UNDER THE UNCITRAL ARBITRATION RULES AND SECTION B OF CHAPTER 10 OF
THE DOMINICAN REPUBLIC - CENTRAL AMERICA - UNITED STATES FREE TRADE
AGREEMENT
ICSID CASE No. UNCT/13/2

SPENCE INTERNATIONAL INVESTMENTS, LLC; BOB F. SPENCE; JOSEPH M.
HOLSTEN; BRENDA K. COPHER; RONALD E. COPHER; BRETT E. BERKOWITZ;
TREVOR B. BERKOWITZ; AARON C. BERKOWITZ; AND GLEN GREMILLION,
CLAIMANTS

v.

THE REPUBLIC OF COSTA RICA,
RESPONDENT

EXPERT REPORT OF
BRENT C. KACZMAREK, CFA

NAVIGANT CONSULTING, INC.
1200 NINETEENTH STREET NW, SUITE 700
WASHINGTON, D.C. 20036
15 JULY 2014
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I. Scope of Work and Qualifications

1. Navigant Consulting, Inc. ("Navigant") has been asked by the Ministry of Foreign Trade in The Republic of Costa Rica ("Costa Rica" or "Respondent") through its counsel Sidley Austin LLP ("Counsel") to prepare this report in connection with the arbitration commenced by Spence International Investments, LLC ("Spence Co."), Bob F. Spence; Joseph M. Holsten; Brenda K. Copher; Ronald E. Copher; Brett E. Berkowitz; Trevor B. Berkowitz; Aaron C. Berkowitz; and Glen Gremillion (collectively, "Claimants") against Costa Rica. Claimants own land in Playa Ventanas and Playa Grande in Guanacaste, Costa Rica which they claim Costa Rica has treated inconsistently with its obligations under the Dominican Republic – Central America – United States of America Free Trade Agreement ("DR-CAFTA"). Claimants allege that Costa Rica’s actions in establishing the Las Baulas National Marine Park ("BNMP") (the “Measures”) subjected the Claimants to expropriation of their properties.¹ Specifically, Claimants allege that Respondent has moved to expropriate 75 meters of property owned by Claimants within the BNMP. Claimants allege that the Measures have resulted in Claimants’ properties being either wholly or partially expropriated. Claimants claim that Respondent’s actions contributed to the expropriation of their properties over several years with the expropriation being “crystalized” on 19 March 2010.² Nevertheless, for valuation purposes Claimants appear to claim that their properties were effectively expropriated as of 27 May 2008, the date upon which Costa Rica’s Constitutional Court ruled that the government must expropriate the properties of landowners or encourage environmentally sensitive developments to proceed.³

2. As shown in Table 1 below, Claimants claim that 13 lots in Playa Ventanas and 13 lots in Playa Grande were wholly or partially expropriated as a result of the Measures. Although each Claimant has individual and joint claims, for simplifying purposes throughout this report will refer to the properties at issue as “Claimants’ properties”.

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¹ Claimants’ Memorial, ¶ 231
² Claimants’ Memorial, ¶ 192
³ Claimants’ Memorial, ¶¶ 159, 331. We note that Claimants convert the amounts claimed from US$ to Costa Rican Colones ("CRC") on 28 May 2008. Moreover, Claimants’ expert, FTI, applies a valuation date of 27 May 2008. (FTI Report, Section 1.1).
3. Claimants have engaged Mr. Michael P. Hedden of FTI Consulting, Inc., (“FTI”)\(^5\) to calculate the fair value of their real estate investments as of 27 May 2008, the date in which the Constitutional Court rendered its judgment ordering the state to either move forward with the expropriation of the private lands in the BNMP or allow them to be developed. Counsel has asked us to review FTI’s report and to assess FTI’s damages methodology and calculations.

4. I, Brent C. Kaczmarek, am a Managing Director in the Washington, D.C. office of Navigant. I led a team of professionals at Navigant in preparing this report and I take

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\(^4\) See FTI Report, Section 9.4. Purchase dates are those reported by FTI.

\(^5\) Mr. Hedden was assisted by Mr. Mark W. Dunec.
responsibility for its contents. All of our work performed in association with this assignment was done by me or others under my direction and supervision. I have been appointed as a financial, valuation, and damages expert in more than 100 international arbitrations, including more than 80 investor-state arbitrations where I have been engaged as an expert by both investors and states. I hold the designation of Chartered Financial Analyst, a globally recognized designation held by professionals demonstrating competence in the investment valuation and decision-making process. My use of the word “investments” refers to all asset classes that one can invest in such as common shares of companies, whole business enterprises, fixed income instruments such as corporate debt securities and sovereign debt, preferred shares, option contracts, futures contracts, and real property. I received this designation in 1998 from the Association for Investment Management and Research (now CFA Institute), the governing body of charter-holders. There are charter-holders and charter-holder candidates residing in more than 150 countries worldwide. My curriculum vitae is provided as Appendix 1 to this report.

5. I was previously appointed by Costa Rica in the consolidated Unglaubes v The Republic of Costa Rica arbitrations wherein I provided an expert opinion on the value of various residential lots in the immediate vicinity of the lots at issue in this arbitration. I have visited the area in the past on two occasions and have made a follow up visit between 7 July and 11 July 2014 to update my understanding of the developments in the market since my last visit in December 2010.

