

**IN THE MATTER OF AN ARBITRATION
UNDER THE ARBITRATION RULES OF THE INTERNATIONAL CENTRE
FOR THE SETTLEMENT OF INVESTMENT DISPUTES**

Among:

**OMEGA ENGINEERING LLC
AND
MR. OSCAR RIVERA
*CLAIMANTS***

v.

**THE REPUBLIC OF PANAMA
*RESPONDENT***

SECOND EXPERT REPORT OF

GREG A. MCKINNON

27 May 2019

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Second Expert Report of Greg A. McKinnon

I. INTRODUCTION

1. My name is Greg A. McKinnon of Hemming Morse, LLP. My regular business address is 2595 Ceanothus Avenue, Suite 186, Chico, California 95973, USA.
2. My expert qualifications, instructing lawyers, disclosure of relationships, background of facts and remuneration are described in my Expert Witness Statement dated 25 June 2018 (“**First McKinnon Report**”).
3. For this report I am instructed to respond to any issues raised in the expert report of Quadrant Economics prepared by Dr. Daniel Flores dated 7 January 2019 (“**First Flores Report**”) regarding my first expert report in this matter. After reviewing the First Flores Report, I offer the following response in relation to Dr. Flores’ comments on the following categories of purportedly incomplete information:
 - a. Documentation in support of the Existing Contract claims in relation to the support for payments for each Project;
 - b. Documentation in support of change orders that contributed to Expected Future Cash Flows on Uncomplete Work;
 - c. Information from Mr. Rivera related to Omega Panama’s Job Cost Reports; and
 - d. My use of Omega Panama’s audited financial statements in relation to expected profit margins at completion compared to expected profit margins based on project specific information.
4. I note that though the scope of this report does not respond to all of the issues raised by Dr. Flores in the First Flores Report, the lack of response does not indicate my agreement with his opinions. Indeed, nothing in the First Flores Report affects the analysis and opinions stated in the First McKinnon Report.

II. OPINIONS IN RESPONSE TO THE FIRST FLORES REPORT

5. In his report, Dr. Flores largely appears to agree with my analysis on which Compass Lexecon bases its calculation of damages on Existing Contracts of \$8.69 million.¹ Dr. Flores’ opinion of damages on Existing Contracts is \$7.1 million.² The \$1.59 million

¹ Compass Lexecon Report, Table I.

² Dr. Flores Report, Figure 1.

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difference is Dr. Flores' opinion that Compass Lexecon erred in discounting the value of advancements at the Valuation Date.³ That issue is unrelated to my work.

6. Indeed, Dr. Flores' only criticism of my work appears to be that my opinions in the First McKinnon Report are founded upon incomplete information. This criticism is incorrect and misleading.
7. In my opinion, from an accounting and quantum perspective, the information and documentation used as the basis of my opinions set out in the First McKinnon Report provide sufficient basis as to the reasonably certain amounts of Omega Panama's Existing Contracts and expected profit margin claims.
8. The bases for these opinions are described in the following section.

III. EXPLANATION OF OPINIONS

A. Dr. Flores' comments on support for payments for each Project

9. Dr. Flores provides comments in relation to the support I provided in the First McKinnon Report for payments requested and received under each of the contracts at issue. I respond to these as follows.

(i) MINSА CAPSI Rio Sereno

10. Dr. Flores makes the following comment in his report:

McKinnon indicates that Pay Apps 15 through 17 have outstanding balances. I note that Pay Apps 15 through 17 include a stamp and signature for the Ministry of Health at the beginning of each document, but the signature line at the end of the document is not signed. Furthermore, Pay App 15 includes some amounts from an "Addendum 5" which is not on the record.⁴

11. Regarding the presence of the Ministry of Health's stamp but not signature on the referenced pay apps, Dr. Flores provide no explanation of the significance of his comment. As stated in the First McKinnon Report, Pay Apps 15 through 17 were submitted to the Ministry of Health dated 31 October 2014 and were not paid. Neither Dr. Flores nor Respondent appear to dispute that these pay apps were submitted by Claimants and received by Respondent.

³First Flores Report, ¶ 8.(ii)

⁴ First Flores Report, ¶143.(i).

