiary hearing, the tribunal disallowed the amendment application. However, after the parties filed their written closing submissions, the tribunal asked for submissions on the Penalty Issue and directed the respondent to produce witnesses for questioning. The respondent did not comply with this direction. The tribunal dismissed the respondent’s claim on the basis that the Make-Whole Clause was an unenforceable penalty clause. The part of her award relating to this decision was set aside. The Court of Appeal found that there was a breach of natural justice. The Penalty Issue was not in play in the arbitration until the tribunal unilaterally re-introduced it after the parties’ written closing submissions (at [41]). The tribunal was not entitled to raise the Penalty Issue after specifically rejecting its inclusion as an issue to be decided in the arbitration (at [53]). The Penalty Issue was a mixed question of law and fact in which the appellants bore the burden of proving that the clause was invalid as a proscribed penalty provision (at [54] and [66]). By directing the respondent to produce witnesses for questioning in her attempt to have the Penalty Issue addressed after she re-introduced it, the tribunal reversed the burden of proof, which meant that respondent did not have a proper opportunity to present its case on the Penalty Issue as it did not know

the appellants' evidentiary basis for their contention (at [68]). The extent of the opportunity needed to be given depends on the nature of the issue (at [52]):¹⁰⁰

When... the court has to consider whether a party has been afforded natural justice during arbitration proceedings, the pivotal question is always whether that party has been given a fair opportunity to deal with an issue that has been raised in the arbitration either by the other party or by the tribunal itself. The extent of the opportunity needed to be given depends on the nature of the issue. If the issue is a legal one, then sufficient time to make legal submissions is all that is required. But if the issue is a factual one or a mixed fact and law question then, apart from submitting on the law, a party needs to be able to question the evidence produced in support of the issue as well as have the chance to itself introduce relevant rebuttal evidence. And in order to do all this, there has to be clarity and precision regarding what issue is being raised and what evidence will be relied on to support it. It is in situations like this that the pleadings will assume a more significant role in indicating the kind of opportunity that natural justice requires to be given and in preventing "unexpected surprises", to use the words of *CBX*.

97 The factors distinguishing *CAJ* and *Phoenixfin* from the present case are that in the former cases, a new defence was raised; the defence was raised after the evidentiary hearing; in the case of *Phoenixfin*, the defence was raised after the tribunal, who previously disallowed it to be raised, did an about-turn; the defence was far more fact-specific than E purports the issue of contractual interpretation to be; and the burden lay on the party advancing the positive defence to establish the factual and evidentiary basis for it. In contrast, the Third-Party Warranty Issue was put in play by the Tribunal from the start of, and consistently throughout, the Hearing. It was E who maintained that the Limited Warranty applied between E and F for the purposes of E's defence; purported to rely on extrinsic facts to prove this; and thus bore the burden of establishing its assertion. F merely made the responsive legal argument, for

¹⁰⁰ EWS at para 74.

which it saw no need to rely on any evidence, that the Limited Warranty was a Third-Party Warranty. In the present circumstances, which differ from those in *CAJ* and *Phoenixfin*, I find that E was not deprived of a reasonable opportunity to present its case in the absence of F amending F's pleadings to plead its position on the Third-Party Warranty Issue. In my view, this finding is not inconsistent with the general principles set out in *CAJ* and *Phoenixfin*.

98 If anything, the present case is more akin to the instance in *JVL* where the court considered that an issue (specifically, the applicability of the parol evidence rule) was put in play not because of the parties' pleadings but because of the tribunal's express directions (at [165]). In that case, JVL had entered into contracts to buy palm oil from Agritrade. The parties agreed to apply a price-averaging arrangement, whereby JVL would enter into new contracts to buy palm oil from Agritrade at prices to be agreed, to discharge certain unperformed contracts. They were subsequently unable to reach the agreement on price necessary to apply the price-averaging arrangement. In the arbitration, JVL claimed against Agritrade for damages for breach of the unperformed contracts. Agritrade's pleaded defence was that the price-averaging arrangement rendered the unperformed contracts too uncertain to be enforceable. Neither party's pleadings addressed whether Agritrade could rely on the price-averaging arrangement, which was extrinsic to the disputed contracts, in light of the parol evidence rule (at [38]–[40]). On the third day of the evidentiary hearing, the tribunal drew the parol evidence rule to the parties' attention. Notably, in their exchange with the parties' counsel, the arbitrators framed their remarks as: "I am wondering whether you have considered the applicability of the parole [*sic*] evidence rule"; "You do not have to answer me now, this is one of the things you can think about"; "We are not raising this point for you to address us now, at the moment, but in the course of the arbitration you will definitely have to

address that point” (at [52]). Significantly, the court found that, by this exchange, the tribunal had “unequivocally and expressly” put the parol evidence rule and its exceptions in play in the arbitration (at [53]):

... by this exchange, the tribunal unequivocally and expressly put the parol evidence rule and its exceptions in play in the arbitration. The tribunal saw the parol evidence rule as *a legal issue lying on the critical path to its ultimate decision*. But the tribunal also realised neither party had pleaded reliance on the parol evidence rule or its exceptions. *It therefore directed both parties, of its own motion and unequivocally, to consider the parol evidence rule and its exceptions and to address the tribunal in the course of the arbitration on both. ... Even after this exchange, it remained the case that reliance on the parol evidence rule was wholly unpleaded by JVL and that reliance on its exceptions was wholly unpleaded by Agritrade. But the rule was well and truly in play in the arbitration, by express direction of the tribunal.* [emphasis added]

99 The court further opined that, because the tribunal had expressly directed both parties to address the parol evidence rule, if the tribunal had found Agritrade liable to JVL for breach of contract on the basis that the parol evidence rule precluded consideration of the price-averaging arrangement, Agritrade could not complain that it had been denied a fair hearing because JVL had never pleaded reliance on the parol evidence rule (at [178]):

... The important point, however, is that the tribunal at the same time *expressly directed both parties to address the tribunal on the rule and on its exceptions*. For that reason, if the tribunal had found Agritrade liable to JVL for breach of contract on the ground that the parol evidence rule precluded it from considering the price-averaging arrangement, *Agritrade could not be heard to complain that it had been denied a fair hearing because JVL had never pleaded reliance on the parol evidence rule and had never, until the tribunal raised it, advanced the parol evidence rule as part of its case*. Agritrade would have been on notice, by the tribunal’s express direction, that reliance on the parol evidence rule was a chain of reasoning which it had to address. [emphasis added]

100 Parallels can be drawn between the above instance in *JVL* and the present case. Given the claim and defence under the Limited Warranty advanced by F and E respectively at the start of the Arbitration, the Tribunal saw the Third-Party Warranty Issue as a “legal issue lying on the critical path to its ultimate decision” on that claim and defence (see *JVL* at [53]) and expressly directed the parties to address the issue. The Third-Party Warranty Issue was thus “well and truly in play” in the Arbitration even though it was neither hitherto nor thereafter pleaded by either party (see *JVL* at [53]). The Tribunal’s express direction for the parties to address the issue sufficed to put E on notice and E cannot complain that it was denied a fair hearing because F never pleaded its position on the Third-Party Warranty Issue (see *JVL* at [178]).

101 For completeness, there is another part to the decision in *JVL*. In written submissions, Agritrade submitted that the parol evidence rule did not apply to the price-averaging arrangement, but neither party dealt with the collateral contract exception to the parol evidence rule (at [66], [72], [76] and [78]). During oral closing submissions, the tribunal suggested to JVL that it was open to Agritrade to argue that the price-averaging arrangement was within the collateral contract exception (at [80]). The court took the view that this exchange differed from the one during the evidentiary hearing in that the tribunal simply put it to JVL’s counsel that Agritrade “might” rely on the collateral contract exception, and no direction was given to address the issue (at [82]). In any event, Agritrade did not adopt the collateral contract exception as part of its case (at [88], [95] and [102]). The tribunal found, by a majority, that the price-averaging arrangement was a collateral contract, and therefore within that exception to the parol evidence rule; that JVL was in repudiatory breach of the unperformed contracts by calling for their performance before the price-averaging arrangement was carried out; and that Agritrade was accordingly not

liable to JVL in damages (at [107]–[108] and [119]). The court set aside the award, finding that JVL did not have a reasonable opportunity to present its case on the collateral contract exception issue: first, Agritrade never advanced the collateral contract exception as part of its case, whether formally on the pleadings or even informally through its submissions; and second, the tribunal never directed JVL to address the collateral contract exception (at [162]). In contrast, in the present case, the Tribunal expressly directed the parties to consider the Third-Party Warranty Issue and F made its legal arguments on the issue on the final day of the Hearing and in its PHB and RPHB. Notwithstanding that the court’s observation in *JVL* at [178] in relation to the parol evidence rule issue was *obiter*, the situation addressed there is more germane to the present case (see [98]–[100] above).

102 For all these reasons, I conclude that E had a reasonable opportunity to present its case on the Third-Party Warranty Issue and there was no breach of the fair hearing rule.

(2) There was no prejudice to E

103 Further and in any event, in respect of the fourth requirement in *Soh Beng Tee*, I find that E has failed to establish that the alleged breach of natural justice prejudiced its rights.