6. I have also been engaged in other disputes as an expert to provide an appraisal of real property for either residential or commercial development including land in, for example, the Turks & Caicos Islands, Hungary, and Venezuela.

7. A number of the documents we have reviewed in this matter were originally prepared in Spanish. I do not speak or write in Spanish. Accordingly, I have relied upon translations of these documents or translation services provided by Counsel or members of my team that are fluent in Spanish. The list of documents we relied upon in preparing this report is provided as Appendix 2.

8. We understand that Claimants have made legal claims regarding alleged breaches of DR-CAFTA by Costa Rica. Nothing in the conclusions or opinions stated herein is intended to address those legal arguments. This report does not contain any opinions on matters of law that would require legal expertise.
9. This report contains nine sections including this introductory section (Section I). Section II is an executive summary. Section III summarizes the historical trends and prices in the Guanacaste real estate market which are relevant to achieve an accurate appraisal of Claimants’ properties. Section IV is an overview of FTI’s valuation methodology and conclusions. Section V provides the history of the establishment of the BNMP, a history of Respondent’s actions against properties within the BNMP, and a timeline of Claimants’ purchases. Section VI explains six reasons why we believe that FTI’s valuation methodology and conclusions are unreliable and overstated. Section VII explains the other indicators of value that were ignored by FTI in preparing their analysis. Section VIII summarizes the alternative valuation approach that FTI should have considered when they prepared their analysis of Claimants’ properties’ market values. Finally, in Section IX, we discuss the appropriate pre-award interest to apply to Claimants’ claims.

II. Executive Summary

10. The BNMP was established in 1991 with the east-west boundary set 125 meters east (inland) from the mean high tide. This boundary is 75-meters inland (the “75-Meter Strip”) from the preexisting 50-meter setback (“Inalienable Zone”) from the mean high-tide line. These boundaries were reconfirmed in 2004. Additionally, between 2003 and 2007, several notices were issued to property owners which declared their land within the BNMP in the public interest. Yet despite these developments, Claimants purchased (and continued to purchase) land within the BNMP. Claimants therefore knew (or should have known) that the land (or a portion of it) they were purchasing was in the BNMP. Thus, it is likely that Claimants’ purchase prices were discounted due to the risk that their purchases within the BNMP would ultimately be expropriated. Now, however, Claimants seek a value for their properties as if no expropriation risk were present. In our view, it would not be economically justified to allow Claimants to benefit from the risk of expropriations occurring within the BNMP via a lower purchase price and then benefit again via a valuation of their properties within the BNMP as if no expropriation risk were ever present. That is what Claimants are seeking and FTI purports to calculate.

11. Since Claimants knew (or should have known) that property within the BNMP was subject to expropriation, the most Claimants should recover if Respondent is found liable is the purchase price they paid for the land within the BNMP. However, the documentation provided by Claimants concerning their purchase prices and purchase dates contains several inconsistencies
and discrepancies. The preferred documentation to support the purchase prices and purchase dates would be Claimants’ sale and purchase agreements. However, Claimants have not provided any sale and purchase agreements as evidence to support their purchase prices and dates for any of the properties at issues. As such, we are unable to prepare an alternative calculation in this report.

12. An alternative to the purchase price paid by Claimants would be the administrative prices determined by Respondent. FTI does not comment upon these administrative appraisals. We believe the administrative prices are quite reasonable, and in some cases possibly overstated in terms of fair market value, particularly when factors affecting the value of the properties are taken into account such as the limited water supply available to the area, the density restrictions, the building height restrictions, and the lack of any view of the ocean due to mangroves within the 50-meter Inalienable Zone from the mean high-tide that cannot be cut down. As such, properties within the 75-Meter Strip are characterized appropriately as “near the beach” lots rather than “beachfront” lots as characterized by FTI.

13. FTI employs the Comparable Sales Approach to value the properties within the 75-Meter Strip as of 27 May 2008. While we agree that this approach is appropriate, FTI’s appraisal of these properties is flawed and overstated for three main reasons.

14. First, FTI makes a number of subjective adjustments to the prices paid for allegedly comparable properties due to, for example, market trends in prices (to account for sales at prior time periods), lot size, etc. These adjustments result in significantly divergent prices for each comparable sale when the adjustments should, if done properly, result in converging prices. To resolve this divergence, FTI decides to take an average price of the divergent prices. However, an average of divergent prices could only result in a proper valuation of the properties by chance since the true value could lie anywhere within the divergent range.

15. Second, FTI’s adjustments to its allegedly comparable sales result in prices for the subject properties in this arbitration that are inconsistent with the market trend of prices along the “Gold Coast” in Costa Rica. As we discuss in Section III below, the real estate market along the Gold Coast is heavily influenced by North American buyers. As such, Gold Coast real estate prices are correlated with prices in the United States. The general gauge of real estate prices in the U.S. is the S&P/Case-Shiller U.S. National Home Price Index (“Case-Shiller Index”). The Case-Shiller Index shows that real estate prices in the US rose to bubble levels in 2006 and then began
to decline. The decline was rapid in 2008 and 2009. Along the Gold Coast, prices rose more rapidly that the Case-Shiller Index because buyers were mostly “flippers,” i.e., persons interested in buying properties on the expectation that the prices would continue to rise such that they could sell them later at a profit. In other words, most buyers were not interested in developing and owning the properties. As a consequence, prices along the Gold Coast reached levels on par with the Dutch tulip craze of 1637. When the real estate market in the U.S. rapidly declined, the real estate market in along the Gold Coast fell even harder. However, FTI’s appraisal of the subject properties in this arbitration indicates that prices in Playa Grande continued to rise in 2007 and 2008, contrary to the correlation with the U.S. market.