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12. Furthermore, Dr. Flores does not explain the significance of the lack of a signature from the Ministry of Health. In my experience, the lack of a signature from the owner on a pay app is immaterial to the progress of work that is the basis of the outstanding balance calculation unless further evidence is presented to show that the lack of signature is, in fact, material. I have seen no such evidence in this case, and Dr. Flores does not present or refer to any such evidence either.
13. With respect to Dr. Flores' comment regarding "some amounts from an Addendum 5" in Pay App 15 not being on the record, these amounts were incorporated into Addendum 4A, which is in the record.⁵
14. I therefore reject Dr. Flores' minor criticisms with respect to my MINSA CAPSI Rio Sereno analysis.

(ii) MINSA CAPSI Kuna Yala

15. Dr. Flores makes the following comment in his report:

Pay Apps 20, 24, and 25 were signed by Omega Panama, the Ministry of Health and the Comptroller but have outstanding balances.⁶

16. I agree with Dr. Flores' observation as set out in the McKinnon First Report at Annex 1: Table 5 – Contract Billings and Payment.
17. As such, this comment provides no basis upon which to change my conclusion with respect to the MINSA CAPSI Kuna Yala contract.

(iii) MINSA CAPSI Puerto Caimito

18. Dr. Flores makes the following comment in his report:

In relation to Pay Apps 19 through 22, Claimants state that these were submitted to the Ministry of Health and not paid. The Pay App for work order 19 is not present – Claimants only produced the invoice for this work order. Pay Apps 20 through 22 include a stamp and signature for the Ministry of Health at the beginning of each document, but the signature line at the end of the document is not signed.⁷

⁵ C-0106 Addendum 4.

⁶ First Flores Report, ¶143.(ii).

⁷ First Flores Report, ¶143.(iii).

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19. Regarding Pay App 19, the work included in the invoice or “Factura” is shown in the following Pay App 20, as can be seen in my analysis at Annex 1: Table 7 – Contract Billings and Payment.
20. Regarding Pay Apps 20 through 22, which were dated 31 October 2014, I refer to my response at ¶¶11 and 12.
21. I therefore reject Dr. Flores’ minor criticism of my analysis regarding the MINSA CAPSI Puerto Caimito contract.

(iv) Ciudad de las Artes

22. Dr. Flores makes the following comment in his report:

Pay Apps 1 through 8 were paid in full via Cuentas de Pagos Parcial (“CPP”). Pay Apps 9 through 11 were partially paid. Pay Apps 12 through 19 were signed by Omega and INAC, but they have outstanding balances.⁸

23. I agree with Dr. Flores’ observation as set out in the McKinnon First Report at Annex 1: Table 9 – Contract Billings and Payment.
24. Again, Dr. Flores’ comment does not provide a basis for revising my conclusions.

(v) Unidad Judicial la Chorrera

25. Dr. Flores makes the following comment in his report:

Pay App 13 was paid with two different checks and has a small outstanding balance.⁹

26. I agree with Dr. Flores’ observation as set out in the McKinnon First Report at Annex 1: Table 11 – Contract Billings and Payment and ¶21 and once again see no basis for revising my conclusions.

(vi) Palacio Municipal, Ciudad de Colon

27. Dr. Flores makes the following comment in his report:

Pay App 3 was signed by Omega Panama, the Municipality of Colón, and the Comptroller, but has an outstanding balance. Pay App 4 is not signed by Omega Panama, the Municipality of Colón, or the Comptroller.¹⁰

⁸ First Flores Report, ¶143.(iv).

⁹ First Flores Report, ¶143.(v).

¹⁰ First Flores Report, ¶143.(vi).

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28. I agree with Dr. Flores' observation as set out in the McKinnon First Report at Annex 1: Table 13 – Contract Billings and Payment regarding Pay App 3.
29. Regarding Pay App 4, I refer to my response at ¶¶11 and 12.
30. I therefore reject Dr. Flores' minor criticism of my analysis regarding the Palacio Municipal, Ciudad de Colon contract.

