

EXHIBIT B

Partial Award

AD HOC ARBITRATION PROCEEDING

Arbitrators: Lucy Reed, Chair; Nancy F. Lesser; John H. Wilkinson

Between:

ALAMAC AMERICAN KNITS LLC

Claimant

and

LUMBERTON POWER LLC

Respondent

PARTIAL FINAL AWARD AND ORDER

I. THE PARTIES

1. Claimant Alamac American Knits LLP ("Alamac") is a limited liability company based in Lumberton, North Carolina, that manufactures fabric. Alamac knits, dyes and finishes yarn into fabric for eventual use in employee uniforms for customers such as Federal Express and UPS. These processes require steam power, in particular the dyeing process, where steam is necessary to ensure uniformity of color for employee uniform fabric.
2. Respondent Lumberton Power LLC ("Lumberton") is a limited liability company that operates a cogeneration power plant in Lumberton, North Carolina. Lumberton generates steam as a by-product of electricity generation, which it traditionally sold to Alamac. Lumberton is a wholly owned subsidiary of North Carolina Power Holdings LLP, which in turn is a wholly owned subsidiary of the Vulcan Power Group.
3. Alamac is represented in this arbitration by Charles G. Berry and Kevin H. Blake of Arnold & Porter LLP in New York City.
4. Lumberton is represented in this arbitration by Richard F. Lawler and Jeffrey Burke of Winston & Strawn LLP in New York City.

II. THE DISPUTE

5. Detailed findings of fact are set out in Section IV below. In this section, the Arbitral Panel sets out only a summary of the facts necessary to describe the basic issues in dispute between the Parties.
6. The Parties entered into a Steam Purchase Agreement (the "SPA") in October 2001, under which Lumberton agreed to sell and Alamac agreed to buy certain amounts of steam power for 10 years. The Parties each performed under the SPA, without major incident, until June 5, 2005.
7. On that date, a crew from Carolina Power & Light Company ("CP&L"), allegedly without notice, cut off the main power to the Lumberton plant for several hours in order to perform maintenance on the CP&L substation at the plant (the "Outage Event"). For reasons that are disputed, by the end of the Outage Event the plant's computer control system had lost memory and was inoperable. Lumberton declared force majeure on (or about) June 7, 2005 when it could not repair the panel. Lumberton did not supply steam power again to Alamac until November 2006, when it rented a replacement panel, and then only sporadically.
8. The Parties agree that Lumberton failed to perform under the SPA by failing to provide steam power to Alamac. The main issues in dispute are:
 - (a) Whether the Outage Event constituted Force Majeure under Section 1.1 of the SPA, thereby excusing Lumberton's failure to supply steam to Alamac?

- (b) Whether Lumberton's failure to supply steam is excused under Section 3.2 of the SPA, because the Outage Event created an emergency or hazardous condition?
- (c) Whether Lumberton used reasonable efforts to cure, mitigate or remedy the situation under Section 9.1 of the SPA?
- (d) If Lumberton's failure to supply steam is not excused and Lumberton did not use reasonable efforts to cure, whether Alamac is entitled to damages and, if so, in what amount?
- (e) The appropriate award of the costs and expenses of this arbitration.

III. THE ARBITRATION AGREEMENT AND PROCEDURAL HISTORY

9. Section 10.9 of the SPA, the dispute resolution article, provides for arbitration in accordance with the Commercial Rules of the American Arbitration Association ("AAA Commercial Rules") and certain additional specifications in Section 10.9:

The parties hereto agree that any and all disputes, controversies or claims among the parties arising out of or relating to this Agreement whether or not the specific subject matter is otherwise expressly herein stated to be subject to or resolved in accordance with this Section 10.9 shall be resolved by consultation and agreement among the parties or, if notice is given by either party as provided below and the matter is not settled within twenty (20) days thereafter, by reference to arbitration in accordance with the Commercial Arbitration Rules (as amended from time to time) of the American Arbitration Association and the following provisions; provided, the provisions of this Section 10.9 shall prevail in the event of any conflict with such rules. Both parties, or either one of them, shall, within twenty (20) days after the giving of notice by one party to any other party of its desire to refer the matter in dispute to arbitration, appoint one arbitrator, and both of the arbitrators so appointed shall, within (5) days after the second of their respective appointments, appoint a third arbitrator as a neutral and impartial arbitrator, and the three arbitrators so appointed shall constitute the arbitration panel, over which said third arbitrator shall preside. If any party fails to appoint its arbitrator within said twenty-day period, the party which has appointed its arbitrator may apply to the American Arbitration Association for appointment of such arbitrator and the parties shall be bound by the selection of such association. If the two arbitrators so appointed fail to agree on a third arbitrator, any party may apply to the American Arbitration Association for appointment of said third arbitrator, and the parties shall be bound by the selection of such association. If any person appointed as an arbitrator shall die, fail to act, resign, become disqualified, or be removed by the person, entity or persons or entities, appointing him, the person or entity, or persons or entities, who appointed him shall, within fifteen (15) days after such death, failure to act,

resignation, disqualification or removal, appoint a substitute arbitrator. If such substitute appointment is not made within fifteen (15) days, any party may apply to the American Arbitration Association for appointment of such substitute arbitrator, and such appointment shall be binding on the parties. Any such arbitration proceeding shall be held in the English language in New York, New York. The written decisions and conclusions of a majority of the arbitration panel with respect to the matters referred to them pursuant hereto shall be final and binding on the parties, and confirmation and enforcement thereof may be rendered thereon by any court having jurisdiction upon application of any party to the arbitration proceeding. The costs and expenses incurred in the course of such arbitration shall be borne by the party against whom the decisions and conclusions of the arbitration panel are rendered; provided, if the arbitration panel determines that its decisions are not rendered wholly against the favour of one party, the arbitration panel shall be authorized to apportion such costs and expenses in the manner it may deem fair and just in light of the merits of the dispute and its resolution.

10. Alamac served a Notice of Arbitration on Lumberton under the AAA Commercial Rules on June 20, 2005.

11. Alamac appointed Nancy F. Lesser of Pax ADR (700 12th Street, NW, Suite 700, Washington, DC, 20005) as arbitrator. Lumberton appointed John H. Wilkinson of Fulton, Rowe & Hart (1 Rockefeller Plaza, New York, NY 10022) as arbitrator. On August 25, 2005, the co-arbitrators appointed Lucy Reed of Freshfields Bruckhaus Deringer LLP (520 Madison Avenue, New York, NY 10022) as chair of the Arbitral Panel.

12. On September 12, 2005, the Panel conducted an initial telephone conference with counsel for the Parties, during which the arbitrators requested a draft procedural order and comments on scheduling. Having received those materials from counsel and having conducted a second conference call on September 22, 2005, the Panel issued the First Procedural Order on September 26, 2005.

13. In the First Procedural Order, the Panel, at the request of the Parties, established this arbitration as an ad hoc arbitration rather than an arbitration administered by the American Arbitration Association. Paragraph 1 provides that "this arbitration shall proceed on an ad hoc unadministered basis, with the applicable rules being the American Arbitration Association Commercial Rules (as currently in effect) as modified and supplemented by the Panel in consultation with the Parties, to effect an efficient and cost-effective resolution." The applicable rules remain the AAA Commercial Rules (*mutatis mutandis*) and the additional specifications in the SPA.

14. The First Procedural Order also set out the basic procedures for the case. The Panel:

- (a) authorized discovery requests "in any convenient and efficient form [including] requests for information in the nature of interrogatory questions as well as requests for production of documents ..." (para. 3);
- (b) scheduled the discovery, including a possible conference to resolve any disputes on October 24, 2005 (paras. 4-6);
- (c) ordered the Parties to submit by November 14, 2005 (i) an agreed statement of undisputed facts, plus indications of significant disputed facts and (ii) memoranda not exceeding 15 pages, plus exhibits, summarizing each Party's view of the issues and the resolution sought (para. 7);
- (d) scheduled a status conference for November 21, 2005 to discuss how to proceed, whether by motions in the nature of summary judgment or evidentiary hearing (para. 8);
- (e) memorialized the Parties' authorization of the chair, in consultation with the other arbitrators as appropriate, to resolve procedural disputes, including discovery disputes (para. 9) and set up escrow accounts to receive and manage the required deposits against costs to fund the arbitrators fees and expenses, set initially at \$20,000 for each Party (paras. 11-13); and
- (f) set the arbitrators' fees at \$500 per hour and authorized use of an administrative secretary (from the chair's law firm) to be compensated at \$250 per hour (para. 13).