16. Third, FTI’s reliance on sales of allegedly comparable properties does not take into account the fact that most of the purchases of properties in the area took place without proper due diligence. Brokers have recognized the uninformed buying that took place in the area and even Claimants have demonstrated they were not informed of the development restrictions and water supply issues in the area. As such, reliance on comparable, uninformed sales prices would only result in an appraisal of Claimants’ properties within the BNMP that is overstated.

17. FTI also calculates severance damages for Claimants holding properties outside the boundaries of the BNMP. Severance damages are defined as damages related to the remaining portion of the properties (the SPG and B lots) that were not expropriated. FTI reasons that if development were allowed within the 75-Meter Strip of the SPG and B lots, the remaining portion of these lots would be more valuable. Consequently, since development is not allowed within the 75-Meter Strip, the remaining portion of the SPG and B lots is now less valuable. However, FTI’s logic for severance damages is significantly flawed. FTI’s logic is based upon the premise that development within the 75-Meter Strip would not only create views of the ocean and beach for properties in the 75-Meter Strip, but views of the ocean and beach for those properties immediately outside the 75-Meter Strip. However, we are informed that no approvals would have ever been granted to Claimants to clear mangroves within the 50 meter Inalienable Zone to create views of the beach or ocean. Indeed, doing so would only further harm the nesting activity of the leatherback sea turtles that the BNMP was specifically created to protect. Thus, Claimants would not have been allowed to cut down the vegetation along the beach to provide the ocean and beach views FTI assumes were allowed. As such, the properties adjacent to the 75-Meter Strip would not decline in value. If there were any impact on the properties
adjacent to the 75-Meter Strip, it would be an increase in value since these properties are now the closest properties to the beach.

18. Even if there were a logical basis for severance damages (which there is not), FTI’s calculation of it is also seriously flawed. In essence, FTI calculates the But-For value of the properties outside the 75-Meter Strip using allegedly comparable property prices within the 75-Meter Strip. FTI then calculates the Actual value of the properties outside the 75-Meter Strip using allegedly comparable properties outside the 75-Meter Strip. The difference, they claim, is severance damages. The flaw in FTI’s calculation is that they use the prices of allegedly comparable properties inside the 75-Meter Strip in the But-For valuation of properties outside the 75-Meter Strip. Had FTI properly used prices of allegedly comparable properties outside the 75-Meter Strip in the But For scenario, their approach would have yielded ZERO damages.

19. As such, there is no economic basis for an award of severance damages.

20. Finally, with regard to interest, we do not dispute that Claimants would be entitled to interest and we do not disagree with the interest rate utilized by Claimants (i.e., the legal rate of interest in Costa Rica for Colones obligations). However, our review of a government website that is utilized in Costa Rica to calculate interest owed using the legal rate of interest reveals that Claimants’ calculation is overstated. The overstatement appears to be the result of Claimants’ application of this interest rate on a semi-annual compound basis. It appears to us that the legal rate of interest in Costa Rica is to be calculated on a simple basis. Indeed, it is our own experience in many jurisdictions that the legal rate of interest is to be calculated on a simple basis.

III. The Evolution of the Guanacaste Real Estate Market

21. In their report, FTI provides a brief overview of the real estate market in Guanacaste Province and the area surrounding Tamarindo (often referred to as the “Gold Coast”). However, FTI’s overview is incomplete and does not present an accurate assessment of the evolution of the real estate market in Guanacaste and in the Playa Grande area in particular. Accordingly, in this section we present a more comprehensive assessment of the Guanacaste real estate market from 2003-2008 (when Claimants claim their properties were de facto expropriated) and from 2008 to present in the following subsections.

6 See FTI Exhibit 24
A. The Correlation Between the US Real Estate Market and the “Gold Coast”

22. The Costa Rican real estate market is not as transparent as the real estate market in North America. Unlike in the U.S. and Canada, there is no Multiple Listing Service in Costa Rica. Accordingly, data is not readily available to the general public surrounding the purchase and sale of real estate. As such, extensive research and analysis is required to understand the trends in the real estate market.

23. The market for vacation and retirement properties along the Gold Coast is heavily influenced by the U.S. real estate market. This is evident in three respects.

24. First, Costa Rican real estate professionals have recognized the market’s dependence on North American investors.

   “If the U.S. sneezes, we get a cold,’ said Gabriel Araya, the listing agent with Costa Rica Sotheby’s International Realty.”

25. A realtor with Coldwell Banker acknowledged the same relationship as well.

   “We’ve always been a cash market with foreign buyers.”

26. Second, local real estate consulting firm NAI also recognizes the dependence of the local real estate market on North American buyers.

   “Along the coastal region in Guanacaste, the Central Pacific and the southern Caribbean, most potential buyers hail from North America.”

27. Third, it is commonly known that U.S. investors have financed their purchases of second homes in Costa Rica by taking out loans on their first homes in the U.S. As stated by Iris Mailloux, a real estate broker in Costa Rica:

   “Most of the sales to Americans are in cash after they take out a second mortgage on a property or mortgage a property they have clear title to…I've only had seven sales that were (locally) financed in the 15 years I've been here.”