(vii) **Mercados Perifericos**

31. Dr. Flores makes the following comment in his report:

The McKinnon Report relies on eight Pay Apps submitted by Claimants for the Mercados Periféricos project. However, for Pay App 1 through 7 there is no backup on the record. According to McKinnon, he was “informed by Mr. Rivera that those Pay Apps were submitted to Republic of Panama, Municipality of Panama for payment but were not paid.” Documentation for Pay App 8 is on the record, but it is not signed by any Panamanian government entity, only by Omega Panama.¹¹

32. Pay Apps used for the Existing Contracts consistent with construction industry practice show cumulative progress of work towards completion. That means progress of work billing in earlier pay apps are shown in later pay apps. There is no concern from an accounting perspective relevant to the issue of calculating the outstanding balance due to Omega for its progress of work on the project that for Pay Apps 1 through 7 there is “no backup on the record,” since the progress of Omega's work reflected in those documents is shown in Pay App 8, which is “on the record”.
33. Regarding Pay App 8 dated 15 September 2014, Dr. Flores again does not explain the significance of the lack of a signature. As stated above, in my experience, the lack of a signature from the owner on a pay app is immaterial to the progress of work that is the basis of the outstanding balance calculation unless evidence is provided to show that it is in some way material. No such evidence has been presented here.

34. In sum, I am not persuaded that any of Dr. Flores' minor comments regarding a supposed lack of support for Omega Panama's pay apps for each project undermine my previous conclusions. I therefore reaffirm those conclusions.

¹¹ First Flores Report, ¶143.(vii).

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B. Dr. Flores' comments regarding partially executed change orders

35. Dr. Flores makes the following comment in his report:

*McKinnon notes in his Annex 2 that US\$ 17.26 million in change orders that contribute to the claim for Expected Future Cash Flows are not fully supported. Footnote 1 of his table "Calculation of Expected Cash Flows on Uncompleted Work" notes that "Partially Executed Change Orders represent **changes signed by Omega and Gov't Ministry official** but lacking Gov't Controller's signature."¹²(my emphasis added)*

36. Dr. Flores' comment is misleading. I did not state that the US\$ 17.26 million in change orders are not fully supported. Rather my footnote at Annex 2 says two things:

- a. One, the government ministry officials for these projects, in this case the Ministry of Health, and Omega Panama had signed the change order document, a document that I understand was prepared by the Ministry of Health; and
- b. Two, that the change order was not signed by the Panamanian Government's Controller.

37. The lack of a signature by the Panamanian Government Controller does not affect my calculation or my conclusions. That is because the change order documents, prepared and signed by the Ministry of Health as well as Omega Panama, indicate agreement to increase contract time and price. In my experience, documents such as these provide strong accounting evidence of reasonably certain future cash flows. The matter of whether the change orders should have been signed by the Controller (as well as the reasons why it was not so signed), as it pertains to my calculation of Omega's claim for Expected Future Cash flows for these projects, is ultimately a legal matter to be decided by the Tribunal.

C. Dr. Flores' comments regarding Omega's job cost reports

38. Dr. Flores makes the following comment in his report:

I also note that two of the documents that McKinnon includes in section III.A of his report, "Documents Relied Upon," were prepared by Mr. Rivera. These documents include the Cost-to-Complete and the Estimate-to-Actual ("ETA"). Furthermore, the Analysis of Job Costs and Accounts Payables by Job ("Job Cost Reports") in that same section includes "numerous entries that

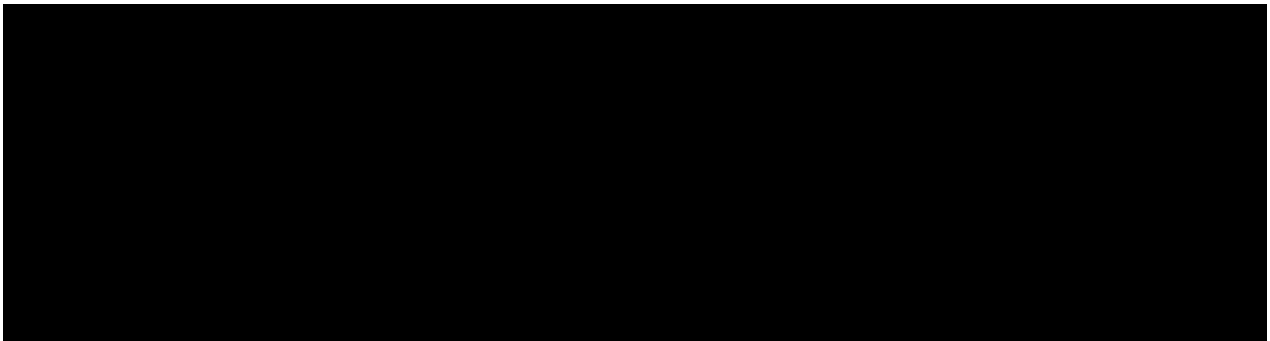
¹² First Flores Report, ¶144.