15. Alamac and Lumberton deposited \$20,000 against costs on October 3, 2005, respectively. The chair established two separate interest-bearing escrow accounts.

16. As envisioned in the First Procedural Order, the Parties served document requests and interrogatories on each other. They submitted objections concerning various discovery disputes to the Panel. The chair conducted a two-hour hearing by conference call on October 24, 2005 and ordered additional submissions. On October 28, 2005, the chair issued the Second Procedural Order resolving the discovery disputes and ordering further discovery.

17. On November 18, 2005, the Parties agreed to suspend the arbitration until February 2006, identified as the target date for Lumberton to restore steam power to Alamac. There were no further arbitration proceedings, other than status checks by email, until October 2006.

18. On October 20, 2006, Alamac requested the Panel to reactivate the proceedings. Lumberton consented on October 27, 2006.

19. Following a preliminary hearing with counsel by conference call on November 9, 2006, the Panel issued the Third Procedural Order. This Procedural Order lifted the suspension, established a new schedule based on that set out in the First Procedural Order, and allowed limited new discovery. The agreed statement of undisputed facts and

memoranda, with exhibits and witness lists, were rescheduled for submission by January 12, 2007 (para. 5). The Panel scheduled the status conference for January 22, 2007 and tentatively set March 13-15, 2007 for an evidentiary hearing (para. 6).

20. The Fourth Procedural Order (December 21, 2006) and Fifth Procedural Order (January 2, 2007) resolved various discovery disputes. In the Fifth Procedural Order, the Panel reserved Alamac's request for an award of fees and costs relating to its discovery application.

21. On January 12, 2007, Alamac filed its Memorandum of Facts and Issues, Statement of Undisputed Facts, Designation of Witnesses, and a submission concerning still outstanding discovery requests related to, among other things, Lumberton financial statements and a Lumberton application to the Federal Energy Regulatory Commission ("FERC"). Also on January 12, 2007, Lumberton filed its Pre-Hearing Memorandum, Proposed Witness List and List of Proposed Exhibits, as well as an Application for More Definitive Statement Pursuant to Rule R-4 of the AAA Commercial Rules and a Request to Strike Alamac's Statement of Undisputed Facts.

22. The Parties proved unable to prepare an agreed statement of undisputed facts (although the Panel did perceive certain undisputed facts from their respective statements of fact).

23. As envisioned in the Third Procedural Order, the Panel conducted a status conference by telephone call on January 22, 2007, following the agenda jointly submitted by the Parties on January 18, 2007.

24. On January 28, 2007, following further limited submissions, the Panel issued the Sixth Procedural Order. In significant part, the Panel:

- (a) denied Lumberton's Application for a More Definitive Statement, on grounds that the record (including the First Procedural Order) reflects the nature and scope of Alamac's claims;
- (b) denied Lumberton's Request that Alamac's Statement of Undisputed Facts be stricken, noting that Alamac should not have used that title for what was a unilateral statement of facts, but that this mistake was mitigated by Alamac's disclosure at the opening of the document that the only undisputed facts apparently were the Parties' entering into the SPA and the Outage Event;
- (c) ordered Lumberton to produce any year-end financial statements for 2004 and 2005 and the most current financial statements for Lumberton or, if no such financial statements exist, such financial statements of its parent North Carolina Power Holdings LLC ("NCPH"); or, should there be no such statements, the financial ledgers and other basic financial information for Lumberton or, if necessary, NCPH, sufficient to show Lumberton's financial condition from 2004 to present; or, if the aforementioned documents do not exist, then to produce a sworn statement from an appropriate officer of Lumberton, NCPH or NCPH's

parent Vulcan Capital that no such financial documents for either Lumberton or NCPH exist;

- (d) ordered counsel for both Parties to affirm by February 5, 2007 that all responsive documents had been produced;
- (e) denied Alamac's request for sanctions in connection with Alamac's discovery requests, but reserved the question of assessing costs and expenses to the final award;
- (f) ordered Alamac to notify the Panel and Lumberton by February 9, 2007 whether it would file a motion in the nature of summary judgment, in which case the Panel would suspend the evidentiary hearing date and set a reasonable pleading schedule. The Panel noted, in this regard, that it anticipated significant questions of disputed fact; and
- (g) ordered each Party to make a further deposit against costs of \$25,000 by February 12, 2007.

25. On February 5, 2007, Alamac notified the Panel and Lumberton that it would not file a motion in the nature of summary judgment. Alamac also reiterated still unsettled discovery issues regarding Lumberton financial statements and FERC documents.

26. On February 28, 2007, the Panel issued the Seventh Procedural Order scheduling the evidentiary hearing for March 13 and 14, 2007 and requesting final witness lists by March 7, 2007.

27. Pursuant to the Seventh Procedural Order, on March 7, 2007 both Parties submitted their lists of witnesses to be called at the hearing and indicated the topics of their testimony. Alamac listed:

- (a) Mark Cabral, Alamac President and CEO
- (b) Glenn Robinson, M.S., P.E., an expert
- (c) Robert Hester, Alamac CFO.

Lumberton listed:

- (a) Scott Campbell, Lumberton Treasurer
- (b) Rick Houser, Lumberton Plant Manager
- (c) Larry Hopkins, a Lumberton technician
- (d) John Lanair, expert (or other expert).

28. Alamac made its second advance against costs on February 14, 2007, and Lumberton on March 13, 2007.

29. The hearing took place on March 13 and 14, 2007 at the chair's New York City offices. (There were no rental charges for the hearing and breakout rooms.) The Parties

arranged for a court reporter. The administrative secretary, David Kohegyi of Freshfields, attended for part of the hearing.

30. At the hearing, counsel for both sides presented opening arguments. Alamac presented Mr. Cabral and Mr. Hester as fact witnesses and Mr. Robinson as an expert witness. Lumberton presented Mr. Hopkins, Mr. Houser and Mr. Campbell as fact witnesses, and did not present any expert witness. Alamac submitted 34 exhibits and Lumberton 15 exhibits.

31. In lieu of closing arguments, the Panel ordered the Parties to file short (20 page maximum) post-hearing submissions summarizing their cases by April 23, 2007. The Panel left the record officially open in order to decide, after receiving the submissions, whether to hold a follow-up conference with counsel.

32. On April 23, 2007, Alamac and Lumberton submitted their Post-Hearing Memoranda.

33. In the course of the hearing, the Panel inquired as to the Parties' expectations for the form of the award. The relevant AAA Commercial Rule, Rule R-42, requires the arbitrators to prepare a written award signed by a majority, but also provides that the arbitrators "need not render a reasoned award unless the parties request such an award in writing prior to appointment of the arbitrator[s] or unless the arbitrator[s] determine that a reasoned award is appropriate." The arbitration clause in the SPA, Section 10.9, it will be recalled, provides:

The written decisions and conclusions of a majority of the arbitration panel with respect to the matters referred to them pursuant hereto shall be final and binding on the parties" (Emphasis added)

The Parties indicated that they desired a reasoned award, but left the amount of detail to the discretion of the arbitrators. (Tr. 596:8-14) In light of the ad hoc nature of our mandate, we have determined to provide relatively detailed findings of fact and conclusions. It will be seen that the focus of this Partial Final Award and Order is on the facts as alleged and proved (or not) by the Parties, as there were no significant legal disputes beyond interpretation of the SPA.

34. On September 25, 2007, the Panel sought a third advance against costs of \$15,000 from each side by October 3, 2007, before releasing its Partial Final Award and Order. Alamac made its third deposit, while Lumberton failed to do so.

IV. FACTUAL BACKGROUND AND FINDINGS OF FACT

A. THE STEAM PURCHASE AGREEMENT

35. The Parties entered into the "Steam Purchase Agreement regarding the Lumberton Facility, between Lumberton Power LLC, as Project Company, and Alamac American Knits LLC, as Steam Purchaser, dated October 1, 2001" (the "SPA").

36. Section 3.1 of the SPA obligates Alamac to purchase from Lumberton a minimum amount of \$60,000 per month of steam power. The SPA also sets a maximum purchase amount of 306 million pounds per year, an amount far exceeding Alamac's actual requirements. There is no dispute as to the levels of Alamac's purchases or, indeed, as to any other issue concerning Alamac's performance.

37. Section 10.8, the Applicable Law clause, provides:

10.8 Applicable Law.

This agreement shall be governed by and construed in accordance with the Laws of the State of New York without regard to choice of law principles that could result in the choice of the law of another jurisdiction.