28. As real estate activity has been heavily influenced by the U.S. housing market, it would follow that real estate values in Costa Rica would be correlated with those in the U.S. We note that FTI agrees with this position.

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7 FTI Exhibit 25
8 Williams, Adam; Real Estate on Slow Upswing; *Tico Times*; 10 September 2010 (R-062)
9 Williams, Adam; Real Estate on Slow Upswing; *Tico Times*; 10 September 2010 (R-062)
10 John McPhaul, “Costa Rica vacation homes hit by crisis,” *Reuters*, 1 August 2008 (R-063)
“The residential investment/second/retirement home boom in Guanacaste is powered by American investors who account for 90% of all residential property sales in Guanacaste. Wealthy pioneers buying up swaths of ranch land in 2002 developed subdivisions to accommodate a second wave of buyers flooding the market in 2006 seeking a lower cost second home or investment property in comparison to higher priced U.S. coastal markets. … The source of much of the investment in real estate development is FDI from the U.S. and Canada. According to the Costa Rican Central Bank, North America provided 62.7% of FDI dedicated to west coast real estate investing totaling approximately $390 million in 2007. Much of this investing is for continued development of resort and residential condominium offerings intended to meet the demand for mass/residential tourism primarily from the U.S., Canada, and Europe.”

29. Thus, the real estate market in Guanacaste has largely followed the U.S. housing market over the past 10 years. Since there is no index or other data source that readily observes and tracks market developments (such as pricing trends, etc.) in Costa Rica, we have considered the S&P/Case-Shiller U.S. National Home Price Index (“Case-Shiller Index”) to establish the trends in the Guanacaste real estate market. As Figure 1 below reveals, the Case-Shiller Index indicates that U.S. residential housing prices peaked in mid-2006, fell back to early-2003 price levels in 2009, and are currently at price levels comparable to those from 2004.

11 FTI Report, p. 16
B. The Real Estate Bubble was Bigger Along the Gold Coast than the United States and Crashed Harder

30. As noted by FTI, from 2003 to 2006, several large resorts and other large-scale residential developments were initiated. As a consequence of this activity as well as the significant rise in real estate prices in the US, property values along the Gold Coast rose at speculative rates. Indeed, the rise in real estate prices was even greater than in the US because many of the buyers along the Gold Coast were purchasing land simply to “flip” (i.e., resell) months later at a profit. The exuberance of these times and the lack of market order have been commented upon by many in the real estate industry in Guanacaste.

   “From 2002 to 2006 the buying process was quick; emotion predominated over reason. Due diligence was something done by a few and the boom of Guanacaste was at its best.”

31. Indeed, the speculative rise in real estate prices led to a break down in broker advice.

   “Before this law, be[ing a] real estate broker was very easy Nowalski said. The little professionalism…provided for disorder and price manipulation.”

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12 S&P/Case-Shiller U.S. National Home Price Index, S&P Dow Jones Indices LLC, (R-064)
13 FTI Report, p. 15
14 Rebecca Clower, “Guanacaste Costa Rica Real Estate: State of the Market address, or (Recognizing a steal when you see one),” Articlesbase, 20 September 2010 (R-065)
15 “Surcharge still around Guanacaste,” Costa Rica News, 2 June 2010 (R-066)
32. The incredible speculation that took place in the Gold Coast can only be best appreciated by the spectacular fall in both prices and sales activity. In September 2010, NAI made the following comment about the real estate market over the past two years.

“The Costa Rican market has suffered the last two years, including an almost complete paralysis of big projects outside of the Central Valley, in the area of Guanacaste and other coastal areas,” Carlos Robles, business director of NAI Costa Rica, told The Tico Times.”

“The broker Nowalski Annette, who works in the Guanacaste area, estimated that the [boom that] caused the shooting real estate prices began a decade ago.”

33. On the basis of an interview with Day Group Services, one of Costa Rica’s real estate investment consultant companies, The Costa Rican News indicated that offer prices dropped to half of the listing prices.

“Soft market shoppers are back, but of course offering cash prices that often half of the listing prices. With buyers looking for basement prices, most sellers have had to lower asking prices to meet this demand. While price went crazy a few years ago, most experts agree we are several years away before we see that kind market frenzy.”

34. Other brokers have reiterated the view that offer prices fell by 50 percent.

“I had some people come in a few weeks ago and ask to see the $1 million homes,” Nunez said. ‘After they saw them, they offered $500,000 to buy. That’s what we in the real estate business call ‘bottom feeding.’ Bottom feeders are people who know the market is down and can still go out there and pay cash. They are looking to strike at the right time and get a lot of bang for their buck.’”

35. Further, other brokers have acknowledged just how horrible the downturn in the Gold Coast real estate sector was.

“It’s no secret that 2009 was completely horrible for just about everyone, both buyers and sellers,’ said Charles Wanger of Bienes.

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16 Williams, Adam; Real Estate on Slow Upswing; Tico Times; 10 September 2010, (R-062)
17 “Surcharge still around Guanacaste,” Costa Rica News, 2 June 2010 (R-066)
18 “Real Estate Continues Upward Trend,” The Costa Rica News, 4 October 2010 (R-067)
19 Williams, Adam; Real Estate on Slow Upswing; Tico Times; 10 September 2010, (R-062)
36. Yet in spite of the market realities these same brokers and industry consultants acknowledge that sellers had not come to grips with the new market realities.