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reference in the Name column “Not Received.” McKinnon was “informed by Mr. Rivera that these were manual accounting entries associated with checks or other transactions that were not made through the accounting system,” and that “back-up documentation for these transactions was kept in paper files at Omega Panama’s office in Panama.”¹³

39. Dr. Flores provides no further explanation of the significance of his comment as it relates to Omega’s claims.
40. Regarding the magnitude of the entries questioned by Dr. Flores, the Job Cost Reports show the following by project by year:

**Table 1 –
Summation of “Not Received” Cost Entries Questioned by Dr. Flores**



41. It is noteworthy that approximately [REDACTED] of the [REDACTED] in “Not Received” entries questioned by Dr. Flores occurred in the fiscal years covered by the independent auditors’ (i.e., Certified Public Accountants) reports on Omega’s financial statements, the last of which was for the year ended December 31, 2013. As described in the First McKinnon Report at ¶¶ 26 to 28, and as reflected in the independent auditors’ report, the scope of the auditors’ work includes testing the underlying accounting records including entries in the job cost and accounts payable system, such as those questioned by Dr. Flores, to confirm whether those transactions materially misstate the Omega Panama’s financial statements such that it would affect users’ investment or credit decisions.
42. It is reasonable, therefore, to have confidence that the vast majority of the entries questioned by Dr. Flores are not only consistent with Mr. Rivera’s description but have been subjected to the scrutiny of its independent auditors without material exception.

¹³ First Flores Report, ¶145.

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43. As such, in my view, there is reasonable assurance that the job costs shown in the Job Cost Reports are not materially misstated and are appropriate to use in calculating reasonably certain damages in this matter.

D. Dr. Flores' comments regarding my estimate of expected profit margins at completion

44. Dr. Flores makes the following comment in his report:

It is worth noting that, after addressing many of the documents provided to him, McKinnon states that he is “unable to confirm that the cost-to-complete estimates and related mark-ups for the Projects in the ETA Analysis would be reasonably achieved.

After explaining that the three MINSÁ CAPSI projects should all expect the same level of profitability, defined by the expected profitability of the MINSÁ CAPSI Puerto Caimito project, McKinnon then states that the “best information available at this time of the expected profit margins at completion for [the remaining] Projects is from Omega’s audited financial statements.”