38. The dispute resolution clause, Section 10.9, is set out in full in Section III above.

39. Article 9 of the SPA is headed Force Majeure. Section 9.1 provides;

Subject to Section 9.3 below, neither party shall be considered to be in default in the performance of any of its obligations under this Agreement, when and to the extent failure of performance shall be due to Force Majeure. The Party claiming Force Majeure shall use its reasonable efforts, to cure, mitigate, or remedy the effects of Force Majeure.

40. Force Majeure is defined in Section 1.1 to mean:

any act that (a) is beyond the reasonable control of the affected Party, (b) is not due to its fault or negligence, (c) cannot be avoided by the exercise of due diligence, and (d) would materially interfere with the Project Company's performance of its obligations hereunder. Subject to the satisfaction of the conditions set forth in (a) through (d) above, Force Majeure shall include, without limitation: (i) natural phenomena, such as storms, floods, lightning, earthquakes and drought; (ii) wars, civil disturbances, acts of terrorism, revolts, insurrections, sabotage, commercial embargoes, expropriation, confiscation and nationalization and export or import restrictions; (iii) transportation disasters, whether by ocean, rail, land or air; (iv) strikes or other labor disputes that are not due to the breach of any labor agreement by the affected Party; (v) fires; (vi) a Change of Law or any actions or omissions of a Governmental

Authority that were not voluntarily induced or promoted by the affected Party, or brought about by the breach of its obligations under this Agreement or any Laws; (vii) the impossibility of one of the Parties, despite its best commercially reasonable efforts, to obtain and maintain in a timely and appropriate manner any Permit necessary to enable such Party to fulfill its obligations in accordance with this Agreement; (viii) the failure by any entity to provide any service it is obligated to provide under any agreements entered into relative to this Agreement; (ix) the failure of coal suppliers to deliver coal to Project Company in accordance with the terms of the coal supply agreements; and (x) failure of any contractor to perform, failure or breakdown of the Facilities and/or equipment from any other cause not listed above (provided that the failure or breakdown of the Facilities and/or equipment is not caused by the failure to operate and to maintain such Facilities and/or equipment in accordance with good engineering and operating practices). (Emphasis added)

41. Section 9.3 of the SPA excludes financial inability from the definition of Force Majeure:

Financial inability to perform shall not constitute an event of Force Majeure, and the Party claiming Force Majeure shall not be excused by reason of Force Majeure from any payment obligations that arose prior to the Force Majeure or from any other payment obligations which remain due and payable hereunder.

42. Section 3.2(c) of the SPA allows Lumberton to discontinue steam power supply in the event of certain emergency or hazardous situations:

Emergency Situations. The Steam may be disconnected or reduced by either party at any time in an emergency affecting the Facilities or Steam Purchaser Plant. In addition, either Party has the right to disconnect the Steam if in the opinion of either Party it poses or may pose a hazardous condition or requires immediate action to protect the environment, persons or property (in either case described above, an "Emergency"). In either case the Party effecting the reduction or disconnection shall give as much notice as possible and reasonable under the circumstances to the other Party and shall keep such other Party informed of the probable length of the disconnection. Each Party will use its reasonable commercial efforts to correct any such condition and to reinstate the delivery and receipt of Steam as soon as reasonably practicable.

43. In the event of unexcused breach by Lumberton, Section 3.2(a) of the SPA provides for Lumberton to pay to Alamac its "Cost of Cover." Section 3.2(a) provides in relevant part:

In the event that the Project Company breaches its obligation to deliver the amount of Steam required to be delivered to Steam Purchaser under this Agreement, and such breach is not excused by Force Majeure, an Emergency, a Planned Shutdown or by Steam Purchaser's breach of any other provision of this Agreement, then Project Company will pay to Steam Purchaser, as Steam Purchaser's sole and exclusive remedy, SP's Cost of Cover until Project Company is able to meet Steam Purchaser's Steam requirements hereunder either from the Steam Facilities or from alternative steam production equipment (e.g. back-up boilers).

44. Section 1.1 of the SPA defines "Cost of Cover" to mean:

the excess of (i) the reasonable cost actually incurred by [Alamac] to meet its Steam requirements from alternative steam production equipment over (ii) the price that would have been paid by [Alamac] under this Agreement to obtain such Steam from [Lumberton].

45. Lumberton also made certain warranties to Alamac. In Section 5.2(a) of the SPA, Lumberton agrees to:

maintain, at its sole cost and expense, all of its equipment and facilities that are part of the Steam Facilities and the Interconnection Facilities which are located on the [Lumberton] Site, in reasonable working order and condition in accordance with Prudent Industry Practice.

46. Section 1.1 of the SPA defines "Prudent Industry Practice" to mean:

those practices, methods, standards and acts that, in the exercise of reasonable judgment in light of the facts known at the time a decision was made, would have been used in prudent engineering and operations to operate a facility similar to [Lumberton's] under the same or similar circumstances, with efficiency, dependability, and in accordance with applicable Laws.

B. THE PARTIES' PERFORMANCE 2001 – JUNE 2005

47. It is clear from the record that, overall, the Parties enjoyed a close working relationship until the Outage Event. Their facilities are adjacent and, indeed, Alamac formerly owned the Lumberton plant for a brief time. The executives and employees of Alamac and Lumberton literally are neighbors.

48. From October 2001 until the Outage Event, the Parties performed their obligations under the SPA without a major incident.

49. Until late 2004, CP&L was Lumberton's exclusive customer for electricity. As noted, the steam provided to Alamac was a by-product of Lumberton's electricity generation operations.

50. In December 2004, Lumberton's specialty coal supplier suffered a serious mine fire, which led Lumberton to have to purchase coal on the open market at an increased price.

51. Lumberton ceased producing electricity for CP&L after the coalmine fire because, according to Scott Campbell (Lumberton's Treasurer), it "was uneconomical." (Tr. 110:17 – 111:2) After that, Lumberton ran its facilities only to provide steam power to Alamac under the SPA.

52. To protect its steam delivery, Alamac paid early for steam used in February 2005 and then, in March 2005, agreed to purchase coal for Lumberton until May 2005 under an extended repayment plan. (Claimant Exs. 4, 5 and 6)

C. LUMBERTON PLANT OPERATIONS

53. A key piece of equipment at the Lumberton plant was a "Rosemount Mark III Distributed Control System" (the "Rosemount DCS"). Rick Houser (Lumberton's Plant Manager), described the Rosemount DCS as the "control system that controls the entire information highway in and out of the control room to operate that facility" (Tr. 401:3-9) and the "brain" of the plant (Tr. 537:3-4).

54. The Rosemount DCS was installed in 1985, before the existence of the Windows operating systems. Its memory system was composed of bubble memory cards. Although Lumberton's evidence was disputed by Alamac, the Panel finds that Lumberton conducted regular maintenance on the Rosemount DCS and that the Rosemount DCS, although aging, functioned reliably until the Outage Event.

55. The Lumberton plant had a back-up battery system, which was approximately 23 years old. It was designed to operate for a minimum of eight hours in the event of a power failure. (Claimant Ex. 19)

56. The owners of Lumberton operated a sister plant in Elizabethtown, North Carolina. The Elizabethtown plant, which also used a Rosemount DCS, had not been generating electricity since some time before December 2004.

57. Mr. Houser was the Lumberton Plant Manager at all relevant times. Larry Hopkins was a "Tech 2" technician who had been trained in various procedures for running the Elizabethtown and Lumberton plants.

58. CP&L has a fenced substation at the Lumberton plant, accessible only to its personnel, containing connection equipment. CP&L performed preventive maintenance on its equipment semi-annually. Under Section 4 of their Interconnection and Operation Agreement (Respondent Ex. 12), CP&L was obligated to notify Lumberton in advance of such maintenance. According to Lumberton, CP&L historically provided such notice.

59. Such maintenance work required CP&L to cut or "drop" the main power to the plant for several hours. Lumberton's normal practice during such power cuts was to self-generate power or, if its turbine and boilers were idle, to rent a back-up generator.

D. THE OUTAGE EVENT OF JUNE 5, 2005 AND ITS AFTERMATH

60. There are substantial facts in dispute concerning the Outage Event and its aftermath. Not all however are relevant to the Panel's resolution of the Parties' disputes. The Panel makes findings of fact only as necessary to resolve those disputes.