“‘Prices went nuts a few years ago,’ Nunez said. ‘We had rising demand in real estate for a four-year run until 2008. Then the market started sliding. People are still hoping to get those same values.’”

37. Other brokers and actors active in the real estate market have echoed this same sentiment.

“With an economy 80 percent based on tourism, and hit by a wave of speculation from 2004 to 2006, Guanacaste suffered beginning in 2008 by the downturn. As real estate prices in Florida, Las Vegas and California tumbled, ‘why would somebody invest in Costa Rica, if you could invest in the U.S. for less,’ Mr. Araya said.”

“Bernardo Gómez, a lawyer, said condominium projects that went up during the boom left owners ‘stuck with a lot of unsold units’ that are finally moving now, though prices are significantly lower. A condominium costing $1.5 million in 2008 sold six months ago for $600,000, he said.”

“From 2002 to 2006 the buying process was quick; emotion predominated over reason. Due diligence was something done by a few and the boom of Guanacaste was at its best. Nowadays the process is completely the opposite. Reason dominates over emotion and due diligence takes a good amount of time. We have noticed that the people that are now buying are those who had been thoroughly investigating the market and the different products. The sellers back then were just meeting the simple criteria of supply vs. demand and prices were going up regardless of the factors that are most relevant today; location, finishes, surroundings, value and an educated analysis of the possible future of the product, the area and the country…. Some sellers get offended and decide not to list with us, while others understand and act accordingly. Of course you will

20 Williams, Adam; Real Estate on Slow Upswing; Tico Times; 10 September 2010, (R-062)
21 Williams, Adam; Real Estate on Slow Upswing; Tico Times; 10 September 2010, (R-062)
22 FTI Report, Exhibit 25
23 FTI Report, Exhibit 25
always have those who decide to act independently from what the market tells us we should be doing.”

38. Data from the Central Bank of Costa Rica is consistent with this narrative. Foreign direct investment in real estate decreased by 32 percent from US$ 631 million in 2007 to US$ 432 million in 2008.

39. FTI appears to accept a downturn in the Gold Coast real estate market in 2007 but does not appear to accept the gravity of the downturn.

“The inflationary trends that were evident in the market in 2003 continued until early 2007 when the real estate recession commenced worldwide.”

40. Thus, the real estate market activity along the Gold Coast is yet another example of speculative market bubbles first observed in 1637 with the Dutch tulip mania. Buyers did not purchase properties on the basis of demand, but rather on the basis of an assumption that real estate prices would continuously increase. The speculation in the Guanacaste market can also be seen through the purchases and sales of some of Claimants’ properties in Playa Ventanas. For example, Mr. Spence stated he purchased Lots V30-V34 for approximately US$ 190 per m² in August and September 2003. In February 2006, Spence Co. sold Lot V61 for US$ 685 per m² – a 261 percent increase over the price paid for lots in Playa Ventanas in September 2003.

41. When the market began to turn in 2007, buyers were caught holding properties they never intended to develop. As we shall discuss in the following subsection, buyers unwilling to accept a loss and the lack of interest in developing the properties has brought development in and around the entire area where Claimants’ properties are located to a complete standstill. Indeed, this standstill persists even today – approximately 7 years after the bubble first burst.

24 Rebecca Clower, “Guanacaste Costa Rica Real Estate: State of the Market address, or (Recognizing a steal when you see one),” Articlesbase, 20 September 2010 (R-065)
26 FTI Report, p. 19
27 First Witness Statement of Bob F. Spence, ¶¶ 8-11. However, we note that FTI reports that all five lots were purchased on 19 August 2003 at a price of US$ 182 per m² (FTI Report, Section 9.58, p. 85)
28 FTI Report, Section 9.5.5
C. The Gold Coast Continues to Suffer from the Speculative Real Estate Activity of the Mid-2000s

42. We returned to the Playa Grande area between 7 July 2014 and 11 July 2014 to assess firsthand how the market for residential real estate has evolved since the market crash in 2007-2009. We developed four observations or opinions during our trip.

43. First, driving through the Playa Grande area (including Palm Beach Estates, Playa Grande, and Playa Ventanas) reveals that virtually no development has taken place in the past 3 years. We were unable to find any new material development in the area despite the fact that the market was undoubtedly aware of the specific boundaries of the BNMP since at least 2008.

44. Second, many of the properties that were developed (particularly in Palm Beach Estates) are for sale (and were for sale in 2010). The lack of construction activity on owned properties and the high level of developed properties for sale is a clear indication that the demand to develop properties in the area is extremely low.

45. Third, it is evident that those wishing to sell their properties have been finally willing to accept the new market circumstances (i.e., the non-existence of a bubble and the lack of demand for properties in the area). The Unglaubes’ residential properties represent a particularly relevant example. Previously, the Unglaubes were marketing five adjacent lots (lots 19-23) covering 4,200 square meters in Palm Beach Estates which included their main home, a guest house, and maid quarters for US$ 1.42 million.29 Driving past their properties on our recent visit, we noticed a sign in front of their properties indicating that they were willing to sell them for US$ 560,000 (or US$ 630,000 with the construction of a new pool).30 While we do not know how long the Unglaubes have sought to sell their properties at this reduced price, it is quite a dramatic decrease in price (a 60 percent decrease).