104 A breach of natural justice would not attract curial intervention if “the same result could or would ultimately have been attained” in the arbitration, or if it can be shown that “the complainant could not have presented any ground-breaking evidence and/or submissions regardless” (*Soh Beng Tee* at [91]). As stated in *L W Infrastructure Pte Ltd v Lim Chin San Contractors Pte Ltd* [2013]

1 SLR 125 at [54], the complainant must show that the material if presented could reasonably have made a difference to the tribunal’s decision:

... the real inquiry is whether the breach of natural justice was merely technical and inconsequential or whether as a result of the breach, the arbitrator was denied the benefit of arguments or evidence that had *a real as opposed to a fanciful chance of making a difference to his deliberations*. Put another way, the issue is *whether the material could reasonably have made a difference to the arbitrator*; rather than whether it would necessarily have done so. Where it is evident that *there is no prospect whatsoever that the material if presented would have made any difference because it wholly lacked any legal or factual weight*, then it could not seriously be said that the complainant has suffered actual or real prejudice in not having had the opportunity to present this to the arbitrator ... [emphasis in original omitted; emphasis added]

105 Here, E’s chief complaint is that it had no opportunity to adduce evidence of extrinsic facts for the purposes of contextual interpretation of the Limited Warranty. Assuming, *arguendo*, that E had lacked this opportunity, the inquiry is whether, given the opportunity, E would have adduced any “ground-breaking evidence” or material that could reasonably have made a difference to the Tribunal’s decision on the Third-Party Warranty Issue. To answer this, it is necessary to examine what exactly E contends is the relevant evidence. This is identified in E’s PHB at para 231 (see [73] above) and E’s written submissions in OA 1165 at para 77 (see [79] above) as being, collectively:

- (a) documents in relation to the parties’ negotiations on the Limited Warranty;
- (b) evidence from the parties on “whether [they] truly considered” the Limited Warranty as a Third-Party Warranty; and
- (c) evidence in relation to warranties issued by F to its end-users.

106 In my judgment, none of this evidence could reasonably have made a difference to the Tribunal’s decision. First, in respect of [105(a)] and [105(b)] above, the difficulty for E is that the parties had already set out, in their respective witness statements filed in the Arbitration, their discussions, negotiations, correspondence and draft contractual documents leading up to the execution of the Contracts (see [52] above). E does not suggest that the record placed before the Tribunal in this regard was incomplete. The Tribunal had regard to this material (Award at [65]–[95]) and still decided that the Limited Warranty was a Third-Party Warranty. Second, insofar as [105(b)] above veers towards E wishing to elicit evidence from the witnesses on the parties’ *subjective intentions*, the Tribunal would not be concerned with this pursuant to the objective principle of contractual interpretation (*Hewlett-Packard Singapore (Sales) Pte Ltd v Chin Shu Hwa Corrina* [2016] 2 SLR 1083 (“*Hewlett-Packard*”) at [55]). Third, in respect of [105(c)] above, F’s interactions with its end-users in relation to the PV modules supplied by E would be conduct subsequent to its execution of the Contracts with E. While it remains an open question whether evidence of subsequent conduct may be admitted for the purposes of contractual interpretation (*Lim Siau Hing @ Lim Kim Hoe and another v Compass Consulting Pte Ltd and another appeal* [2023] SGCA 39 at [96]), it is clear that any such evidence must satisfy the tripartite requirements of being relevant, being reasonably available to all the contracting parties and relating to a clear and obvious context (*Hewlett-Packard* at [56]). F’s dealings with, or any warranties issued to, its end-users would, minimally, fail the requirements of being reasonably available to the contracting parties (*ie*, E and F) and relating to a clear and obvious context. Such evidence thus could not have been taken into account by the Tribunal even if adduced. Further, the Tribunal was firm in its views that “the emphasis in [E’s] submissions on its inability to adduce evidence of subjective intent would not have been of

assistance in determining the relevant context” and that it was “almost inconceivable that any contextual facts could lead to a conclusion directly opposite to an express statement, such as that found in Clause 6 [of the Limited Warranty], as reinforced by the whole text” (Award at [232] and [233]). Given these strong indications, I consider it unlikely that any of the matters raised by E could reasonably have caused the Tribunal to change its decision.

Art 34(2)(a)(iii) of the Model Law

107 Under Art 34(2)(a)(iii) of the Model Law, an arbitral award may be set aside if it deals with a dispute not contemplated by or not falling within the terms of the submission to arbitration, or contains decisions on matters beyond the scope of the submission to arbitration. The inquiry under Art 34(2)(a)(iii) involves a two-stage process: (a) identification of the scope of the submission to arbitration; and (b) consideration of whether the award involved matters within the scope or a “new difference ... outside the scope of the submission to arbitration” (*CBX and another v CBZ and others* [2022] 1 SLR 47 at [11], citing *PT Asuransi Jasa Indonesia (Persero) v Dexia Bank SA* [2007] 1 SLR(R) 597 (“*PT Asuransi*”) at [40]).

108 In respect of the first stage, matters within the scope of the submission to arbitration are identified with reference to five sources: the parties’ pleadings, the agreed list of issues, opening statements, evidence adduced, and closing submissions at the arbitration (*CDM and another v CDP* [2021] 2 SLR 235 (“*CDM*”) at [18]). In *CAJ*, the Court of Appeal cautioned that it would not suffice for the purposes of determining the tribunal’s jurisdiction that the issue in question had been raised in any *one* of the five sources, adding that “the overriding consideration is to determine whether the relevant issues had been properly pleaded before the tribunal” (at [50]). This caution should not be taken

out of context as imposing a requirement that a matter must necessarily be pleaded, regardless of the circumstances of the case, before it can be taken to fall within the scope of the submission to arbitration.

109 First, as explained in [95] above, *CAJ* concerned the appellants' introduction of a *defence* (the EOT Defence), which turned on *facts and evidence*, only in *written closing submissions*. It cannot be gainsaid that the EOT Defence had to be pleaded for the respondent to know what case it had to meet and to have an adequate opportunity to respond to that case. In that context, the Court of Appeal prefaced its caution about the five sources by stating that it would be wrong to construe *CDM* to mean that so long as the point was covered in the closing submissions, that would be sufficient for it to come within the scope of the submission to arbitration even if it was not pleaded (*CAJ* at [50]).

110 Second, other equally applicable principles enjoin a balanced approach towards assessing, in the round, what falls within the scope of the submission to arbitration. As the Court of Appeal stated in *CKH v CKG and another matter* [2022] 2 SLR 1 ("*CKH*") at [16], matters can arise which are or become within the scope of the submission to arbitration even though they are not pleaded:

The pleadings are the first place in which to look for the issues submitted to arbitral decision. But *matters can arise which are **or become** within the scope of the issues submitted for arbitral decision, **even though they are not pleaded***. Whether a matter falls or has become within the scope of the agreed reference depends ultimately upon what the parties, viewing the whole position and the course of events objectively and fairly, may be taken to have accepted between themselves and before the Tribunal. ... [emphasis added in italics and bold italics]

111 The court in *Asiana Airlines, Inc v Gate Gourmet Korea Co, Ltd* [2022] 4 SLR 158 developed on this principle, adding that the scope of an arbitration

may widen implicitly to include a point that was clearly raised and which *the parties had an adequate opportunity to address* (at [33]):

... as the judgment in *CKH* makes clear, *the way in which an arbitration develops may lead to a widening of its scope* explicitly by an amendment of the pleadings or by the consent of the parties but, equally, *it may arise implicitly in circumstances where the point in issue is clearly raised and there is an adequate opportunity to address it*. In these circumstances it will become apparent, objectively, that the parties have accepted that the point necessarily falls to be determined as though it was a pleaded issue and/or the subject of requested relief. [emphasis added]

112 The inquiry is “whether the issues in question were *live issues* in the arbitration” [emphasis added], and in determining this, the court “does not apply an unduly narrow view” but “ha[s] regard to the totality of what was presented to the tribunal” (*CJA* at [38]).

113 In the present case, I find that the Third-Party Warranty Issue and the Tribunal’s decision that the Limited Warranty was a Third-Party Warranty were within the scope of the parties’ submission to arbitration in view of the totality of the following six inter-related factors.

114 First, the Tribunal raised and directed the parties to address the Third-Party Warranty Issue on the first day of the Hearing, making it a live issue in the Arbitration from that point (see [88] above).

115 Second, the Third-Party Warranty Issue was directly related to the disputes which the parties had submitted to arbitration. The issue had its genesis in, or bore a close nexus to, the parties’ pleadings in two respects:

- (a) One, the underlying premise of both (i) F’s (original) Limited Warranty claim, and (ii) E’s defence based on the exclusion clause in cl

4 of the Limited Warranty, was that the Limited Warranty applied between E and F. The Third-Party Warranty Issue, which essentially questioned the legal soundness of this implicit and assumed position in the pleadings, arose logically. Indeed, it is clear from the First Arbitrator's opening remarks that he regarded the Third-Party Warranty Issue as arising because of, and affecting, F's Limited Warranty claim and E's defence based on the Limited Warranty (see [54] and [88] above).

(b) Two, E had argued in its Defences and Rejoinder that F was the "Customer" under the Limited Warranty, and F had argued in its Reply against that interpretation, albeit these arguments unfolded in the narrower context of their debate over the "Warranty Start Date" (see [48]–[50] above). E took the point so far as to posit, in para 63(c) of its Rejoinder and in its written opening statement, that if F were not the "Customer" under the Limited Warranty, F had no standing to make any claim against E under the Limited Warranty (see [50]–[51] above). These arguments in the pleadings share a similar kernel of reasoning as the Tribunal's view that the Limited Warranty was a Third-Party Warranty. In fact, on the first day of the Hearing, Mr Tan acknowledged that the point made in E's written opening statement was "perhaps to some extent in the context of" the Third-Party Warranty Issue the First Arbitrator had articulated, "in the sense that who is this warranty for? Is the warranty meant for [F] as the buyer or is the warranty intended as the customers of [F]? *[sic]*"¹⁰¹ (see [55] above). On the sixth day of the Hearing, when reminding the parties to address the Third-Party Warranty Issue, the Chairman also noted that "[i]t was touched on in one

¹⁰¹ Exh YLL-1, tab 70: Day 1 Transcript at p 51:5–11.

of the earlier pleadings but just touched on, referred to”¹⁰² (see [57] above). On the final day of the Hearing, after taking the position that the Limited Warranty was a Third-Party Warranty, Mr Lai also acknowledged para 63(c) of the Rejoinder before confirming that F would drop its Limited Warranty claim (see [60] above).

Given that the Third-Party Warranty Issue was intertwined with the pleaded disputes submitted by the parties to arbitration, the Tribunal’s direction to the parties at the start of the Hearing to address the Third-Party Warranty Issue legitimately widened the scope of the parties’ submission to arbitration and squarely brought the issue within that scope.