1. The Outage Event and Damage to the Rosemount DCS

61. The key and essentially undisputed facts surrounding the Outage Event itself are these:

- (a) At approximately 7:00 am on the morning of Sunday, June 5, 2005, a crew from CP&L arrived at the Lumberton plant to perform maintenance.
- (b) The plant was idle and the only employee on duty was Mr. Hopkins. Mr. Hopkins was unaware that CP&L would do maintenance that day. He asked them not to proceed, but they did.
- (c) Mr. Hopkins tried, unsuccessfully, to call Mr. Houser and Mr. Campbell from the plant by landline to notify them of the situation. He left them voicemails. He did reach the control room operator at the Elizabethtown plant who said he would also try to reach Mr. Houser. Mr Hopkins did not have a cell phone.
- (d) Mr. Hopkins took steps to isolate the plant by opening certain circuit breakers.
- (e) At around 7:30 am, the CP&L crew dropped the power. CP&L did not restore power until approximately 2:00 or 3:00 pm, over six hours later. The power cut included the landline telephone.
- (f) Mr. Hopkins did not patrol the plant while it was dark.
- (g) The back-up battery system did not provide sufficient power to the Rosemount DCS while the main power was cut.
- (h) When CP&L restored the main power, the Rosemount DCS was not functioning. Mr. Hopkins tried and failed to restart the Rosemount DCS.

62. The Parties dispute the cause of the damage to the Rosemount DCS.

63. In the opinion of Alamac's expert witness, Mr. Glenn Robinson, the damage was caused by a power spike when CP&L dropped or restored the power, because Mr. Hopkins had failed to "isolate" the plant by opening the main circuit breaker connecting the plant to the CP&L lines. Mr. Robinson, who prepared an insurance report in July 2006 based on his inspection of the plant a year after the Outage Event (Claimant Ex. 16),

based this opinion on certain signs of damage that he observed consistent with an unprotected power surge.

64. Mr. Hopkins testified that he had opened the necessary circuit breakers, as he had been trained to do. (Tr. 356:18 – 357:8, 376:9-14) Although the record reflects that Mr. Hopkins was generally trained (Respondent Exs. 13 and 15), the scope of his training on plant shutdown procedures is disputed. Mr. Houser testified that there was an operator-training manual in the control room (Tr. 471:8-13), but Lumberton failed to produce a copy to Alamac despite specific requests. Mr. Hopkins admitted that he did the June 5 shutdown from memory without consulting a manual, and that he had not previously shut down either the Lumberton or Elizabethtown plant without supervision. (Tr. 376:2 – 377:11, 388:2-7)

65. Lumberton asserts that, because Mr. Hopkins properly isolated the Lumberton plant from the grid, a power spike could not have caused the damage to the Rosemount DCS. Lumberton asserts, instead, that the damage to the Rosemount DCS occurred because the back-up batteries were drained before CP&L restored power and, as a consequence, the Rosemount DCS bubble memory cards were de-electrified. When the bubble memory cards are de-electrified, the stored information deteriorates and the program becomes corrupt and unusable. According to the testimony of Mr. Houser, once power is lost the Rosemount is “gone.” (Tr. 424:18)

66. There was no definitive evidence on the capacity of the 20-plus year old back-up battery system. Although it was designed to last for a minimum of eight hours (Claimant Ex. 19), Mr. Houser testified that he would not trust it for more than “six to eight hours” (Tr. 19:7-8) or “guarantee that they [the batteries] would last six hours” (Tr. 426:6-9). Although the system was maintained (Tr. 353:22 – 354:4), Mr. Houser testified that it had never been tested for capacity. (Tr. 426:10-22) He also testified that there was a DC voltage alarm to signal the batteries were near depletion. (Tr. 427:11-16)

2. Aftermath of the Outage Event

67. Following Mr. Hopkins’ unsuccessful efforts on June 5, 2005, the control room supervisor from the Elizabethtown plant and the Lumberton employee in charge of Instrument and Control also tried and failed to restart the Rosemount DCS.

68. Mr. Houser arrived at approximately 6:00 pm on Sunday night, June 5, and tried several ways to restart the Rosemount DCS. He tried to repair the system with spare bubble cards and other parts on site. He then tried parts “cannibalized” from the Elizabethtown plant. His efforts failed.

69. When it became apparent to Mr. Houser that he would not be able to restart the Rosemount DCS, he notified Alamac that Lumberton could not provide steam for Alamac’s next scheduled shift. Alamac cancelled the shift.

70. The next day, on June 6, 2005, Lumberton hired an independent engineering firm to assess the situation. (Respondent Ex. 3) Mr. Houser contacted Robert E. Mason Company (“REM”), the service representative for the Rosemount DCS, which scheduled

a technician to arrive on Tuesday morning, June 7, 2005. Mr. Houser also attempted to order replacement parts by overnight courier, but this avenue proved unavailing.

71. The Parties exchanged several letters between June 7 and June 17, 2005 concerning the Outage Event. (Claimant Exs. 7, 8, 9, 10 and 11; Respondent Exs. 5 and 6). It appears that Lumberton formally noticed Force Majeure under Article 9 of the SPA by letter dated June 9, 2005 from Lumberton's Executive Vice President, Mr. Gerald Campbell, to Mr. Cabral (Respondent Ex. 6), rather than in a shorter letter dated June 7 from Mr. Scott Campbell to Mr. Hester described in the June 9 letter as "a courtesy to alert you to the situation while we gathered all the facts" (Respondent Ex. 5; Claimant Ex. 7). In the June 9 letter, Mr. Campbell described the Outage Event and, among other things, stated:

Consequently, the control system in the Facilities was damaged as the lack of electricity erased the memory of the system and damaged its components.

As you are aware, the control system in the Facilities is quite old and is no longer supported by any major manufacturer. Without a proper control system, the Facilities cannot be operated safely to protect the employees and equipment located there.

(Claimant Ex. 9)

72. Alamac disputed the claim of Force Majeure. In a letter dated June 16, 2005 to Mr. Campbell, Mr. Cabral stated:

It is our position that maintaining the facilities, and operating, with a control system that is "quite old and no longer supported by any major manufacturer," without an adequate contingency plan, is not in accordance with "Prudent Industry Practice."

(Claimant Ex. 10)

73. By letter dated June 17, 2005, Mr. Campbell took "strong exception" to Mr. Cabral's letter of June 16, emphasized that "we had, and continue to have, all necessary backup power supplies in place for any contingency which would result in the loss of our primary power source," and confirmed that Lumberton was using "reasonable efforts to cure, mitigate or remedy the effects of the Force Majeure event." (Claimant Ex. 11)

74. Over the same period, Alamac took steps to protect its operations. Alamac had a temporary boiler rented, installed and operational on Saturday, June 11, less than one week after the Outage Event. The temporary boiler was sufficient to provide steam for fabric dyeing and finishing. Alamac used this rented boiler until early November 2005, when it purchased and installed two used boilers to provide steam both for operations and heating the plant. These boilers burn either fuel oil or natural gas. Alamac rented the temporary boiler for approximately \$14,000 per month and purchased the boilers for approximately \$200,000. (Claimant Ex. 32)

75. Meanwhile, Lumberton was still exploring its alternatives. Simple repair of the Rosemount DCS, as compared to partial or full replacement, did not appear to be a viable option. In an email to Mr. Houser dated September 1, 2005, REM reported:

After our recent visit to your site to fix issues with the RS3 control system, we recommend that you replace the current system. With time our ability to support your system has become near impossible. Parts are no longer available for your system. Any repairs done to the RS3 cannot be guaranteed to be permanent fixes and therefore should not be considered safe alternatives to replacement. A failure of the control system during certain boiler operating conditions could result in damage to mechanical equipment or personal injury. Emerson has supported your current system to the best of our ability. We have an in depth understanding of your boiler operations due to our involvement in the installation and maintenance of yours and similar facilities. Due to our prior experience in replacement of RS3 systems we can leave your current field wire terminations in place and connect through the marshaling panels directly to DeltaV. By not rewiring, your current system can be upgraded very quickly and with little risk of damage to field wires. Please contact us with any questions you have.

(Claimant Ex. 13; emphasis added)

76. The record is clear that Lumberton could not, at that time, finance a partial or full replacement of the Rosemount DCS. In an email to Scott Campbell and Jerry Campbell (at Vulcan email addresses) dated October 5, 2005, Mr. Houser wrote that REM was:

committed to us being fully operational sometime in January 2006. "Only if we start the ordering process this coming week". We also touched on the money issue and I feel sure that 250K is more than sufficient to start the process. ... Remember that all this boils down to the money, once we have it in place we may start speeding up this process.

(Claimant Ex. 14)

77. On August 3, 2005, REM Services, Inc. and Emerson provided Lumberton with a Budgetary Estimate of \$732,000 to design and supply controls and monitor construction to upgrade the Rosemount DCS with an Emerson DeltaV system. (Claimant Ex. 12)

78. Lumberton provided Alamac with various projections for the restoration of the steam supply. As noted above, the Parties suspended the arbitration in November 2005 in anticipation that Lumberton would restore steam power in February 2006.