46. Fourth, we were shown documents and informed on our visit that there are significant water supply issues in the area. Indeed, water supply issues appear to have been identified as early as 2003, but the market mania (and lack of due diligence) that took place thereafter does not appear to have looked into the water supply issue.31 Today, it now appears to be accepted

30 See Appendix 3, Photographs from Site Visit, 8-9 July 2014
31 SENARA, Hydrological Study of the Huacas-Tamarindo Aquifer, May 2003 (R-046)
that development is severely restricted in the area because of the limited supply of water. This issue would obviously have a further impact on the market value of properties in the area.

IV. Overview of FTI’s Damages Calculation

47. Claimants claim that Respondent’s expropriation of an additional 75 meters inland from the public beach area (which extends 50 meters from the mean high-tide line) resulted in the full or partial expropriation of their properties. Claimants claim that 17 lots were fully expropriated as a result of the Measures: 13 in Playa Ventanas (V30-V33, V38-V40, V46, V47, V59, and V61a-c) and four in Playa Grande (A39, A40, C71, C96). Claimants claim that nine lots in Playa Grande (SPG1, SPG2, SPG3, B1, B3, B5-B8) were partially expropriated as a result of the Measures.

48. Claimants engaged FTI to determine the market value of the 26 properties affected by the creation of the BNMP. FTI calculates the “market value” of Claimants’ properties, which they define as:

“the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm’s length transaction after proper marketing wherein the parties had each acted knowledgably, prudently and without compulsion”

49. To calculate the market value, FTI applies the Sales Comparison Approach. The Sales Comparison Approach estimates the market value of Claimants’ properties (i.e., the subject properties) by comparing them with the actual prices paid for comparable properties with a similar “highest and best use”.

“The Sales Comparison Approach to estimating market value reflects the market’s perception that the value of a property is directly related to the prices of comparable competitive properties; it analyzes the subject’s market value based on prices paid in actual market transactions involving properties that have a similar highest and best use to that of the subject. … By analyzing sales that qualify as arm’s-length transactions between willing and

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32 FTI Report, p. 10. Although FTI calculates the market value of the properties, we understand DR-CAFTA defines that “fair market value” should be the standard of value that is applied in the case of an expropriation. The American Society of Appraisers defines fair market value as: “the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm’s length in an open and unrestricted market, when neither is acting under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.” (American Society of Appraisers, “ASA Business Valuation Standards”, 2008, p. 27, (R-069)). In our view, FTI’s definition of “market value” comports with the generally accepted definition of fair market value.

33 FTI Report, p. 22
knowledgeable buyers and sellers, we can identify value and price trends.”

50. FTI also prepared a Development Valuation Model (“DVM”) to value SPG1, SPG2 and SPG3. FTI’s DVM was prepared to value the SPG Lots as a 44-unit development before the taking and as a 36-unit development after the taking. We note that FTI only produced the output of this model and not the underlying model itself. Accordingly, we could not evaluate the details of their DVM, such as the revenues and costs associated with each unit. Ultimately FTI relies upon the DVM to support the valuation conclusion from the Sales Comparison Approach for the SPG Lots.

51. FTI assumed 27 May 2008 is the appropriate date upon which to value Claimants’ property (which was the date they determined the value of Claimants’ real estate was irreparably damaged by Respondent’s actions):

“Ultimately, it was the actions of the Constitutional Chamber of the Supreme Court of Justice of Costa Rica (the "Court") May 2008 that ended any speculation and put property owners and potential buyers on notice that properties within the Park (i.e. 125 meters inland from the mean high tide mark) would be subject to expropriation.”

“The Court’s confirmation of the scheme in May 2008 permeated the actions of the brokers, buyers and sellers and distorted the level of market activity for oceanfront land in the marketplace. But for the scheme, the subject properties would have enjoyed an environment of robust market activity, continued rapid price appreciation and ownership of prime, fee-titled oceanfront property or significant investment returns”

52. FTI calculates the market value of the properties before the expropriation (“But-For Scenario”) and after the expropriation (“Actual Scenario”). The difference between FTI’s But-For Scenario and Actual Scenario is the damage claimed by Claimants. For the wholly expropriated properties, FTI calculates the damages as being equal to the But-For Scenario (i.e.,

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34 FTI Report, p. 22
35 FTI Report, p. 31
36 FTI Report, p. 31
37 FTI Report, p. 31
38 FTI Report, p. 9
39 FTI Report, p. 17
40 FTI Report, p. 18
Actual Scenario market value is zero). For the partially expropriated properties, FTI separates the damages into two categories: 1) the value of the “part taken” and 2) “severance damages.” The value of the “part taken” is the subject property’s But-For Scenario market value, prorated for the property area expropriated (i.e., the approximately 75-Meter Strip expropriated by Respondent). Severance damages represent the alleged incremental loss of value of the remaining property area outside of the 75-Meter Strip.

53. FTI arrives at the market value for the subject properties in each scenario by taking an average of three comparable sales. FTI selected “the best available comparables to the subject properties” in calculating their But-For and Actual Scenarios. FTI then analyzed the comparable sales transactions and applied various adjustments to their values to account for differences.