116 Third, the Finalised List of Issues expressly included the Third-Party Warranty Issue (see [70] above). I make two points in this connection. One, when F sent E a revised draft list of issues on 8 November 2022 that expressly included the Third-Party Warranty Issue, E did not object to the inclusion of that issue. What E objected to was an apparent lack of detail in F’s revised draft list of issues (see [67]–[68] above). Two, in any event, the parties agreed at the end of the Hearing that the Tribunal was to settle the list of issues in the event of disagreement, and that their post-hearing briefs would address the issues in the Finalised List of Issues (see [63] above). The Finalised List of Issues settled by the Tribunal included, without any contemporaneous protest by E, the Third-Party Warranty Issue. Viewing these events holistically, E must be taken to have agreed to the Third-Party Warranty Issue being addressed in the Arbitration.

117 Fourth, the parties addressed the Third-Party Warranty Issue substantively in their PHBs and RPHBs (see [72] and [74]–[76] above).

¹⁰² Exh YLL-1, tab 74: Day 6 Transcript at p 104:16–17.

118 Fifth, for reasons similar to those at [94] above, I do not think this was a case where F's position that the Limited Warranty was a Third-Party Warranty needed to be pleaded in order for the Third-Party Warranty Issue to fall within the scope of the submission to arbitration.

119 Finally, I have found that E had a reasonable opportunity to address the Third-Party Warranty Issue in the Arbitration, including by adducing any evidence it considered relevant (see [102] above).

120 The totality of the picture is thus that the Third-Party Warranty Issue arose from or was connected to the pleaded disputes; it was raised at the start of the evidentiary hearing and the parties were directed to address it; it was a live issue in the Arbitration; and the parties had a reasonable opportunity to address it and availed themselves of the opportunity. In all these circumstances, I conclude that the Third-Party Warranty Issue *was* within the scope of the submission to arbitration. It is unsurprising that, based on the same factual matrix, the conclusion is both that the Tribunal neither breached natural justice nor acted in excess of jurisdiction. In the ordinary run of cases, where allegations in respect of the excess of jurisdiction and breach of natural justice grounds rest substantially on the same factual matrix, it is only logical and commonsensical that the answer to one should be the same as to the other (*CJA* at [36], citing *Soh Beng Tee* at [71]).

Art 34(2)(a)(iv) of the Model Law

121 Under Art 34(2)(a)(iv) of the Model Law, an arbitral award may be set aside where an agreed arbitral procedure was not adhered to. The requirements for establishing this ground are: (a) there must be an agreement between the parties on a particular procedure; (b) the tribunal must have failed to adhere to

the agreed procedure; (c) the failure must be causally related to the tribunal’s decision in that the decision could reasonably have been different if the agreed procedure had been adhered to; and (d) the party mounting the challenge will be barred from relying on this ground if it failed to raise an objection during the proceedings before the tribunal: *Lao Holdings NV and another v Government of the Lao People’s Democratic Republic* [2023] 1 SLR 55 (“*Lao Holdings*”) at [98], citing *AMZ v AXX* [2016] 1 SLR 549 at [102]. In my judgment, E’s challenge fails to satisfy at least the second and third requirements.

122 The starting point of the analysis is to determine what agreed procedure was applicable where the Tribunal raised the Third-Party Warranty Issue of its own accord. E suggests that Art 20(2) of the UNCITRAL Rules 2013 and paras 20 and 74 of the PO1s¹⁰³ apply and were breached in that F failed to set out its position on the Third-Party Warranty Issue in F’s Statement of Claim (“SOC”).¹⁰⁴

123 Art 20(2) of the UNCITRAL Rules 2013 provides that the particulars to be included in the statement of claim include “[t]he points at issue” and “[t]he legal grounds or arguments supporting the claim”. Paragraph 20 of the PO1s (“PO1 Para 20”) states that the parties’ written submissions shall specify the facts and contentions of law, relief claimed and evidence relied upon. Paragraph 74 of the PO1s (“PO1 Para 74”) expressly and directly addresses the situation where new matters are raised at the arbitral hearing:

As a general principle, no Party shall advance any new factual allegations or any new legal arguments at the hearing that have not already been stated in the written submissions in accordance with the Procedural Timetable unless expressly permitted by the Tribunal on an application by the Party

¹⁰³ Exh YLL-1, tabs 64 and 65.

¹⁰⁴ EWS at paras 78–80.

advancing such new allegation or argument, made at least seven (7) days prior to the commencement of the hearing or, *in exceptional circumstances, with leave of the Tribunal*. The opposing Party shall be given an opportunity to respond to the application prior to the Tribunal's determination of the same. [emphasis added]

124 In my view, the applicable agreed procedure in the Arbitration where a party advanced a new matter at the hearing is that set out in PO1 Para 74, and not PO1 Para 20 or Art 20(2) of the UNCITRAL Rules 2013, which relate more generally to the content of the parties' pleadings. PO1 Para 74 prescribes the specialised procedure that is to apply to the specific situation where new matters are raised at the hearing and, in respect of this situation, operates in precedence to other general provisions. As for what PO1 Para 74 entails, it does not automatically mandate that new matters may be raised only upon or with an attendant amendment in pleadings. Instead, PO1 Para 74 leaves it to the Tribunal to determine the terms on which it permits a new matter to be raised, which may or may not include directions for the amendment of pleadings. PO1 Para 74 also contemplates that the Tribunal may permit a party to advance a new matter in exceptional circumstances without any application.

125 Turning then to the second requirement in *Lao Holdings*, I do not accept E's submission that the agreed procedure was breached because F did not set out its position on the Third-Party Warranty Issue in F's SOC. I find that there was no breach of the agreed procedure, *ie*, PO1 Para 74, because (a) the Tribunal's direction for the parties to address the Third-Party Warranty Issue constituted leave in exceptional circumstances for the parties to advance new arguments on the issue without making an application to do so; and (b) the Tribunal permitted the parties to address the Third-Party Warranty Issue without requiring either party to amend their pleadings.

126 In respect of the third requirement in *Lao Holdings*, the procedural breach must be material and this often requires proof that the breach could reasonably be said to have altered the final outcome of the arbitral proceedings in some meaningful way (*Coal & Oil Co LLC v GHCL Ltd* [2015] 3 SLR 154 at [51]). Even if, *arguendo*, there had been a breach of agreed procedure in that F failed to plead its position on the Third-Party Warranty Issue, it would not reasonably have made a difference to the Tribunal's decision if F had amended its SOC. F did not rely on any evidence to advance its position on the Third-Party Warranty Issue and its SOC (if amended) would have contained no more in the way of legal argument than what F already put into its PHB and RPHB. There would be no meaningful difference to the status quo. Insofar as E wished to adduce evidence on the Third-Party Warranty Issue, E did not have to wait for F to amend its pleadings. In any event, the purported evidence E has identified could not reasonably have made a difference to the Tribunal's decision, as explained at [105]–[106] above.

Conclusion

127 I decline to set aside the Award on Ground 2.

Ground 3 (relating to cl 5.3 of the 2013 Contract)

Relevant background

128 F brought claims in the Arbitration under Arts 35(1) and (2) of the CISG. F's position was that concurrent claims under Arts 35(1) and (2) could be made so long as contractual quality requirements under Art 35(1) were not contradictory to the quality requirements stipulated under Art 35(2) (F's PHB at para 123). E's position was that Art 35(2) did not apply insofar as the parties

had agreed on specifications of the goods in their contract, or at least to the extent the contractually agreed qualities were concerned (E's PHB at para 271).

129 The Tribunal found that F's claim under Art 35(1) of the CISG failed, and there was thus no real issue to determine in relation to the permissibility of raising concurrent claims under Arts 35(1) and (2). F's Art 35(1) claim failed because relevant contractual quality requirements either (a) did not exist or (b) did not encompass latent defects within the warranty offered (Award at [409]). In relation to the first point, F's Art 35(1) claim had been premised on a quality requirement, arising from the purported Independent Warranty under cl 1 of the 2012 Contract and cl 5.1 of the 2013 Contract, that the PV modules should be free from defects. However, the Tribunal rejected that the purported Independent Warranty existed (Award at [406] and [408]). In relation to the second point, the Tribunal found that the only contractual quality requirement that could be said to potentially conflict with the provisions of Art 35(2) in relation to fitness for purpose of the PV modules arose from cl 5.3 of the 2013 Contract. Clause 5.3 of the 2013 Contract required claims for the replacement of defective or damaged products to be made within 30 days of the arrival of the PV modules at F's factory in Country Z. However, such a time-limited warranty was not expressed to cover, nor intended to apply, to latent defects contained within the PV modules. There was thus no issue of concurrency between contractually agreed qualities, claimable under Art 35(1), so as to limit any Art 35(2) claim as pleaded by F in relation to durability and safety defects outside of this 30-day period (Award at [410]). Separately, the Tribunal found the defects in the PV modules to be latent, in that they were hidden and might not arise until years after the sale (Award at [422]). The Tribunal also found E to be in breach of Arts 35(2)(a) and (b) of the CISG (Award at [438] and [443]).

E's case

130 E now argues that the Tribunal should not have found as it did on cl 5.3 of the 2013 Contract when neither party advanced any argument on the point.¹⁰⁵ E was denied the opportunity to adduce evidence and/or make submissions that cl 5.3 included latent defects, and suffered prejudice in being unable to do so.¹⁰⁶ While F's claim under Art 35(2) of the CISG was in play, the Tribunal's reasoning did not flow from the parties' arguments.¹⁰⁷ Moreover, the Tribunal's reasoning was "unsound" as the 30-day time limit to claim under cl 5.3 has no bearing on whether cl 5.3 was intended to address the PV modules' fitness for purpose. E could not reasonably anticipate the unsound chain of reasoning.¹⁰⁸ The parts of the Award relating to the Tribunal's decision on cl 5.3 should be set aside under (a) Art 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA as E was unable to present its case; (b) Art 34(2)(a)(iii) of the Model Law as the cl 5.3 issue was outside the scope of the submission to arbitration; and (c) Art 34(2)(a)(iv) for non-adherence to agreed arbitral procedure.¹⁰⁹

F's case

131 F submits that E had a reasonable opportunity to address the Tribunal on cl 5.3 of the 2013 Contract as E could have pointed out any contractual provision to show the existence of quality requirements that would exclude the operation of Art 35(2) of the CISG.¹¹⁰ In any case, E suffered no prejudice. The Tribunal's

¹⁰⁵ EWS at paras 113 and 115.