79. According to Mr. Campbell's testimony, Lumberton decided in June 2006 to purchase a new Honeywell HC 900 DCS unit. (Tr. 530: 18-19; 532: 10-12). This was the same time that financing became available. (Tr. 537:14-20) Mr. Campbell testified that the new Honeywell system was to be installed in April 2007 and should be operational one month later. (Tr. 532:19 – 533:3)

80. Also in June 2006, Lumberton rented temporary DCS equipment from REM. A combination of repair and the rental (at \$5000 per month) of a rebuilt console allowed Lumberton to begin producing power again. (Tr. 487:19; 488:18) Lumberton tested the interim system in August 2006, which apparently allowed it to be recertified by FERC on October 17, 2006. According to Mr. Houser, the testing and installation process took a "couple of months." (Tr. 483:10-12).

81. Lumberton has supplied steam to Alamac only periodically, and apparently only when supplying power to the grid, for a total of 20 days from August 2006 through the hearing. (Claimant Ex. 31; Tr. 99:3-5) The testimony was candid that Lumberton considers the SPA uneconomical: Mr. Campbell described the SPA as a "secondary contract" (Tr. 542:20) and Mr. Houser, after acknowledging that Lumberton had the ability to supply Alamac since late 2006, stated the failure to supply was "the owner's decision" (Tr. 494:13-22).

82. At some point, Alamac received a payment of \$171,000 from its insurer for business interruption. (Tr. 118:2 – 119:3) The subrogation and recovery rights of the insurer in relation to this arbitration are not clear on the record. (Tr. 144:19-24)

IV. CLAIMS AND DEFENSES OF THE PARTIES

A. Claimant Alamac

83. Alamac makes the following allegations against Lumberton:

- (a) Lumberton breached the SPA by failing to supply steam subsequent to the Outage Event;
- (b) Lumberton's breach of the SPA is not excused by Force Majeure under Article 9 of the SPA;
- (c) Lumberton's breach of the SPA is not excused under the emergency or hazardous condition provision in Section 3.2(c) of the SPA; and
- (d) Lumberton has not made reasonable efforts to cure, mitigate or remedy the effects of any Force Majeure pursuant to Section 9.1 of the SPA.

84. Accordingly, Alamac is seeking:

- (a) an award of damages from Lumberton for its Cost of Cover in the amount of \$1,441,766.01;
- (b) a declaration of entitlement to damages for its ongoing Cost of Cover until Lumberton cures; and
- (c) an award of its costs and expenses incurred in this arbitration, including for its multiple discovery applications, in an amount to be determined.

B. Respondent Lumberton

85. Lumberton defends itself on grounds that it:

- (a) is excused from supplying steam under the SPA because of Force Majeure, as provided for in Article 9 of the SPA;
- (b) in the alternative, is excused because of hazardous emergency circumstances, as allowed in Section 3.2(c) of the SPA;
- (c) used reasonable efforts to cure, mitigate or remedy the effects of Force Majeure in accordance with Section 9.1 of the SPA.

86. Lumberton, accordingly, requests the Panel to deny all of Alamac's claims and award Lumberton its costs and expenses incurred in defending this arbitration.

VII. MERITS: ALAMAC'S CLAIMS AND LUMBERTON'S DEFENSES

A. Breach of Contract

87. The Panel finds that Lumberton breached the SPA by not providing contractual levels of steam to Alamac from the Outage Event of June 5, 2005 until (at least) the close of the hearing in March 2007.

B. Force Majeure: Existence and Duration

88. The next question is whether Lumberton's failure to provide steam is excused by Force Majeure under Article 9 of the SPA and, if so, for how long. For the reasons set forth below, the Panel finds that Lumberton was so excused from June 6, 2005 through September 6, 2005, at which point Lumberton reasonably could have repaired and rebuilt the Rosemount DCS with a rental console from REM, as it ultimately did in June 2006.

89. In evaluating the Force Majeure issues, as in other issues, the Panel faces a great deal of contrary evidence. Some allegations are well documented, while others are only supported by circumstantial evidence and inference. However, as noted, not all of the disputed questions of fact have proved necessary to resolve.

1. The Definition and Standards under the SPA

90. It is undisputed that Lumberton bears the burden of proving its Force Majeure defense. Lumberton relies on the Outage Event and its aftermath, which Lumberton describes, in the words of the definition of Force Majeure in Section 1.1 of the SPA, as a:

failure or breakdown of Facilities and/or equipment from any . . . cause . . . (provided that the failure or breakdown of the Facilities and/or equipment is not

caused by the failure to operate and to maintain such Facilities and/or equipment in accordance with good engineering and operating practices). (Emphasis added)

91. Lumberton alleges that its failure to supply steam to Alamac resulted from the “failure or breakdown” of Lumberton’s Rosemount DCS, caused by the “unauthorized and unprecedented act of third-party CP&L, not by any failure, negligence or lack of diligence on the part of Lumberton.” (Lumberton Pre-Hearing Memorandum, page 6)

92. For its part, Alamac claims that negligence on Lumberton’s part precludes Lumberton’s Force Majeure defense. In the main, Alamac claims that Lumberton was negligent in: (a) relying on the aged and obsolete Rosemount DCS to operate the plant; (b) relying on the aged back-up battery system to protect the Rosemount DCS in the event of a power outage; (c) leaving Mr. Hopkins solely responsible for the plant, without adequate training, support or a cell phone. Parallel to the reference in the definition of Force Majeure to “good engineering and operating practices” (Section 1.1 of the SPA), Alamac also alleges that Lumberton breached its warranties under Section 5.2(a) of the SPA by failing to maintain its equipment in accordance with Prudent Industry Practice.

93. In evaluating the Parties’ arguments, the Panel has to look to the overall definition and standards for Force Majeure in the SPA. The definition in Section 1.1 has several basic components, being:

any act that (a) is beyond the reasonable control of the affected Party, (b) is not due to its fault or negligence, (c) cannot be avoided by the exercise of due diligence, and (d) would materially interfere with the Project Company’s performance of its obligations hereunder.

94. Given that Lumberton is relying on a chain of acts or events that allegedly interfered with its performance of its obligation to supply steam to Alamac, the Panel considers that each act has to: (a) have been beyond Lumberton’s reasonable control; (b) not have been caused by Lumberton’s fault or negligence; and (c) could not have been avoided if Lumberton had exercised reasonable due diligence. The primary focus of the debate here is Lumberton’s alleged fault and negligence, which must be judged by the standard of “operating and maintaining in accordance with good engineering and operating practices” and “Prudent Industry Practice” as defined in Sections 1.1 and 5.2(a) of the SPA.

2. The CP&L Maintenance Visit

95. The Parties agree that the first act in the chain of alleged Force Majeure was the visit of the CP&L maintenance crew on June 5, 2005. Although the evidence was sparse, the Panel finds that Lumberton, and Mr. Hopkins in particular, did not expect this maintenance visit. The testimony showed that CP&L regularly notified Lumberton of maintenance visits and that Lumberton rented a generator to provide back-up power, rather than relying on the back-up battery system, if it was not itself generating power. It is highly likely that Lumberton would have taken similar precautions if it had expected CP&L to cut power to perform maintenance on June 5, 2005.

96. Although the Panel is convinced that Lumberton did not expect the June 5 maintenance visit, the Panel cannot make any finding as to whether CP&L did or did not send a notice to Lumberton. Lumberton did not present any evidence from CP&L about the June 5, 2005, maintenance work. While Lumberton argued that the maintenance visit was "wrongful" (Lumberton Post-Hearing Memorandum, page 1), the record is largely silent on the extent to which Lumberton pursued any rights against CP&L. Lumberton produced a letter dated June 13, 2005 from CP&L (by then Progress Energy) to Lumberton promising a "prompt" investigation (Respondent Ex. 7), in response to a June 5, 2005 letter about the electrical service interruption, but could not produce the June 5 letter (Tr. 512:3-9).

97. Under all the circumstances -- early on a Sunday morning, with the plant idle, without the opportunity to put precautionary back-up measures (other than the battery system) in place -- the Panel finds the CP&L maintenance visit and related power cut to have been (a) beyond Lumberton's reasonable control, (b) not caused by Lumberton's fault or negligence, and (c) not avoidable through reasonable due diligence by Lumberton. Further, under those same conditions, it was not per se negligent for Lumberton to have left the plant under the sole watch of Mr. Hopkins on June 5, 2005.