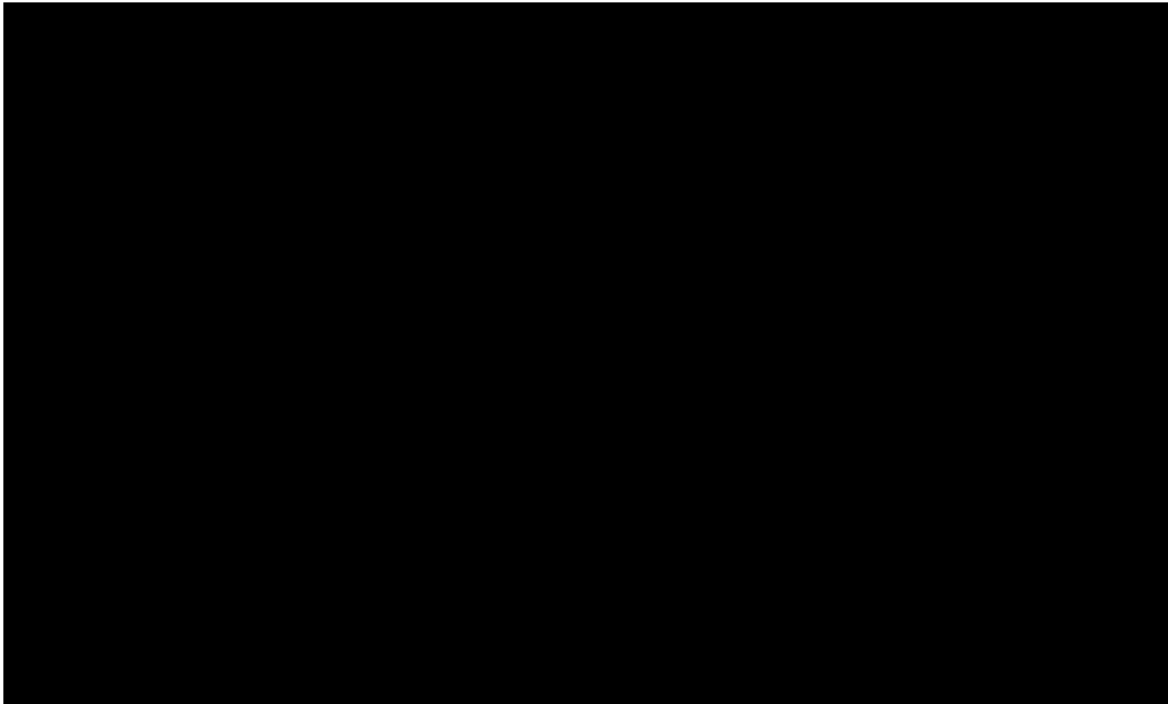
*That is, McKinnon appears to indicate that he could not rely on the project-specific data presented to him in relation to the **projects that were on average only half completed**. Instead, he determined the best information available to him was that from three years of financial statements, during which time Omega Panama had completed only one project. (**emphasis added by me**)*

In footnote 2 of the first table in Annex 2 of his report, McKinnon confirms that “Estimated Cost at Completion is based on the reasonably expected margin for the project based on the best information available, setting aside estimates of the same from Omega.”¹⁴

45. Dr. Flores' comment is misleading and misquotes ¶¶ 89-94 of the First McKinnon Report, Annex 2, footnote 2 and my opinions.
46. First, Dr. Flores says that the project-specific data on which I could not rely related to “projects that were on average only half complete” referencing ¶28, Figure 2 of the First Flores Report.

¹⁴ First Flores Report, ¶146.

Figure 2
Completion Progress of Omega Panama's Projects²⁷



47. Looking at my full statement at ¶¶ 89-94 of the First McKinnon Report, shown below, I used project-specific data for the MINSA-CAPSI projects which were in the aggregate [REDACTED] complete, the closest to completion being Puerto Caimito, the project I used as the benchmark for expected profit margin at completion:

89. *In sum, though the aggregate average profit mark-up for the Projects shown in the ETA Analysis is comparable to the Projects' bid estimate mark-up, **taking the most conservative approach**, as instructed, I am unable to confirm that the cost-to-complete estimates and related mark-ups for the Projects in the ETA Analysis would be reasonably achieved **with certain exceptions**. (emphasis added by me)*

90. *Those exceptions are for the Projects performed for the Ministry of Health ("MINSA CAPSI") based on the following factors:*

a. All projects were for the same Government entity;

b. All projects were for similar construction of medical facilities;

c. Much of the work to complete was for specialty medical equipment, and mechanical and electrical systems performed by subcontractors.

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d. Addendum or change orders signed by the Ministry of Health for cost escalation and extension of time appear to offset increased line item costs.

e. Puerto Caimito was approximately [REDACTED] on cost and [REDACTED] complete on billings; and

f. Puerto Caimito estimated at-completion margin based on the ETA Analysis was [REDACTED] margin or [REDACTED] mark-up.

91. *I believe that Puerto Caimito provides the best available information of expected profit margin since it was near completion and the remaining trade work was subcontracted as described in Annex 3, Section C. Puerto Caimito. (emphasis added by me)*

92. For the Ministry of Health projects, using Puerto Caimito's near completion estimate of cost-to-complete and at-completion mark-up results in an increase in cost-to-complete and a reduction in estimated at-completion profits for Rio Sereno and Kuna Yala as shown on the ETA Analysis.