¹⁰⁶ EWS at paras 118, 124 and 126.

¹⁰⁷ EWS at para 123.

¹⁰⁸ EWS at para 125.

¹⁰⁹ EWS at paras 119–120.

¹¹⁰ FWS at paras 163–164.

finding on cl 5.3 was in E's favour.¹¹¹ Further, if the Tribunal had not considered cl 5.3, the Tribunal's finding would simply be that the Independent Warranty asserted by F did not exist to support F's claim under Art 35(1) of the CISG. That would have made it even clearer that there was no conflict between Arts 35(1) and (2) and the Tribunal would still have found E liable under Art 35(2).¹¹²

Decision

Art 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA

132 E alleges a breach of the fair hearing rule in that it was unable to present its case on cl 5.3 of the 2013 Contract. I find that the second and fourth requirements in *Soh Beng Tee* (see [86] above) are not established.

133 In respect of the second requirement in *Soh Beng Tee*, I find that there was no breach of the fair hearing rule. A tribunal may adopt a chain of reasoning which arose by reasonable implication from the parties' pleadings or flowed reasonably from their arguments (*BZW and another v BZV* [2022] 1 SLR 1080 at [60(b)]). It is not obliged to refer every point for decision to the parties for submissions (*Soh Beng Tee* at [65(d)]) and is entitled to arrive at a conclusion regarding contractual interpretation that differs from the views of parties (*CJA* at [72]). In my judgment, all these are features of the Tribunal's decision on cl 5.3 of the Contract. I elaborate.

134 From the start of the Arbitration, E advanced the proposition that where there were contractual quality requirements specified in the Contracts, F could not bring a claim under Art 35(2) of the CISG. For example, E pleaded that

¹¹¹ FWS at paras 162 and 165.

¹¹² FWS at para 166.

Art 35(2) applied only when the contract was silent on or contained insufficient details of the requirements to be satisfied by the goods for the purposes of Art 35(1), and that Art 35(2) therefore did not apply in F's case given the quality requirements of the PV modules already stated in the Contracts (E's ARB 2 Defence at paras 111–112 and Rejoinder at, *eg*, paras 71 and 76). E also listed as an issue in the Pre-Hearing Draft LOI: "Whether the implied term under Article 35(2) of the CISG is applicable under the Contracts" (at s/n 8). This made it a live issue in the Arbitration whether the Contracts had specified quality requirements of the PV modules so as to exclude the application of Art 35(2). The Tribunal's chain of reasoning – that cl 5.3 of the 2013 Contract was a contractual quality requirement that could be said to potentially conflict with Art 35(2) but did not ultimately do so as cl 5.3 did not encompass latent defects – was neither a dramatic departure from the parties' cases nor an interpretation that was at odds with the wording of the clause (*Soh Beng Tee* at [65(d)]). It was a line of argument that was entirely acceptable for the Tribunal to adopt even though the parties did not specifically address it (*CJA* at [73]).

135 In respect of the fourth requirement in *Soh Beng Tee*, even if, *arguendo*, the fair hearing rule was breached in that E had no opportunity to present its case on cl 5.3 of the 2013 Contract, E has not shown that it suffered prejudice as a result. E has not stated definitively what its position on cl 5.3 is or would have been. On E's case, is cl 5.3 not a warranty at all; or is cl 5.3 a warranty that covers latent defects? Assuming E's position is that cl 5.3 is not a contractual warranty at all and assuming entirely in E's favour that the Tribunal would have agreed with E, the Tribunal would then have concluded that there were no contractual quality requirements and, consequently, nothing in the way of F bringing a claim under Art 35(2) of the CISG. The Tribunal's ultimate decision to allow F's claim under Art 35(2) would be unaffected. Assuming E's position

is that cl 5.3 is a warranty that covers latent defects, E has not articulated the evidence or arguments it would have advanced to establish this. The express wording of cl 5.3 imposes a limitation that any claim for replacement of defective or damaged PV modules must be made within 30 days of their arrival at F's site. It is very unlikely that the Tribunal would have been convinced that, despite this 30-day limit, cl 5.3 was intended to cover latent defects, which by their nature do not emerge till later. In my view, even if E had been heard on cl 5.3, it could not reasonably have made a difference to the Tribunal's decision.

Art 34(2)(a)(iii) of the Model Law

136 I do not accept E's submission that the Tribunal's decision on cl 5.3 of the 2013 Contract dealt with a matter beyond the scope of the submission to arbitration. The court does not apply an unduly narrow view of what the issues in an arbitration were (*CJA* at [38]). The issue of whether the Contracts had specified quality requirements of the PV modules so as to exclude the application of Art 35(2) of the CISG was in play from the start of the Arbitration (see [134] above). Clause 5.3 was relevant to this issue as it was a contractual quality requirement that could be said to potentially conflict with Art 35(2) in relation to fitness for purpose of the PV modules (Award at [410]). Therefore, the Tribunal's consideration of cl 5.3 was *not* a "new difference" outside the scope of the submission to arbitration that "would have been *irrelevant to the issues requiring determination*" [emphasis in original] (*PT Asuransi* at [40]). In fact, it was to E's benefit that the Tribunal had considered whether the Contracts provided for *any* contractual quality requirement (whether or not specifically raised by F) that might preclude F's claim under Art 35(2).

Art 34(2)(a)(iv) of the Model Law

137 The Tribunal raised cl 5.3 of the 2013 Contract as part of its chain of reasoning in the Award. E has not explained how this supposedly breached any agreed procedure. I find that Art 34(2)(a)(iv) of the Model Law is not engaged.

Conclusion

138 I decline to set aside the Award on Ground 3.

Ground 4 (relating to the Representative Sample Issue)*E's case*

139 E points out that it had argued in the Arbitration that there was a lack of randomness in the sampling of the 60 modules tested in F's Fraunhofer Tests.¹¹³ F had countered that the 60 modules were taken from at least four locations in Country X.¹¹⁴ The Tribunal addressed the lack of randomness in sampling in relation to whether F's Fraunhofer Tests could be relied on to show that the cracks in AAA backsheets worsened when exposed to thermomechanical stress and were the likely cause of electrical current leakage from the PV modules (Award at [356], [378] and [384]).¹¹⁵ However, the Tribunal did not consider whether the lack of randomness in sampling affected whether the Tribunal should have relied on F's Fraunhofer Tests to conclude that backsheet cracks were prevalent in AAA backsheets.¹¹⁶ Had the Tribunal "properly considered" the Representative Sample Issue, it would not have found that the AAA

¹¹³ EWS at para 132.

¹¹⁴ EWS at para 133.

¹¹⁵ EWS at para 134(b).

¹¹⁶ EWS at paras 134(a) and 134(c).

Modules were prone to develop backsheet cracks and were thus inherently defective.¹¹⁷

140 Accordingly, the Award should be set aside under: (a) Arts 34(2)(a)(ii) and (iii) of the Model Law and s 24(b) of the IAA as the Tribunal failed to consider and address a key issue; and (b) Arts 34(a)(ii) and (iv) of the Model Law and s 24(b) of the IAA as the Award did not give sufficient reasons to inform the parties of the basis of the Tribunal’s decision on the issue.¹¹⁸ As will be seen later, E also relies on these legal bases for its challenges under Grounds 5, 6 and 7 (see [151], [161] and [173] below).

F’s case

141 F submits that the Tribunal applied its mind to and decided the Representative Sample Issue, just not in a way that suited E.¹¹⁹ In any event, a tribunal’s failure to deal with every issue referred to it will not ordinarily render its award liable to be set aside. Natural justice also does not require the parties to be given a response on all their submissions.¹²⁰ The results from F’s Fraunhofer Tests were just one facet of the overall evidence F adduced to prove the inherent defectiveness of the AAA backsheets.¹²¹ E is unable to show any prejudice. The Tribunal already considered E’s arguments but still concluded, given all the evidence, that E was liable to F under Art 35(2) of the CISG.¹²²

¹¹⁷ EWS at para 139.

¹¹⁸ E’s 1st Affidavit at paras 151, 152, 156 and 157; EWS at paras 5(d)(i) and 130.

¹¹⁹ FWS at paras 105(b) and 128–129.

¹²⁰ FWS at paras 107–108.

¹²¹ FWS at para 130.

¹²² FWS at paras 109–110.

Decision*Arts 34(2)(a)(ii) and (iii) of the Model Law and s 24(b) of the IAA*

142 Art 34(2)(a)(iii) of the Model Law applies where a tribunal failed to decide matters that had been submitted to it (*CRW Joint Operation v PT Perusahaan Gas Negara (Persero) TBK* [2011] 4 SLR 305 (“*CRW*”) at [31]). Such failure to consider an important issue would also be a breach of natural justice under Art 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA (*AKN* at [46]). The relevant principles include:

- (a) A tribunal is only required to deal with the essential issues and need not deal with every point or argument made by the parties (*Bintai Kindenko Pte Ltd v Samsung C&T Corp* [2018] 2 SLR 532 at [40], referring to *TMM Division Maritima SA de CV v Pacific Richfield Marine Pte Ltd* [2013] 4 SLR 972 (“*TMM*”) at [73]). A failure by the tribunal to deal with *every* issue referred to it will not ordinarily render its award liable to be set aside (*CRW* at [32]).
- (b) A tribunal may implicitly resolve or decide an issue (*AKN* at [47]; *TMM* at [77]). An inference that the tribunal failed to consider an important issue must be “clear and virtually inescapable” (*AKN* at [46]).
- (c) Where a tribunal simply misunderstood or failed to comprehend the aggrieved party’s case, erred in law or fact in rejecting its argument, or chose not to deal with a point because the tribunal considered it unnecessary to do so, this does not warrant setting aside the award (*AKN* at [46] and [47]; *CRW* at [33]).
- (d) The aggrieved party is required to show real or actual prejudice in that had the allegedly overlooked issue been dealt with by the tribunal,

it could reasonably have made a difference to the outcome in the award (*CRW* at [32]).