3. The Cause of the Damage to the Rosemount DCS

98. The next question is the causal relationship between the CP&L maintenance visit and the undisputed damage to the Rosemount DCS. Was it, as Alamac claims, an unprotected power surge or, as Lumberton claims, the extended duration of the power cut by CP&L?

99. There is not sufficient evidence in the record to prove whether a power surge occurred or not. Alamac's expert Mr. Robinson, while helpful and credible, presented the power surge as a theory more than a fact. However, as set forth below, the Panel need not make a specific finding of fact regarding the power surge.

100. Even assuming there was a power surge, the Panel finds no negligence in how Mr. Hopkins managed a CP&L maintenance visit he had not been warned to expect. Lumberton presented credible evidence from Mr. Hopkins and Mr. Houser that, after Mr. Hopkins had failed to convince the CP&L workers to leave, Mr. Hopkins isolated the plant or at least the Rosemount DCS from the impact of any power surge. The Panel is satisfied that, even if Alamac were correct that Mr. Hopkins failed to open the main circuit breaker, he opened other circuit breakers necessary to protect the Rosemount DCS from a power surge. Although it obviously would have been optimal if Mr. Hopkins had received more training or personal experience in shutting down the plant for an outage, the Outage Event here was an unprecedented one.

101. The Panel is satisfied that, overall and within the scope of his training, Mr. Hopkins acted conscientiously and responsibly to do everything within his power to protect the plant from the Outage Event. As noted, he tried to persuade the CP&L work crew to confirm their instructions before proceeding with their work. He made several attempts to reach his supervisors. He followed his training to prepare the plant for the

power outage. Again, while it obviously would have been optimal for him to have had a cell phone for emergencies when the plant landline lost power, it is not clear that his supervisors were available to return his voicemail messages to a cell phone when the landline power was cut.

102. In sum, regardless of whether the CP&L crew – arriving unannounced – caused a power surge or not, the Panel cannot find that Lumberton was negligent or acted outside of the bounds of proper due diligence in how it trained Mr. Hopkins or how Mr. Hopkins managed the Outage Event.

103. Given the adequate proof that Mr. Hopkins' actions protected the Rosemount DCS from the impact of a power surge (if there was one), the Panel must conclude that the undisputed damage to the Rosemount DCS was caused by the extended duration of the power cut by CP&L. As a first step, based on the testimony of Mr. Houser, the Panel is satisfied that CP&L normally took approximately two hours to conduct such routine management. Hence, the more than six-hour power cut on June 5, 2005, was abnormal and unforeseeable. It was certainly beyond the control of Lumberton for the purposes of establishing Force Majeure.

104. As a second step, the question arises whether Lumberton was negligent or failed to exercise proper due diligence by having a back-up battery system that proved inadequate to provide power to the Rosemount DCS for the more than six hour Outage Event. Although this proved to be a very close question, the Panel finds in Lumberton's favor on this point.

105. The undisputed evidence was that the back-up battery system was designed to operate for at least eight hours. It plainly did not do so on June 5, 2005. This presumably was because it was some 23 years old and, as admitted by Mr. Houser, had not been tested for capacity. It is telling that Mr. Houser also testified that he would not guarantee the back-up battery system for more than six hours, which is why Lumberton rented a back-up generator for planned outages during CP&L routine maintenance.

106. Although the state of the back-up battery system seems per se dubious, the determinative fact is that Lumberton required back-up power of only approximately two hours for normal CP&L maintenance visits. It follows that even if Mr. Hopkins had been able to inform his supervisors of the unexpected maintenance visit and power cut, they could reasonably have relied on the low end of the capacity of the back-up battery system. They could not have reasonably anticipated a power cut of more than six hours. Although it appears true that if Mr. Hopkins had patrolled the plant during the Outage Event, he might have observed the DC voltage alarm signalling the depletion of the back-up battery system, it is unclear whether any steps could have been taken at that late point to avoid the damage to the Rosemount DCS.

107. Accordingly, the Panel finds that the exhaustion of the back-up battery system during the unusually extended power cut by CP&L falls in the chain of Force Majeure events because it cannot be attributed to negligence or a lack of due diligence by Lumberton, and therefore was beyond Lumberton's reasonable control. In similar vein,

Lumberton was not in breach of its warranty under Section 5.2(a) of the SPA to maintain its equipment, specifically its back-up battery system, in accordance with Prudent Industry Practice.

4. The Vulnerability of the Aged Rosemount DCS

108. An overarching question is whether the age of the Rosemount DCS – a critical piece of equipment some 20 years old, operating on bubble card memory pre-dating Windows technology – should itself defeat Lumberton's Force Majeure defense. Although the Parties devoted a great deal of time and effort to debating this issue, the Panel finds the answer relatively clear: it was not per se negligent for Lumberton to have been using the Rosemount DCS as of 2005.

109. The record is clear that the Rosemount DCS was adequate for Lumberton's operations before the Outage Event. Lumberton listed four similar power plants within a 100 mile radius of the Lumberton plant that still use DCS systems similar in model and vintage to Lumberton's 1985 Rosemount DCS. (Tr. 404: 9-23) That testimony was not controverted by Alamac. Mr. Houser also testified to regular maintenance of the Rosemount DCS. There was no evidence that the Rosemount DCS had previously broken down or seriously malfunctioned or that it had deteriorated significantly (except for the cracking of a rubber spindle on one tape drive). There was evidence that Lumberton maintained the Rosemount DCS. (Respondent Ex. 8)

110. Under the circumstances, the Panel cannot find that Lumberton was negligent or outside the bounds of due diligence in continuing to use a computer control system that had operated reliably for many years. That the Rosemount DCS was vulnerable to bubble card memory loss in the unexpected event of an unusually extended power cut during CP&L maintenance does not break the chain of Force Majeure under Article 9 of the SPA.

111. Nor, turning to specific allegations, was Lumberton negligent for not having additional spare parts, back-up tapes or replacement bubble memory cards with which to reprogram the plant's operating system. Even REM, the service agent for the Rosemount DCS, proved unable to reprogram it. For Lumberton to have on-site capability to deal with the impact of the Outage Event on the Rosemount DCS would exceed reasonable due diligence requirements.

112. In similar vein, the vulnerability of the Rosemount DCS to the Outage Event does not constitute a breach of Lumberton's warranty under Section 5.2(a) of the SPA to maintain its equipment, specifically the Rosemount DCS, in accordance with Prudent Industry Practice.

5. Conclusion: Existence of Force Majeure

113. In conclusion, the Panel finds that the chain of events on June 5, 2005 – the unexpected maintenance work by CP&L and the unusually extended duration of the power cut, which exceeded the capacity of the back-up battery system to protect the Rosemount DCS – constitutes Force Majeure under Article 9 of the SPA. In the words of

that Article, the Panel is satisfied that the failure and breakdown of the Rosemount DCS was (a) beyond the reasonable control of Lumberton, (b) was not due to Lumberton's fault or negligence, and (c) could not have been avoided by the exercise of due diligence. Nor was the failure and breakdown caused by Lumberton's failure to operate and to maintain the Rosemount DCS in accordance with good engineering and operating practices.

114. It may be unfortunate that so many things went wrong at the Lumberton plant on June 5, 2005 during and after the Outage Event. But such misfortune – if it was, as here, neither reasonably foreseeable nor avoidable – should not be conflated with negligence, a lack of proper due diligence or failure to maintain its equipment in accordance with Prudent Industry Practice by Lumberton.

6. Duration of Force Majeure: Reasonable Efforts to Cure

115. The next question is how long Lumberton may reasonably be excused by Force Majeure. Section 9.1 of the SPA requires Lumberton to use “reasonable efforts to cure, mitigate, or remedy the effects of Force Majeure.”

116. The Panel is satisfied that Lumberton's initial attempts to repair the Rosemount DCS were reasonable, if unsuccessful, efforts to cure, mitigate and remedy. On the evening of the Outage Event, Mr. Houser attempted to repair the equipment himself with spare bubble cards (at \$25,000 apiece) and other spare parts available on-site and from the sister plant at Elizabethtown, and to order parts by express courier. He also put Alamac management on notice that evening, in order to allow them to cancel the next shift. Within two days, Lumberton had brought REM in, only to learn that REM could not repair the system. The evidence was that Lumberton spent some \$250,000 in these early efforts to arrange prompt repair of the Rosemount DCS. (Tr: 549:6)

117. Based on the email sent from REM to Mr. Houser on September 1, 2005 (Claimant Ex. 13), the Panel is satisfied that it was not safe for REM simply to repair the Rosemount DCS with spare parts. If “repairs done to the RS3 [Rosemount DCS] cannot be guaranteed to be permanent fixes and therefore should not be considered safe alternatives to replacement,” it obviously would not have been a reasonable cure for Lumberton to arrange for such repairs solely to supply steam to Alamac in the days and weeks following the Outage Event.