“The major points of comparison for this type of analysis include the property rights conveyed, the financial terms incorporated into the transaction, the conditions or motivations surrounding the sale, changes in market conditions since the sale, the location of the real estate, its physical traits and the economic characteristics of the property. In accordance with the suggestion of the Appraisal Institute, the sale properties are analyzed with regard to property rights, financing terms, atypical conditions of sale (motivation), market conditions, location and physical characteristics. In the adjustment process, adjustments for dissimilarities in the elements of comparison between the subject property and the comparable sales are based on paired data sets and patterned analyses which isolate the effects of individual variables.”

54. As shown in Table 2 below, FTI considered a total of eight comparable sales transactions from 2003, 2006, and 2007 to develop the But-For Scenario market value of all of Claimants’ 26 properties as of 27 May 2008. FTI also considered four comparable sales transactions from 2007 to develop the Actual Scenario market value of Claimants’ 10 partially expropriated properties on 27 May 2008.

41 FTI, Section 9.4
42 FTI Report, p. 23
43 FTI Report, p. 23
Table 2 – Comparable Sales Transactions Selected by FTI\textsuperscript{44}

<table>
<thead>
<tr>
<th>Lot(s)</th>
<th>Location</th>
<th>Physical Specs.</th>
<th>Purchase Date</th>
<th>Price</th>
<th>Area (m\textsuperscript{2})</th>
<th>Price/m\textsuperscript{2}</th>
</tr>
</thead>
<tbody>
<tr>
<td>V30-V34</td>
<td>Playa Ventanas</td>
<td>Beachfront</td>
<td>19-Aug-2003</td>
<td>$800,000</td>
<td>4,404</td>
<td>$181.65</td>
</tr>
<tr>
<td>V52</td>
<td>Playa Ventanas</td>
<td>Beachfront</td>
<td>15-Mar-2007</td>
<td>$575,000</td>
<td>817</td>
<td>$703.79</td>
</tr>
<tr>
<td>V59</td>
<td>Playa Ventanas</td>
<td>Beachfront</td>
<td>11-May-2007</td>
<td>$515,000</td>
<td>893</td>
<td>$576.71</td>
</tr>
<tr>
<td>V61</td>
<td>Playa Ventanas</td>
<td>Beachfront</td>
<td>6-Feb-2006</td>
<td>$3,100,000</td>
<td>4,524</td>
<td>$685.23</td>
</tr>
<tr>
<td>A28</td>
<td>Playa Grande</td>
<td>Interior Lot</td>
<td>21-Sep-2007</td>
<td>$228,000</td>
<td>800</td>
<td>$285.00</td>
</tr>
<tr>
<td>A29</td>
<td>Playa Grande</td>
<td>Interior Lot</td>
<td>21-Sep-2007</td>
<td>$228,000</td>
<td>800</td>
<td>$285.00</td>
</tr>
<tr>
<td>C71</td>
<td>Playa Grande</td>
<td>Interior Lot</td>
<td>22-Nov-2007</td>
<td>$230,000</td>
<td>667</td>
<td>$344.83</td>
</tr>
<tr>
<td>18</td>
<td>Playa Flamingo</td>
<td>Beachfront</td>
<td>2-May-2006</td>
<td>$1,550,000</td>
<td>8,175</td>
<td>$189.60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lot(s)</th>
<th>Location</th>
<th>Physical Specs.</th>
<th>Purchase Date</th>
<th>Price</th>
<th>Area (m\textsuperscript{2})</th>
<th>Price/m\textsuperscript{2}</th>
</tr>
</thead>
<tbody>
<tr>
<td>A28</td>
<td>Playa Grande</td>
<td>Interior Lot</td>
<td>21-Sep-2007</td>
<td>$228,000</td>
<td>800</td>
<td>$285.00</td>
</tr>
<tr>
<td>A29</td>
<td>Playa Grande</td>
<td>Interior Lot</td>
<td>21-Sep-2007</td>
<td>$228,000</td>
<td>800</td>
<td>$285.00</td>
</tr>
<tr>
<td>A30</td>
<td>Playa Grande</td>
<td>Interior Lot</td>
<td>21-Sep-2007</td>
<td>$228,000</td>
<td>800</td>
<td>$285.00</td>
</tr>
<tr>
<td>C71</td>
<td>Playa Grande</td>
<td>Interior Lot</td>
<td>22-Nov-2007</td>
<td>$230,000</td>
<td>667</td>
<td>$344.83</td>
</tr>
</tbody>
</table>

55. The lots identified in Table 2 above reveal that FTI selected sales of interior lots as being comparable to the partially expropriated properties in the Actual Scenario. Thus, in FTI's view, by removing the 75-Meter Strip of land from the property adjacent to the BNMP, the partially expropriated “beachfront” lots have ostensibly become "interior" lots as though a building or other impediment had been constructed between the lot and the beach.

56. FTI also applies four adjustments to increase or decrease the values of the comparable sales transactions identified.

57. First, FTI adjusts comparable sales to account for the overall growth in market prices since the comparable sale occurred. Specifically, FTI applies a monthly inflation factor of between 1 percent and 3 percent in 2003-2007.

58. Second, FTI makes a subjective adjustment for location, with properties in Playa Ventanas and Playa Flamingo being considered superior to Playa Grande.