143 E’s sole grouse, as its written submissions make clear, is that the Tribunal allegedly “failed to consider how the lack of randomness in sampling affected whether the Tribunal should have relied on [F’s] Fraunhofer Tests” to “conclude that backsheet cracks were prevalent in AAA backsheets”.¹²³ The Tribunal had found that “the inspection and testing undertaken by Fraunhofer on behalf of [F] supports a finding of both the prevalence of backsheet cracking and the established process of propagation of cracks”. The Tribunal stated that Fraunhofer’s “visual inspection of the Modules prior to any additional testing showed that all modules had cracks in the cell gaps” (Award at [355]). In my judgment, the Tribunal did not fail to apply its mind to whether the lack of randomness in sampling meant that it should not rely on Fraunhofer’s visual inspection as supporting a finding of the prevalence of backsheet cracking.

144 First, the Tribunal had identified and pithily summarised the criticisms made by E regarding the representativeness of the sample, including, most relevantly to E’s present complaint, that: (a) there was no evidence that the 60 modules were selected randomly and in fact the evidence suggested that F deliberately selected those modules (Award at [321(b)]); and (b) F had not provided any evidence that the 60 modules were representative of the locations and environmental conditions of all 365,000 AAA Modules and the fact that 85% of the tested modules came from a single location in Country X suggested that the sample was not representative (Award at [321(d)]). It cannot be said that these criticisms regarding the lack of randomness in sampling were not on the Tribunal’s mind when the Tribunal had specifically recapitulated them.

¹²³ EWS at paras 134(a) and 134(c).

145 Second, the criticisms on the lack of randomness in sampling were made by E as part of its overall criticisms of F's Fraunhofer Tests (Award at Section VIII.B(4)). The Tribunal dismissed E's criticisms of F's Fraunhofer Tests in terms that included the following (Award at [383]–[384]):

383. [E's] submissions detail various criticisms of [F's] Fraunhofer Tests. *The Tribunal does not find this criticism compelling, nor does it view the criticisms as undermining the force of the results.* The first criticism related to the issue of sampling. It is certainly correct that the selection of the 60 Modules was only a very small sample of a much larger cohort of 365,000 Modules. However, the use of a relatively small sample is consistent with the process of testing PV modules for IEC [ie, International Electrotechnical Commission] standards which require the testing of 6 to 8 modules. It also reflects a sensible approach to testing modules that are mass produced.
384. The criticism regarding the lack of a randomized sample does carry some weight. [F's] sample of Modules does reflect some variance in locations, but it is fair to say it is not a true reflection of the sites where [F] has installed [E's] PV modules. *However, [E's] criticism is difficult to square with [E's] own sampling process of using 15 Modules from one specific site on one roof in [Country X].* Nevertheless, one has to question why a perfectly randomized sample is required in this situation. The purpose of the Second [F] Fraunhofer Test was to make an assessment of how cracks that appear on a PV module affect the leakage of electrical current. It was not about how the specific aspects of field and weather events in different locations affected the occurrence of cracks or the process of propagation. The purpose was to test the source of current leakage when a backsheet was already cracked. The requirement of a perfect and randomized sample size does not, in our view, undermine the test results that simply reviewed the connection between cracks and current leakage.

[emphasis added]

146 It is true that these passages in the Award do not expressly discuss the effect (if any) that E's criticism of lack of randomness in sampling should have on Fraunhofer's visual inspection. However, the Tribunal was not required to

specifically and expressly deal with the effect (or lack thereof) of this criticism on each and every test performed by Fraunhofer (see [142(a)] and [142(b)] above). The Tribunal did state its general and broad finding that E's various criticisms of F's Fraunhofer Tests did not undermine the force of the results (Award at [383]). Reading the Award generously (*Soh Beng Tee* at [65(f)]), this finding must extend to all of E's criticisms regarding the lack of randomness in sampling (which the Award had previously identified). It also appears that E's double standards in "using 15 Modules from one specific site on one roof in [Country X]" generally denuded its criticism of lack of randomness in sampling of force (Award at [384]). At worst, the Tribunal's specific expressed opinion that a perfectly randomised sample was not required for the Second [F] Fraunhofer Test might suggest that the Tribunal thought E's criticism of lack of randomness in sampling was relevant only to the Second [F] Fraunhofer Test. However, this amounts to only a misapprehension of E's argument or an error in rejecting the argument, neither of which is a basis to conclude that the Tribunal failed to consider the issue (see [142(c)] above).

147 Even if, *arguendo*, the Tribunal had failed to consider whether the lack of randomness in sampling meant that it should not rely on Fraunhofer's visual inspection as supporting a finding of the prevalence of backsheet cracking, I find that there is no real or actual prejudice to E. Even assuming that the Tribunal would disregard the results of Fraunhofer's visual inspection, the Tribunal would, in all likelihood, still have concluded that backsheet cracking on AAA backsheets was prevalent; AAA backsheets were inherently more susceptible / prone to degradation and cracking; and this made the AAA backsheets inherently defective. This is because these findings were primarily underpinned by scientific evidence that the Tribunal regarded compelling. The Tribunal found that there was an "overwhelming scientific consensus that AAA

backsheets are inherently more susceptible to degradation and cracking” (Award at [339]). It relied on an academic paper noting “reports of ‘widespread failure (cracking) of AAA backsheets’” (Award at [341]). It then concluded that the fact that AAA backsheets were more prone to cracking was a ‘defect’ in the PV modules for three reasons: (a) the scientific consensus regarding backsheet cracking was that the cracks represented a defect or failure of the module (Award at [346]–[350]); (b) there was no requirement for backsheet cracks to develop into through cracks in order for backsheet cracking to constitute a defect (Award at [351]–[354]); and (c) F’s Fraunhofer Tests supported a finding of both the prevalence of backsheet cracking and the established process of propagation of cracks (Award at [355]). Fraunhofer’s visual inspection showing that the sampled PV modules had cracks was, in the overall scheme of the evidence the Tribunal relied on, hardly significant. E cannot show that taking the results of Fraunhofer’s visual inspection out of the equation could reasonably have altered the Tribunal’s findings that the AAA backsheets were inherently defective.

Arts 34(2)(a)(ii) and (iv) of the Model Law and s 24(b) of the IAA

148 E contends that “failure to give adequate reasons” is a basis for setting aside the Award under Arts 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA for breach of natural justice, as well as under Art 34(2)(a)(iv) of the Model Law for non-adherence to the requirements in Art 31(2) of the Model Law and Art 34(3) of the UNCITRAL Rules 2013 that an award “shall state the reasons upon which it is based”.¹²⁴ It is not settled in the case law whether a tribunal’s failure to give adequate reasons gives rise in itself to a ground to set aside an award (*CVV and others v CWB* [2024] 1 SLR 32 (“*CVV*”) at [32]). It is also not

¹²⁴ EWS at paras 35 and 39; E’s 1st Aff at para 156.

entirely settled what the content of a tribunal's duty to give reasons is (although it is clear that a tribunal need not give reasons to a "judicial standard") (*CVV* at [33]–[34]). I consider it unnecessary to determine these two issues in the present case because, based on uncontroversial principles regarding the extent of reasoning expected in an award, it is clear that E's challenge fails.

149 In concluding that AAA backsheets were more susceptible to degradation and cracking, the Tribunal had relied on scientific evidence and Fraunhofer's visual inspection (see [147] above). The Tribunal clearly placed more weight on the collective scientific evidence as compared to E's evidence on lack of randomness in sampling. This is reinforced by the Tribunal's express statement that E's argument regarding the lack of randomness in sampling was difficult to square with E's own sampling process (Award at [384]; see [145] above). However, the Tribunal was not obliged to explicitly reject or explain why it rejected E's evidence as a criticism against Fraunhofer's visual inspection. A tribunal is not obliged to explain each step of its evaluation of the evidence and the weight attached to particular evidence, or to explain each step by which it reached its conclusion. Indeed, where a tribunal arrives at a conclusion of fact expressly on the basis of particular evidence, it is "unambiguously clear" that the tribunal placed more weight on that evidence than on other evidence, and no clarification is required (*TMM* at [100]–[101], citing *World Trade Corporation v C Czarnikow Sugar Ltd* [2005] 1 Lloyd's Rep 422 at [8] and [9] and *Hussman (Europe) Ltd v Al Ameen Development & Trade Co and others* [2000] 2 Lloyd's Rep 83 at [56]). The Award thus cannot be impugned on the basis that it did not contain adequate reasons for rejecting E's criticism of the lack of randomness in sampling.

Conclusion

150 I decline to set aside the Award on Ground 4.

Ground 5 (relating to the No Recall Issue)*E's case*

151 E points out that it had argued in the Arbitration that F's failure to recall the AAA Modules showed that there was no "real" electric shock hazard posed by the AAA Modules that would render them inherently defective. However, and undisputedly, the No Recall Issue was not addressed in the Award.¹²⁵ E submits that the "clear and inescapable inference" is that the Tribunal did not consider E's arguments on the No Recall Issue. Had the Tribunal "properly considered" the No Recall Issue, it would not have found that the AAA Modules were inherently defective and that E was liable under Art 35(2) of the CISG.¹²⁶ The Award should be set aside on the legal bases at [140] above.¹²⁷

F's case

152 F submits that a tribunal need not deal with every issue referred to it. The No Recall Issue was insignificant when considered in the context of the more probative evidence going directly to whether the AAA Modules were a safety hazard, based on which the Tribunal found that the AAA Modules were

¹²⁵ EWS at para 161.

¹²⁶ EWS at paras 165–166.

¹²⁷ E's 1st Affidavit at paras 151, 152, 156 and 157; EWS at paras 5(d)(ii) and 159.

a safety hazard and inherently defective.¹²⁸ Had the No Recall Issue featured in the Award, that would have made no difference to the outcome in the Award.¹²⁹

Decision

153 It would be superficial to conclude that the Tribunal failed to apply its mind to or to decide the No Recall Issue just because it was not mentioned in the Award. I do not accept E's submission that the Tribunal failed to do so.