118. The same cannot be said for Lumberton's later efforts. Lumberton did not elect to make the upgrade estimated at \$732,000 by Emerson and REM in August 2005, which could have seen the plant fully operational by January 2006. (Claimant Exs. 12 and 14) The record is clear that Lumberton instead made the decision, shortly after the Outage Event, to replace the Rosemount DCS. The record is even clearer that the reason Lumberton did not execute its plans to replace the system was financial. Lumberton was candid in its filings and testimony that it could not finance the replacement (or upgrade) until its parent provided funds in April 2006. (Lumberton Post-Hearing Memorandum, page 18; Tr: 530, 532, 536 – 40)

119. Given that Section 9.3 of the SPA provides that “financial inability to perform” does not constitute an event of Force Majeure, it follows that Lumberton’s inability to finance an upgrade or replacement for the Rosemount DCS cannot excuse its failure to act after a reasonable time.

120. The next question is what was a reasonable time for Lumberton to effect a cure, mitigation or remedy. The record contains ample evidence that once Lumberton had financing and decided in June 2006 to buy a Honeywell replacement system, it proceeded with alacrity to repair and reconstruct the Rosemount DCS in conjunction with designing the new system. Mr. Campbell testified that after Lumberton decided in June 2006 to purchase the Honeywell system, it turned its attention to “bringing the old system back, getting it to where it was safe to operate” (Tr. 531:4-5), to allow engineers for the vendor supplying the new DCS to observe the plant in operation. Despite Lumberton’s suggestion that repair of the Rosemount DCS was unsafe and hence impossible, the fact is that REM was able to repair and reconstruct it with new parts, including a new console rented for \$5000 per month. Mr. Houser testified that, on the basis of testing of the repaired/reconstructed Rosemount DCS, he is satisfied as to safety. (Tr. 454:10-14)

121. Following Lumberton’s decision in June 2006 to proceed with the new purchase, it had the original Rosemount DCS safely restored and tested, and the plant fully operational, by September 2006. This process took approximately three months, which the Panel finds to be a reasonable period for cure, mitigation or remedy.

122. Accordingly, the Panel finds that Lumberton – financial problems aside – reasonably could have repaired and reconstructed the Rosemount DCS, as it actually did in 2006, within three months of the Outage Event of June 5, 2005. As discussed below, Lumberton therefore is liable to compensate Alamac for its Cost of Cover beginning from September 6, 2005.

123. It bears mention that since Lumberton actually did return the plant to operation with the reconstructed and rented DCS in September 2006, it has provided steam to Alamac only when testing or supplying power to the grid. Lumberton’s testimony was candid that this is an economic decision by management, which obviously is not a valid excuse for the ongoing contractual breach. (Tr. 494:17-23)

C. Emergency Hazardous Situation

124. Lumberton argues that Section 3.2(c) of the SPA provides an alternative excuse for its failure to supply steam to Alamac after the Outage Event. The Panel disagrees.

125. Section 3.2(c) allows Lumberton either (a) to disconnect or reduce the steam supply in the event of an emergency affecting its or Alamac’s plant or (b) to disconnect the steam supply “if in the opinion of either party it poses or may pose a hazardous condition or requires immediate action to protect the environment, persons or property.” In the event of such a steam disconnection or reduction by Lumberton, it must “use its reasonable *commercial* efforts to correct any such condition and to reinstate the delivery and receipt of Steam as soon as reasonably practicable.” (Emphasis added)

126. Lumberton contends that it would have been hazardous to run the plant with a repaired Rosemount DCS after the Outage Event. Regardless of whether or not this is correct, the Panel interprets Section 3.2(c) to be addressing an emergency or hazardous situation involving steam supply per se, for example, a leak in steam supply lines or a steam temperature spike. As Section 3.2(c) presumes the capacity to produce steam, it does not cover the consequences of a long-term shut down by Lumberton.

127. Even if Lumberton could somehow be excused under Section 3.2(a) for not supplying steam to Alamac for some period after the Outage Event, Section 3.2(c) speaks of “reasonable *commercial* efforts to correct any such condition and to reinstate the delivery and receipt of Steam as soon as reasonably practicable” (emphasis added). This phrase differs from the “reasonable efforts” required to cure, mitigate, or remedy the effects of Force Majeure in Section 9.3 of the SPA. As described above, Lumberton could and did ultimately repair and reconstruct Rosemount DCS within three months, in large part by renting a new console for \$5000 per month. It would have been commercially reasonable for Lumberton to have taken those steps within three months of the Outage Event to correct the so-called hazardous condition preventing steam supply.

D. Alamac’s Claim for Prospective Damages

128. Alamac has requested an award of compensation for Lumberton’s anticipated prospective violations of its obligation to supply steam. Such future relief is beyond the jurisdiction of the Panel, which will become *functus officio* following the issuance of the Final Award.

XIII. Assessment of Damages

129. The SPA in Section 8.2 (b) provides that Alamac’s sole remedy in the event of a breach by Lumberton is to recover its “Cost of Cover,” which is defined as the difference between the reasonable cost actually incurred by Alamac to meet its steam requirements from alternative steam production equipment and the price that Alamac would have paid Lumberton for steam during the relevant time period.

130. Alamac’s witness regarding damages was its Chief Financial Officer Robert Hester. Mr. Hester testified on the basis of documents collected as Claimant’s Exhibit 32, which contained: (a) documents covering June 5, 2005 through November 26, 2006 previously provided to Lumberton; and (b) documents updated through March 14, 2007. Mr. Hester testified to Alamac’s calculations of its total Cost of Cover: Alamac incurred \$2,738,310.35 to produce the steam it needed from June 5, 2005 through March 14, 2007, while it would have cost Alamac \$1,296,544.34 had it been able to purchase steam from Lumberton during that period. (These figures match those on the summary page in Exhibit 32. The estimated purchase figure of \$1,296,544.34 differs slightly from the figure of \$1,262,928.34 on a supplemental sheet distributed with Exhibit 32 entitled “Potential Payment to Lumberton Power.” The Panel will use the higher number of \$1,296,544.34, as it works in favor of Lumberton.) Accordingly, Alamac claimed Cost of Cover damages of \$1,441,766.01 through March 14, 2007.

131. Alamac's claimed Cost of Cover is comprised of two primary elements: the expenses Alamac incurred to procure boilers to generate its own steam, and the operating costs of the boilers.

132. Alamac initially rented a temporary boiler in June 2005. When it became clear that Lumberton would not resume providing steam in the near future, Alamac decided it was more economical to purchase two second-hand boilers. There were related costs and expenses associated with the purchase of the boilers, including the cost of a consultant to advise the company on its options for permanent boilers. Alamac also claimed for incremental interest expenses incurred in connection with its line of credit, because it needed to borrow additional funds for the costs incurred. Mr. Hester confirmed that the record contains no evidence concerning these interest expenses (Tr. 328: 13-23).

133. Alamac also incurred operating costs in connection with the boilers. In addition to the rental charges for the temporary boiler, Alamac needed to purchase fuel (natural gas and #2 and #6 fuel oil) on an ongoing basis to operate the boilers. On the basis of detailed documentation concerning boiler-related costs limited to substitute steam generation, Mr. Hester testified to fuel and other operational charges. He explained that Alamac had purchased futures contracts for natural gas in 2006, and that profits made on trading gas futures contracts had been netted out of the fuel cost calculations for substitute steam generation.

134. With respect to the second limb of the Cost of Cover analysis – what Alamac would have paid Lumberton for steam had it been available – Alamac used the figure of \$5.50 per thousand pounds of steam that Lumberton actually charged Alamac on the isolated days in late 2006 and early 2007 when Lumberton did sell steam to Alamac. Mr. Hester then multiplied that price by the minimum monthly purchase amount in the SPA. For the few months when Alamac exceeded the minimum (February 2006 and January 2007), he used Alamac's actual steam requirement figures as the multiplier.

135. In the main, Lumberton did not challenge Alamac's proof of damages. In its Post-Hearing Memorandum, in particular, Lumberton argued that two elements of Alamac's damage calculations were infirm, namely that Alamac did not provide backup documentation for: (a) profits on trading gas futures; and (b) additional interest expenses incurred by Alamac on its line of credit. Lumberton also objected to Alamac's failure to deduct the insurance payment of \$171,000 for business interruption from its Cost of Cover.