93. *For all other Projects, I believe the best information available at this time of the expected profit margins at completion for these Projects is from Omega's audited financial statements. That is because as described ¶24.c., the independent auditor examined and obtained audit evidence to test management's estimates of the Projects' revenues, costs and gross profits. (emphasis added by me)*

94. The average mark-up percentage that I used in my calculations for these projects, based on information from the audited financial statements for fiscal years 2011 through 2013 was 13.4%.


48. The foregoing shows that I used project-specific data, contrary to Dr. Flores' comments. It also shows that I used Omega Panama's audited financial statements in place of project-specific data based on instruction from counsel to choose the most conservative approach. That means from an accounting perspective that given multiple outcomes the most conservative approach is to choose the lowest outcome. This approach is consistent with my experience as an auditor of construction contractors' financial statements. In the context of the non-MINSA CAPSI project, the lowest expected profit margin was from the audited financial statements for the year ended December 31, 2013.

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49. It is also worth noting that the independent auditors' report for the December 31, 2013 financial statements was dated April 28, 2014, which is several months before the events that give rise to the dispute in this arbitration. As such, the independent auditor is required to consider information subsequent to the financial statement date (*i.e.*, December 31, 2013) that could materially affect the financial statements. That would include critical assessment of all contracts in progress for events or issues that could materially increase or decrease a project's expected profit margin at completion. Therefore, it is reasonable to assume that, based on the auditors' report the estimated profit margins at completion as shown on the December 31, 2013, audited financial statements for the non-MINSA CAPSI projects set a reasonable estimate of expected profit at completion for purposes of calculating damages in this matter. Indeed, they are "most conservative" (*i.e.*, the lowest probable outcome) when compared to the projects' bid margin and Omega Panama's current estimate of margin at completion based on project-specific data from Mr. Rivera.
50. By using the lowest probable outcome in the First McKinnon Report I did not opine that Omega Panama's bid margins and/or its current estimate of margin at completion were unachievable, only that I am unable to confirm that such margins would be reasonably achieved with certain exceptions related to the MINSA-CAPSI projects. In fact, the analytical review of project specific information that I performed and was described in Annex 2 of the First McKinnon Report did not identify significant issues that would cause me to call into question Omega Panama's estimated profit margins at completion for the Existing Projects as being wholly unreasonable such that they should be disregarded.
51. So that the Tribunal understands the range of probable outcomes based on the analysis described in the First McKinnon Report, I have provided an alternative calculation of Omega Panama's expected cash flow on uncompleted works based on the project specific information of the estimated profit margin at completion for the projects. Table 2 below provides a comparison of the alternative calculations.

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Table 2
Expected Cash Flows from Uncompleted Works
Using Omega Panama's Estimated Margins at Completion Compared to First
McKinnon Report



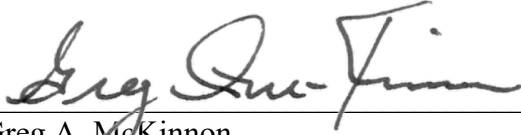
Source: HM prepared based on updated Annex 2 to this Second McKinnon Report.

52. The difference between the total above and the First McKinnon Report is approximately [REDACTED]. While I find that this alternative of [REDACTED] based on Omega Panama's project specific estimated profit margins to be accurate and defensible, I was instructed to use the more conservative profit margins reported in Omega Panama's audited financial statements. This is not to say that I do not stand by the figures and my analysis of Omega Panama's project specific information on the estimated profit margin described in the First McKinnon Report.
53. Given the foregoing, Dr. Flores' comment regarding my estimate of profit margins at completion is inaccurate and misleading. Like his other comments, it therefore provides no basis for altering my previous analyses, calculations, or conclusions other than to show the Tribunal the expected cash flows from uncompleted works using Omega Panama's project specific estimates.

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IV. Expert's Declaration

54. In accordance with Procedural Order No. 1,¹⁵ paragraph 17, I state that I am the sole author of this report.



Greg A. McKinnon
Managing Partner

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2595 Ceanothus Avenue, Suite 186
Chico, California, USA

27 May 2019

¹⁵ Procedural Order No. 1, dated June 9, 2017.

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Annex 2 from First McKinnon Report – Updated
Calculations: Expected Cash flows on Uncompleted Work and Alternative calculation – Termination Damages**

Calculation of Expected Cash Flows on Uncompleted Work