154 First, during the Hearing, in the course of Mr Tan's cross-examination of F's Mr SS on the No Recall Issue, the Tribunal interjected to engage with the line of questioning:¹³⁰

Q. Now, in paragraph 34 of your first statement, you started with the sentence:

"In an attempt to urge [E] to take urgent steps to remedy the issue of defective backsheets..."

Reading this paragraph, would I be correct when I read "In an attempt to urge [E] to take urgent steps", what you represented to [E] about the recall was untrue.

[SECOND ARBITRATOR]: I'm not sure I quite understand that, so I think that is why the interpreter may be puzzled.

MR TAN: Let me rephrase.

[SECOND ARBITRATOR]: Please do.

...

CHAIRMAN: Did you decide to have a recall because you were concerned about the safety of the units?

A. Yes. And now the very serious safety issues are happening.

¹²⁸ FWS at paras 133–135.

¹²⁹ FWS at para 136.

¹³⁰ Exh YLL-1, tab 71: Transcript, 11 October 2022 at pp 38:24–40:20.

CHAIRMAN: So when did you first learn about the safety issues?

...

A. 2021.

CHAIRMAN: 2021. And you haven't yet made a recall, or have you?

A. Not yet.

CHAIRMAN: Thank you.

155 As this exchange shows, the Tribunal had paid attention to Mr Tan's line of questioning on the No Recall Issue. The Second Arbitrator interjected to seek clarity on Mr Tan's point, and the Chairman expressly questioned Mr SS on whether F had made a recall of the AAA Modules. Further, Mr Tan submitted in his oral closing statement that there were "no real safety hazards" given that F did not conduct any recall of the AAA Modules, and in this connection, he referred to E's slides for its oral closing statement,¹³¹ which excerpted the transcript of the exchange between the Chairman and Mr SS and stated that "[u]nder questioning from the Tribunal" Mr SS finally admitted that F had not made a recall of any modules (at slide 55).¹³² It is unlikely that the Tribunal was not alive to or did not apply its mind to the No Recall Issue when E's arguments on the issue were built on Mr SS' response to the Tribunal's questions.

156 Second, the Tribunal concluded that the AAA Modules were a safety hazard because it was "satisfied that there is a real connection between backsheet cracks in AAA backsheets and current leakage which gives rise to a safety hazard" (Award at [389]). The Tribunal formed this view based on (a) its finding that "[t]he connection between backsheet cracking and electrical shocks

¹³¹ Exh YLL-1, tabs 11 and 81.

¹³² Exh YLL-1, tab 77: Day 10 Transcript at pp 52:18–53:17.

is ... well-recognised in the scientific literature” (Award at [370]–[375]); (b) its acceptance of F’s expert’s evidence on the possible ways in which electric shock may occur with backsheet cracks (Award at [372]–[374]); and (c) its assessment that F’s Fraunhofer Tests showed that cracking in AAA backsheets is likely to be the cause of current leakage (Award at [378]). It is evident that the Tribunal’s findings and conclusions on the issue of safety hazard were based on *scientific assessments*. In contrast, E’s arguments on the No Recall Issue sought to address the issue of safety hazard in a completely *non-scientific* way, viz, by drawing inferences from F’s conduct. However, F’s *subjective* beliefs and actions do not bear on whether, *objectively*, the AAA Modules were in fact a safety hazard. It is unsurprising that the No Recall Issue had no place in the Tribunal’s science-based determination of that question. The non-mention of the No Recall Issue in the Award reflects the Tribunal’s view that the issue was irrelevant to whether the AAA Modules were, in fact, a safety hazard.

157 Even if, *arguendo*, the Tribunal had failed to consider the No Recall Issue, I do not accept that it could reasonably have made a difference if the Tribunal had considered the issue. The Tribunal would, in all likelihood, have decided that the No Recall Issue was irrelevant to and did not affect its assessment that the AAA Modules were a safety hazard (see [156] above).

158 Finally, I reject E’s argument that the Tribunal failed to give adequate reasons. The Tribunal made a finding of fact (regarding the connection between backsheet cracks in AAA backsheets and current leakage) expressly on the basis of the scientific evidence before it. The Tribunal did not have to explain its decision to attach no or little weight to the No Recall Issue.

159 I decline to set aside the Award on Ground 5.

Ground 6 (relating to the Insufficient Electricity, System Protection and No Contact Factors)

E’s case

160 E submits that it made arguments on the Insufficient Electricity, System Protection and No Contact Factors in the Arbitration,¹³³ but the Tribunal:

- (a) failed to address the Insufficient Electricity Factor;¹³⁴
- (b) “misapprehended [E’s] argument on the System Protection Factor” as referring to the internal mechanisms of a PV module as opposed to the external safety mechanisms of the PV system into which the module would be integrated;¹³⁵ and
- (c) in relation to the No Contact Factor, “completely failed to address” E’s argument that “for any theoretical risk of contact with a live leakage current, a person has to somehow climb onto the roof, and squeeze through a 42.4mm gap to reach underneath the PV module to touch the specific spot on the underside of the module where there was a through crack”.¹³⁶

161 E argues that if the Tribunal had “properly considered” these factors, it would have concluded that the AAA Modules were neither unsafe nor not durable.¹³⁷ The Award should be set aside on the legal bases at [140] above.¹³⁸

¹³³ EWS at para 167.

¹³⁴ EWS at para 169(a).

¹³⁵ EWS at para 169(b).

¹³⁶ EWS at para 169(c).

¹³⁷ EWS at para 171.

¹³⁸ E’s 1st Affidavit at paras 159, 160, 166 and 167; EWS at paras 5(e), 159 and 170.

F's case

162 F highlights that the Tribunal noted E's arguments on the Insufficient Electricity, System Protection and No Contact Factors ("Purported Factors") in the Award.¹³⁹ In the Arbitration, F took the position that the Purported Factors were irrelevant to the existence of electric shock hazards and that E deliberately failed to distinguish between an electric shock hazard (a potential source of harm) and an actual electric shock.¹⁴⁰ The Tribunal found that the AAA Modules were a safety hazard based on the scientific, expert and technical evidence. F submits that the Tribunal decided that the Purported Factors were irrelevant.¹⁴¹

Decision***Insufficient Electricity Factor***

163 I do not accept E's submission that the Tribunal failed to address the Insufficient Electricity Factor. There are two aspects of the Insufficient Electricity Factor, as defined by E:

- (a) whether any leakage electrical current flowing to an exposed surface on the backsheet would be extremely low due to the high volume resistivity of EVA ("EVA Point"). EVA is a material that encapsulates the solar cells within a PV module, buffering the solar cells from the backsheet of the module (Award at [335]); and
- (b) whether, in hypothetical weather conditions involving rain heavy enough to cause water to get onto the backsheets, there was unlikely to

¹³⁹ FWS at para 142.

¹⁴⁰ FWS at para 140.

¹⁴¹ FWS at para 141.

be sufficient sunlight to generate a high enough voltage to cause an electric shock (“Low Voltage Point”).

164 In relation to the EVA Point, the Tribunal noted E’s expert’s view that “PV modules already allow moisture to permeate through the module and to be absorbed by the EVA and that there was no conductive path through the EVA as it is resistant to electricity” (Award at [328]). E’s expert also stated, in relation to the EVA encapsulate, that “when a crack forms in the backsheet there still is a large thick layer of elastomeric rubber encapsulant which is highly insulating material so there’s nothing that you can touch when you do that” (Award at [335]). The Tribunal further noted F’s counter-argument that the existence of the EVA encapsulate did not mean there was no potential safety hazard. F’s expert gave evidence that the EVA encapsulate is 0.1 mm thick and is a soft, rubbery material that is capable of melting, tearing or degrading. He stated that “the consensus of the experts is if you see [a crack in the backsheet], you have to assume it’s a hazard and you have to get rid of it”. This was confirmed by the new International Electrotechnical Commission (“IEC”) test for PV modules which provides that modules should be replaced if they showed signs of a leakage path into structure (Award at [305(b)]). Turning to address the extent of any safety hazard, the Tribunal then expressed its own position on the EVA Point, preferring the view that PV modules should be replaced upon any signs of leakage paths (such as backsheet cracks) into structures (Award at [394]):

... the relevant IEC standards that are currently in place note that PV modules should be replaced if they show signs of leakage paths into structures. [E’s expert] accepted that ... the existence of backsheet cracks was a sign of potential leakage paths into the structure. [footnotes in original omitted]

There is no basis for E to allege that the Tribunal failed to consider or address the EVA Point in the Insufficient Electricity Factor.

165 In respect of the Low Voltage Point, the Tribunal noted E’s contention that “due to the relatively low nominal voltage, ... even if there were a live leakage and a person touched the backsheet surface, the shock would be minor and inconsequential” (Award at [317]). In respect of this contention, the Tribunal referenced (Award at [317], footnote 393) E’s submission in E’s PHB (at para 92 read with footnote 184) that in hypothetical weather conditions involving rain heavy enough to cause water to get onto the backsheets on the underside of the modules, there was unlikely to be sufficient sunlight to generate a high enough voltage to cause an electric shock. The Tribunal further noted F’s counter-argument that any alleged mildness of a potential electric shock did not undermine the existence of a safety hazard (Award at [305(c)]). The Tribunal then expressed the view that, notwithstanding the limitation on voltage, the resultant electric shock would be of concern (Award at [393]):

... Finally, as to the limitation on voltage, the evidence is that an electric shock would cause a prickly sensation and cause strong involuntary muscle contractions. This shock does not appear, in our view, to be a risk that would be accepted within current values of society. Such a shock would likely be of significant concern to a person affected by the shock.

While the Tribunal did not express its decision in terms of the specific hypothetical weather conditions raised by E, the Tribunal clearly understood the pith of the Low Voltage Point to be that voltage would be low and consequently not cause an electric shock. The Tribunal evidently rejected the proposition that no electric shock would result or that any shock would be mild and acceptable. Even if, *arguendo*, the Tribunal misunderstood or (in E’s view) wrongly decided the Low Voltage Point, those are not grounds to set aside the Award (see [142(c)] above). On a proper reading of the Award, the Tribunal did not fail to consider or address the Low Voltage Point in the Insufficient Electricity Factor.