136. The Panel finds that, subject to certain adjustments described below, Alamac has adequately established entitlement to its claimed damages for Cost of Cover.

137. First, in light of the Panel's ruling above on Force Majeure, it would not be appropriate to calculate Alamac's Cost of Cover commencing on June 5, 2005. As the Panel has concluded that a three-month period following the Outage Event would have been reasonable for Lumberton to have cured, mitigated or remedied the effects of the Force Majeure, the Panel has deducted from Alamac's total claimed steam generation expenses those (approximately) allocable to the period of June 5 through September 5,

2005. In specific, the Panel has deducted: (a) the monthly rental charges for the temporary boiler for June, July and August 2005 (\$41,910 at \$13,970 per month), (b) natural gas expenses for July through August 2005 (\$254,853.72), (c) the related expenses for June through August 2005 for electricity (\$11,342.68), maintenance labor for boiler operations and emergency repairs (\$8,150.77), and water treatment (\$3,726.92). This lowers the figure for Alamac's steam generation expenses from \$2,738,310.35 to \$2,418,326.26, for the liability period of September 6, 2005 through March 14, 2007.

138. The Panel next adjusted Alamac's estimated cost of purchasing steam from Lumberton by deducting the costs for June through August 2005 (\$108,736.64) from the total claimed of \$1,296,544.34; the adjusted total is \$1,187,807.70. Subtracting \$1,187,807.70 (the estimated cost of purchasing steam from Lumberton) from \$2,418,326.26 (Alamac's steam generation expenses), the adjusted total is for September 6, 2005 through March 14, 2007 to \$1,230,518.56.

139. Second, although the Panel finds that Alamac has supported the vast bulk of its damage claims, the Panel also believes certain of Lumberton's objections have a degree of merit. Given the great detail in Alamac's natural gas and other fuel calculations, the Panel is prepared to accept Mr. Hester's testimony that the company discounted profits made from gas futures trading. However, in light of the total lack of documentation for or calculations relating to interest charges on Alamac's revolving credit line and receipt of its business interruption insurance payment, the Panel has further adjusted Alamac's claimed Cost of Cover (in addition to the calculations in the immediately preceding paragraph) by deducting: (a) the \$87,191.79 claimed for interest charges; and (b) the \$171,000 insurance payment. (As set forth below, Alamac is invited to include supporting evidence for these items in a Supplemental Submission.) For purposes of this Partial Final Award, therefore, the Tribunal has adjusted the allowable Cost of Cover to \$972,326.77.

140. The Panel is uninformed as to whether Lumberton has in fact resumed providing steam to Alamac and, if so, when that began. Given that Alamac's damage calculations run through only March 14, 2007, the Panel will consider a Supplemental Submission for damages from March 15, 2007 through the date of submission. Such a Supplemental Submission should include supporting documentation, including the documents addressed below.

141. Provided adequate advances against costs are paid, the Panel will allow Alamac, within 30 days of the date of this Partial Final Award and Order, for the time period September 6, 2005 through the supplemental damages period Alamac may claim, to: (a) file a brief supporting its revised and supplemental damage calculations in accord with the Panel's rulings herein; (b) provide bank statements or other documents sufficient to show the portion of its interest expenses properly allocable, consistent with this ruling, to its Cost of Cover; and (c) the disposition of the \$171,000 business interruption insurance payment received and, in specific, whether that amount is included in its Cost of Cover damages claim under the SPA, and whether its insurer has subrogation or recovery rights to that portion of the damages claim.

142. If after review of the Supplemental Submission, and provided adequate advances against costs are paid, Lumberton wishes to request an opportunity to cross-examine Mr. Hester further on these issues, the Panel will take the request under advisement before issuing its Final Award.

IX. ASSESSMENT OF COSTS

143. In accordance with Section 10.9 of the SPA, the costs and expenses of the arbitration are to be borne by the losing party, provided that, if the decisions are not rendered wholly against one party, the Panel is authorized to apportion the costs and expenses "in the manner it may deem fair and just in light of the merits of the dispute and its resolution."

144. Alamac has prevailed on its claims for damages for breach of the SPA, while Lumberton has prevailed in part on its defense of Force Majeure. In light of the considerations of Section 10.9 of the SPA, the Panel determines that Alamac is entitled to a portion of its total arbitration costs and expenses, including attorneys' fees, to Alamac, with the apportionment and amount to be set in the Final Award on the basis of the claim and supporting documentation to be provided in Alamac's Supplemental Submission. As envisioned in the Fifth and Sixth Procedural Orders, Alamac is invited to address in its Supplemental Submission its request for an award of costs and expenses related to its discovery applications.

PARTIAL FINAL AWARD AND ORDER

It is hereby determined that:

1. Lumberton breached its obligations under the SPA by not supplying steam to Alamac following the June 5, 2005 Outage Event (except in minimal quantities in 2006 and 2007) until, at least, March 2007.
2. Lumberton is excused by Force Majeure under Article 5 of the SPA from June 6, 2005, the day after the Outage Event, through September 5, 2005, at which point Lumberton could reasonably have cured, mitigated or remedied the effects of Force Majeure.
3. Alamac's claim for an award of compensation for its prospective Cost of Cover, following the date of the Final Award, is dismissed for lack of jurisdiction.
4. Lumberton's defense of excuse under Section 3.2(c) of the SPA based on an emergency or hazardous condition is dismissed.
5. Alamac is awarded and Lumberton is to compensate Alamac for its Cost of Cover (as defined in Section 1.1 of the SPA), from September 6, 2005 through March 14, 2007 in the principal amount of \$972,326.77.

6. Alamac is awarded and Lumberton is to pay Alamac a portion (to be determined in the Final Award) of Alamac's costs and expenses, including attorneys' fees and expenses, in pursuing this arbitration, in an amount to be determined on the basis of the Supplemental Submission authorized below. Lumberton's request for an award of costs and expenses is denied.

7. As described in more detail in Section XIII above, and subject to receipt of adequate advances against costs, Alamac is authorized to make within 30 days of the date of this Partial Final Award and Order a Supplemental Submission, which may include briefing and evidence concerning:

(a) Alamac's revised Cost of Cover calculations, from September 6, 2005 through the date Lumberton recommenced steam supply under the SPA, if it has so recommenced steam supply, or through a date not later than the Supplemental Submission, also taking into account any changes resulting from consideration of items (b) and (c) below;

(b) Exact interest amounts, for incremental use of its line of credit, included in its claimed Cost of Cover, with calculations and back up banking records or other documentation;

(c) Any accounting in the claimed Cost of Cover for the \$171,000 business interruption insurance payment received, and information concerning relevant subrogation and recovery rights of the insurer;

(d) Alamac's claim for costs and expenses of the arbitration, including attorneys' fees and expenses, with back-up documentation, including copies of invoices from its attorneys with details of work performed and disbursements. Privileged information contained within the invoices may be redacted from the copies of the documents provided to Lumberton; however, the Panel does not consider simple descriptions of work performed to be, in the main, privileged information; and

(e) Alamac's request for expenses and costs in relation to its discovery applications.

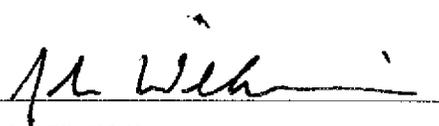
8. Should Alamac file a Supplemental Submission, and provided adequate advances against costs are received, Lumberton is authorized to file a Response within 30 days of service, in which Lumberton may request an opportunity to cross-examine Alamac witness Robert Hester further on evidence presented in the Supplemental Submission on items 7(a), (b) and (c) above.

9. Except for any revised quantum of damages and allocation of costs, expenses and attorneys' fees, this award is in full resolution of all matters disputed in connection with this arbitration, and any matter not explicitly addressed herein (except for the revised quantum of damages and allocation of costs, expenses and attorneys' fees) is denied.

Signed this 7th day of November 2007:

Lucy Reed, Chair

Nancy F. Lesser



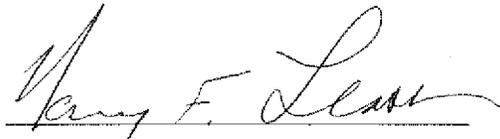
John H. Wilkinson

9. Except for any revised quantum of damages and allocation of costs, expenses and attorneys' fees, this award is in full resolution of all matters disputed in connection with this arbitration, and any matter not explicitly addressed herein (except for the revised quantum of damages and allocation of costs, expenses and attorneys' fees) is denied.

Signed this 7th day of November 2007:



Lucy Reed, Chair



Nancy F. Lesser

John H. Wilkinson