System Protection Factor

166 E’s complaint is that “[t]he Tribunal *misapprehended [E’s] argument* on the System Protection Factor” [emphasis added] as referring to the internal mechanisms of a PV module as opposed to the external safety mechanisms of the PV system into which the module would be integrated. E claims that “[i]t is based on this *wrong understanding of [E’s] argument* on the System Protection Factor” [emphasis added] that the Tribunal found that there was limited evidence of what the mechanisms would be, how they worked to limit the possibility of an electric shock hazard and whether they were part of the PV modules E supplied (Award at [393]).¹⁴² E’s own choice of words gives away that its case is not actually that the Tribunal failed to consider the System Protection Factor, but rather, that the Tribunal purportedly misunderstood E’s argument on the System Protection Factor. However, at law, this is not a basis for setting aside the Award (see [142(c)] above).

167 Nor do I think the purported misunderstanding suffices to give rise to an inference that the Tribunal did not consider E’s argument on the System Protection Factor *at all*. The Tribunal had accurately noted E’s argument on the System Protection Factor as relating to the PV system design (Award at [317]): “These features, [E] submits, are in the exclusive purview of the PV systems designer and would alleviate the risk of an electric shock hazard”. The Tribunal also referenced (Award at [317], footnote 392) E’s submission in E’s PHB (at paras 91–92) that “PV system design typically includes a number of safety features” and “[t]hese safety features... are within the exclusive purview of the PV system designer”. I therefore do not accept that the Tribunal failed to consider the System Protection Factor.

¹⁴² EWS at para 169(b).

No Contact Factor

168 In relation to the No Contact Factor, E’s sole complaint is that the Tribunal failed to address E’s argument that “for any theoretical risk of contact with a live leakage current, a person has to somehow climb onto the roof, and squeeze through a 42.4mm gap to reach underneath the PV module to touch the specific spot on the underside of the module where there was a through crack”.¹⁴³ I do not accept that the Tribunal failed to address this aspect of E’s argument.

169 First, the Tribunal was cognisant of this aspect of E’s argument on the No Contact Factor, as seen from its recapitulation of the same (Award at [319]):

Finally, in relation to the hazard, [E] submits that even where a through crack caused a safety hazard, a person would have to touch the backsheet of the module at the point of the crack in order to suffer an electric shock. Such a scenario, it contends, is incredibly unlikely. [footnote in original omitted]

In summarising E’s argument, the Tribunal referenced (Award at [319], footnote 396) E’s submission in E’s PHB (at para 37) that:

... Even taking [F’s] case at its highest, and assuming that a through crack will cause an electric shock hazard ... it is most improbable that a person would touch the backsheet of the module and suffer an electric shock – *in the first place, that person would have to specially procure the setting up of scaffolding as the PV modules are installed on the rooftops of houses, and then reach under the PV module to specifically touch the spot on the backsheet where the through crack is situated.* [footnote and emphasis in original omitted; emphasis added]

170 Second, reading the Award generously, the Tribunal was clearly unpersuaded by E’s argument. The Tribunal found that the location of PV modules “on roofs that are only accessible by scaffolding” was insufficient to prevent risk (Award at [393]). At a general level, the Tribunal also rejected E’s

¹⁴³ EWS at para 169(c).

attempt to “recast the critical issue” as being whether “cracks in backsheets **will** compromise the safety of the Modules and cause an electric shock hazard” [emphasis in original] (Award at [363]). The issue was whether the AAA Modules posed a safety hazard, *ie*, a *potential* source of harm, and E’s attempt to “set an *impermissibly high evidentiary burden*” [emphasis added] was expressly rejected (Award at [363] and [366]). These findings taken together indicate that the Tribunal simply did not think much of E’s argument that the risk of an electric shock would not actualise because a person had to reach underneath a PV module to touch the specific spot of a backsheet crack: (a) as with E’s point about the relatively inaccessible rooftop location of the PV modules, this was insufficient to prevent risk; and (b) in any event, the argument was not relevant in the context of the critical issue being whether the AAA Modules were a potential source of harm.

Conclusion

171 I do not accept E’s submissions that the Tribunal had failed to consider and/or address the Purported Factors. Even assuming in E’s favour that the Tribunal gave inadequate reasons for its treatment of the Purported Factors, this is merely an error of law that does not warrant curial intervention: *CVV* at [35], citing *TMM* at [98]. Further yet, even if the Tribunal had failed to consider the Purported Factors, E suffered no prejudice. The Tribunal found that the AAA Modules were a safety hazard because it was “satisfied that there is a real connection between backsheet cracks in AAA backsheets and current leakage which gives rise to a safety hazard” (Award at [389]) in view of the scientific, expert and technical evidence detailed in the Award. The Tribunal considered the limitations on risk raised by E as going towards whether the associated risk was “tolerable” (Award at [390]), not as displacing the Tribunal’s assessment

that there *was* a safety hazard. The Purported Factors could not reasonably have made a difference to the assessment that the AAA Modules were a safety hazard.

172 I decline to set aside the Award on Ground 6.

Ground 7 (relating to the System Design and Microclimate Issues)

E's case

173 E took the position in the Arbitration that the design of F's PV system and the microclimatic conditions to which the AAA Modules were subjected had an effect on the formation and progression of backsheet cracks.¹⁴⁴ E argues that the System Design and Microclimate Issues therefore went towards the issue of liability, *ie*, whether the AAA backsheets were susceptible to cracking as claimed by F.¹⁴⁵ However, the Tribunal did not resolve the System Design and Microclimatic Issues and instead held that they were questions pertaining to the assessment of damages rather than liability.¹⁴⁶ The Tribunal failed to appreciate that these issues went towards the existence and cause of the backsheet cracks.¹⁴⁷ Had the Tribunal "properly considered" these issues as questions going towards liability, it would not have concluded that the AAA Modules were inherently defective and found that E had breached Art 35(2) of the CISG.¹⁴⁸ The Award should be set aside on the legal bases at [140] above.¹⁴⁹

¹⁴⁴ EWS at paras 142(f)–(g) and 144.

¹⁴⁵ EWS at para 141.

¹⁴⁶ EWS at paras 142(h) and 143.

¹⁴⁷ EWS at para 144.

¹⁴⁸ EWS at para 155.

¹⁴⁹ E's 1st Affidavit at paras 145, 146 and 149; EWS at paras 5(c) and 130.

F's case

174 F submits that the Tribunal had addressed the System Design and Microclimate Issues.¹⁵⁰ The Tribunal agreed with F's submission that the issues were irrelevant to the determination of liability as the cause of action for breach of contract was complete when E supplied the inherently defective AAA Modules, prior to the onset of any purported microclimatic stress arising from the System Design and Microclimate Issues.¹⁵¹ E had argued in the Arbitration that Art 74 of the CISG required the Tribunal to consider the System Design and Microclimate Issues during the liability phase, but the Tribunal found that Art 74 pertained to the assessment of damages.¹⁵² In any case, E has not shown prejudice. The Tribunal deferred the determination of the System Design and Microclimate Issues to the remedies phase of the Arbitration. E has another opportunity to submit on these issues if it wishes.¹⁵³

Decision

175 In my view, E is effectively seeking to appeal against the Tribunal's decision that the System Design and Microclimate Issues are irrelevant to the liability phase of the Arbitration. This is impermissible.

176 It is clear that the Tribunal had considered and rejected E's arguments that the System Design and Microclimate Issues went towards the issue of liability. The Tribunal noted E's contentions that (a) the System Design and Microclimate Issues were "related to the question of causation and not [issues]

¹⁵⁰ FWS at para 105(a).

¹⁵¹ FWS at para 116.

¹⁵² FWS at paras 118–120.

¹⁵³ FWS at paras 117 and 124–125.

that went separately to the assessment of damages”; and (b) causation was a “substantive precondition to liability in damages” under Art 74 of the CISG (Award at [458]–[460]). The Tribunal found that F had shown that the AAA material was inherently defective and E’s breach was thus established (Award at [463] and [466]). The “remaining” System Design and Microclimate Issues pertained to the assessment of damages and it was “premature and inappropriate” for the Tribunal to consider them in the liability phase of the Arbitration; they would be dealt with in the remedies phase (Award at [463], [466] and [467]). The Tribunal also decided that Art 74 of the CISG did not assist E because it dealt with the assessment of damages under the CISG and did not outline any rule relating to causation (Award at [464]–[465]). As is evident, the Tribunal explained its decision to deal with the System Design and Microclimate Issues in the remedies phase of the Arbitration.

177 E accepts that “it is open to the Tribunal to conclude that the System Design Issue and Microclimate Issue bear little or no weight in determining the defectiveness of the Modules”.¹⁵⁴ With respect, on a fair reading of the Award, this is precisely the conclusion the Tribunal reached, hence its decision that the System Design and Microclimate Issues were reserved to the remedies phase of the Arbitration. The Tribunal found the AAA backsheets / Modules to be inherently defective based on scientific, expert and technical evidence, such as the “overwhelming scientific consensus that AAA backsheets are *inherently more susceptible* to degradation and cracking” [emphasis added] (Award at [339]). The System Design and Microclimate Issues (which are external to the AAA backsheets) do not bear on these findings relating to the intrinsic characteristics (and, concomitantly, inherent defectiveness) of the AAA

¹⁵⁴ EWS at para 146.

backsheets. E's disagreement is, in truth, with the merits of the Tribunal's decision but that cannot be challenged under the guise of an alleged breach of natural justice (*AKN* at [37]–[39]).

178 I decline to set aside the Award on Ground 7.

Ground 8 (relating to the CISG Durability Argument)

E's case

179 E argues that the Tribunal should not have considered the CISG Durability Argument made by F, *ie*, that the AAA Modules were not durable as an aspect of F's claim under Art 35 of the CISG. In F's pleadings, F had framed its claim under Art 35 in terms of a breach of E's obligation to supply modules that were fit for general and particular purposes. F did not indicate that the durability of the AAA Modules was relevant to its claim under Art 35. It was only in the context of F's claim under the SOGA that F alleged that the AAA modules were not durable. F raised the CISG Durability Argument for the first time in F's PHB as an independent ground to find that there was a breach of Art 35(2) in that the AAA Modules were not fit for the purposes for which PV modules were ordinarily used. Despite this, the Tribunal accepted the CISG Durability Argument.¹⁵⁵ E was prejudiced as, had F pleaded the CISG Durability Argument, E would have introduced evidence showing that the AAA backsheets were not less durable than other backsheets.¹⁵⁶ If the Tribunal had not found that the AAA backsheets lacked durability, the Tribunal would not have found that the AAA Modules were inherently defective and that E breached Art 35(2).¹⁵⁷

¹⁵⁵ EWS at paras 173–175.

¹⁵⁶ EWS at para 180.

¹⁵⁷ EWS at paras 181–182.

The Award should be set aside under: (a) Arts 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA as E did not have a reasonable opportunity to present its case on the matter; (b) Art 34(a)(iii) of the Model Law as the CISG Durability Argument was outside of the scope of the submission to arbitration; and (c) Art 34(a)(iv) of the Model Law for non-adherence to the agreed procedure in PO1 Para 20, PO1 Para 74 and Art 20(2) of the UNCITRAL Rules 2013.¹⁵⁸

F's case

180 F submits that the factual issue of whether the AAA Modules were durable was within the scope of the submission to arbitration. The durability of the AAA Modules and their corresponding fitness for purpose under Art 35(2)(a) of the CISG were listed as issues in the Finalised List of Issues.¹⁵⁹ The Tribunal found that, although pleaded in relation to F's SOGA claim, F's case on fitness for purpose was intricately linked to questions of durability (Award at [359]); a reasonable interpretation of the whole of the pleadings and the evidence adduced was that 'durability' was considered an element of fitness for purpose under the CISG claim (Award at [360]); and E had, and took, the opportunity to make submissions and provide evidence on whether the AAA Modules were durable (Award at [361]).¹⁶⁰ In any case, E suffered no prejudice. If the Tribunal had not considered 'durability', it would still have found E liable under the CISG on the basis that the AAA Modules were defective in that they gave rise to a safety hazard and the AAA Modules could not be onsold (Award at [422] and [435]–[437]).¹⁶¹ There was also no breach of any agreed procedure.

¹⁵⁸ E's 1st Affidavit at paras 169, 170, 172 and 174; EWS at para 5(f).

¹⁵⁹ FWS at paras 148–149.

¹⁶⁰ FWS at para 150.

¹⁶¹ FWS at para 156.

The CISG Durability Argument was raised with the Tribunal’s leave. Further, F never contemporaneously raised any objections about a breach of agreed procedure and is barred from doing so now.¹⁶²

Decision

Art 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA

181 I do not accept E’s argument that it was denied the right to be heard under Art 34(2)(a)(ii) of the Model Law and s 24(b) of the IAA in relation to the CISG Durability Argument.

182 The CISG Durability Argument comprises a *factual* issue of the durability of the AAA Modules, and a *legal* issue of whether such lack of durability qualifies as a breach of Art 35(2) of the CISG.

183 The factual issue of the durability of the AAA Modules was a live issue in the Arbitration from the start: (a) F expressly pleaded E’s failure to supply durable PV modules as a facet of F’s claims under the SOGA, for breach of E’s common law duty of care, and in misrepresentation;¹⁶³ (b) E pleaded in response that F had not shown how the PV modules were not durable and that they were in fact durable;¹⁶⁴ (c) in the Pre-Hearing Draft LOI, F’s formulation of the issue relating to the SOGA claim (at s/n 11) and E’s formulation of the issue relating to the misrepresentation claim (at s/n 14) included the durability of the AAA Modules; (d) the issue of durability was raised in F’s written opening statement

¹⁶² FWS at paras 157–159.

¹⁶³ Exh YLL-1, tab 3: ARB 1 SOC at paras 94(d), 100(c), 102(a) and 103; and tab 4: ARB 2 SOC at paras 100(d), 106(c), 108(a) and 109.

¹⁶⁴ Exh YLL-1, tab 5: ARB 1 Defence at paras 143, 196 and 211; tab 6: ARB 2 Defence at paras 137, 190 and 205.

where F claimed that the “AAA Modules were not durable as the backsheet cracked and became susceptible to electrical shock hazard as early as 5 years after installation” (at paras 18(b) and 40); (e) E’s written opening statement asserted that the alleged representation that the PV modules would be “durable, safe, of high quality and suitable for use on houses” was not false (at paras 84 and 88); and (f) E also made submissions and provided evidence “at some length” on the factual issue of whether the AAA Modules were durable, including in E’s PHB and RPHB (as noted in the Award at [361]). That ‘durability’ was initially raised as a facet of F’s non-CISG claims does not detract from the fact that this factual issue was in play and E had full opportunity to present its case on the same.

184 Insofar as the legal issue of whether a lack of durability amounts to a breach of Art 35(2) of the CISG is concerned, what is required is that E had a reasonable opportunity to make legal submissions on the point. E certainly had such opportunity. The Finalised List of Issues specified that the issue of whether the AAA Modules were fit for purpose under Art 35(2) included whether the AAA Modules were durable (at s/ns 11 and 11(a)). E addressed ‘durability’ as an aspect of F’s claim under Art 35(2) in E’s RPHB (at para 149).

185 In any event, even assuming E did not have a reasonable opportunity to present its case on the CISG Durability Argument, I find that it could not reasonably have made a difference to the Award even if E had done so. First, I do not accept E’s suggestion that it would have adduced other or further evidence on ‘durability’ had the CISG Durability Argument been “properly pleaded”.¹⁶⁵ The factual issue of ‘durability’ was in play from the start of the Arbitration and it is my view that E would have already adduced whatever

¹⁶⁵ EWS at para 180.

evidence on ‘durability’ it could or wished. The Tribunal would thus still have reached the same findings that the AAA Modules were not durable and that Art 35(2)(a) of the CISG was breached. Second, going further, even if the Tribunal did not find that the AAA Modules lacked durability, the Tribunal would still have reached the conclusion that the AAA Modules were inherently defective because of its finding that the AAA Modules were a safety hazard. The Tribunal had considered the issues of durability and safety hazard disjunctively in determining if the AAA Modules were inherently defective (Award at [358]). In particular, the finding that the AAA Modules were not durable was based on the *rate of degradation* of their “key component”, *ie*, AAA backsheet (Award at [368]); whereas the finding that the AAA Modules were a safety hazard was based on the connection between backsheet cracking and electrical shocks (Award at [370], [373] and [389]). The Tribunal concluded that the AAA Modules were inherently defective both because they were not durable *and* because they were a safety hazard (Award at [395(b)]), and correspondingly found that E had breached Art 35(2)(a) (Award at [421]–[422] and [429]).

Art 34(2)(a)(iii) of the Model Law

186 For the reasons in [183] above, the factual issue of whether the AAA Modules were durable was in play from the start of the Arbitration and within the scope of the submission to arbitration. Further, F having made a claim under Art 35(2) of the CISG from the start of the Arbitration,¹⁶⁶ the legal issue of whether E had breached its obligation under Art 35(2) by failing to deliver PV modules that were fit for purpose was also within the scope of the submission to arbitration. Against this backdrop, I consider the CISG Durability Argument to be within the scope of the submission to arbitration from two perspectives.

¹⁶⁶ Exh YLL-1, tab 3: ARB 1 SOC at para 88; and tab 4: ARB 2 SOC at para 94.

187 First, as the Tribunal is entitled to “reshuffle the way in which different concepts have been combined” (*Trustees of Rotoaira Forest Trust v Attorney-General* [1999] 2 NZLR 452 at 463, cited in *Soh Beng Tee* at [55(g)]), the CISG Durability Argument did not involve a “new difference ... outside the scope of the submission to arbitration” that was “irrelevant to the issues requiring determination”. Second, the CISG Durability Argument was squarely raised in the Finalised List of Issues and addressed in the parties’ PHBs and/or RPHBs (see [184] above). It would be appropriate to conclude from these sources that the CISG Durability Argument was within the scope of the submission to arbitration given, in particular, that (a) key components of the CISG Durability Argument were already within the scope of the submission to arbitration (see [186] above), and (b) the parties had agreed that the Tribunal would settle the list of issues and they would address the matters set out in the Finalised List of Issues (see [63] above).

Art 34(2)(a)(iv) of the Model Law

188 In my judgment, E’s challenge fails to satisfy the second, third and fourth requirements in *Lao Holdings* (see [121] above). The agreed procedure applicable where new arguments are raised is in PO1 Para 74 (see [124] above). To the extent that the CISG Durability Argument was a new argument, the Tribunal clearly allowed it to be raised under PO1 Para 74 without any requirement for F to amend its pleadings, as seen by the inclusion of the CISG Durability Argument as an issue in the Finalised List of Issues which the parties were to address in their PHBs and RPHBs. The circumstances merited this given that key components of the CISG Durability Argument were already in play. Even if, *arguendo*, the fact that F’s pleadings were not amended to plead ‘durability’ as an aspect of its CISG claim amounts to a breach of procedure, it could not reasonably have made a difference to the Tribunal’s decision had the

CISG Durability Argument been pleaded. As stated in [185] above, I do not accept that E would have adduced other or further evidence on ‘durability’.¹⁶⁷ Finally, I agree with F that E did not raise any contemporaneous objection to the CISG Durability Argument on the ground that it was allegedly advanced in breach of arbitral procedure and is barred from doing so now.

Conclusion

189 I decline to set aside the Award on Ground 8.

Conclusion

190 OA 1165 is dismissed. Unless parties agree on costs, they should file their written submissions on costs, limited to three pages, within one week from the date of this judgment.

Kristy Tan
Judicial Commissioner

Tan Chee Meng SC, Lim Wei Lee, Frank Oh Sheng Loong, Daryl Wong Zheng Hui, Wee Min and Chin Ming Fwu (WongPartnership LLP) for the claimant;
Lai Yew Fei, Tao Tao and Brendan Tan Zi Jian (Rajah & Tann Singapore LLP) for the defendant.

¹⁶⁷ EWS at para 180.