\textsuperscript{44} FTI Report, Section 9.5, Addenda. Note that the purchase dates reported by FTI in Section 9.4 for lots V30, V31, V32, V33, C71 do not match data in reported in Section 9.5. See Table 6 below for details of discrepancies found in FTI's data.
59. Third, FTI adjusts for lot size, with larger properties being adjusted downward as it is assumed that larger land plots are less expensive (per m²) than smaller land plots.

60. Fourth, FTI makes subjective adjustments for physical traits such as beach frontage and topography, with comparables with more beach frontage or flatter terrain considered superior.

61. Other than the adjustment to account for timing differences between the comparable sales and the valuation date, FTI does not explain how they quantified any of their other adjustments. As can be seen in the tables below, after FTI’s adjustments, the comparables they selected increased by as much as 121 percent and decreased by as much as 66 percent from the original sales price.

Table 3 – FTI’s Adjusted Comparable Sales Prices (US$ / m²)45

<table>
<thead>
<tr>
<th>Lot(s)</th>
<th>Purchase Date</th>
<th>Original Value</th>
<th>Adj.Value (Maximum)</th>
<th>Adj.Value (Minimum)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>V30-V34</td>
<td>19-Aug-2003</td>
<td>$181.65</td>
<td>$400.96</td>
<td>$177.20</td>
<td>121% to -2%</td>
</tr>
<tr>
<td>V52</td>
<td>15-Mar-2007</td>
<td>$703.79</td>
<td>$774.00</td>
<td>$681.00</td>
<td>10% to -3%</td>
</tr>
<tr>
<td>V59</td>
<td>11-May-2007</td>
<td>$576.71</td>
<td>$994.00</td>
<td>$586.00</td>
<td>72% to 2%</td>
</tr>
<tr>
<td>V61</td>
<td>6-Feb-2006</td>
<td>$685.23</td>
<td>$1,053.00</td>
<td>$586.00</td>
<td>54% to -14%</td>
</tr>
<tr>
<td>A28</td>
<td>21-Sep-2007</td>
<td>$285.00</td>
<td>$296.40</td>
<td>$296.40</td>
<td>4%</td>
</tr>
<tr>
<td>A29</td>
<td>21-Sep-2007</td>
<td>$285.00</td>
<td>$296.40</td>
<td>$296.40</td>
<td>4%</td>
</tr>
<tr>
<td>C71</td>
<td>22-Nov-2007</td>
<td>$344.83</td>
<td>$351.72</td>
<td>$351.72</td>
<td>2%</td>
</tr>
<tr>
<td>18</td>
<td>2-May-2006</td>
<td>$189.60</td>
<td>$272.00</td>
<td>$64.00</td>
<td>43% to -66%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lot(s)</th>
<th>Purchase Date</th>
<th>Original Value</th>
<th>Adj.Value (Maximum)</th>
<th>Adj.Value (Minimum)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A28</td>
<td>21-Sep-2007</td>
<td>$285.00</td>
<td>205.00</td>
<td>86.00</td>
<td>-28% to -70%</td>
</tr>
<tr>
<td>A29</td>
<td>21-Sep-2007</td>
<td>$285.00</td>
<td>205.00</td>
<td>86.00</td>
<td>-28% to -70%</td>
</tr>
<tr>
<td>A30</td>
<td>21-Sep-2007</td>
<td>$285.00</td>
<td>103.74</td>
<td>103.74</td>
<td>-64%</td>
</tr>
<tr>
<td>C71</td>
<td>22-Nov-2007</td>
<td>$344.83</td>
<td>217.24</td>
<td>91.30</td>
<td>-37% to -74%</td>
</tr>
</tbody>
</table>

62. FTI selected 3 of the first 8 properties that it deemed most comparable to the fully and partially expropriated subject properties to arrive at a But-For value for each subject property. Likewise, FTI also selected 3 of the latter 4 properties that it deemed most comparable to the partially expropriated properties to arrive at an Actual value for each subject property. FTI then

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45 See FTI Report, Section 9.4 and 9.5, pp. 45-85. We note that FTI’s adjusted value for A28, A29, and A30 does not vary based on the comparable sales transaction selected. In other words, all three of FTI’s comparable sales transactions when adjusted yield the same value for the subject property on a US$ per m² basis.
allocated these damages to the value of the “part taken” and “severance damages.” As shown in Table 4 below, FTI calculated that Claimants have suffered damages equal to US$ 36,203,000 (value of the part taken of US$ 23,157,995 and severance damages of US$ 13,045,005).

Table 4 – Damages Calculated by FTI for the Area Actually Expropriated by Respondent

<table>
<thead>
<tr>
<th>Claimant</th>
<th>Lot</th>
<th>Purchase Date</th>
<th>Purchase Price</th>
<th>Value of Part Taken</th>
<th>Severance Damages</th>
<th>Total Damages</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Spence</td>
<td>V30</td>
<td>30-Sep-2003</td>
<td>$200,000</td>
<td>$649,000</td>
<td>-</td>
<td>$649,000</td>
</tr>
<tr>
<td>B. Spence</td>
<td>V31</td>
<td>30-Sep-2003</td>
<td>200,000</td>
<td>676,000</td>
<td>-</td>
<td>676,000</td>
</tr>
<tr>
<td>B. Spence</td>
<td>V32</td>
<td>30-Sep-2003</td>
<td>150,000</td>
<td>688,000</td>
<td>-</td>
<td>688,000</td>
</tr>
<tr>
<td>B. Spence</td>
<td>V33</td>
<td>30-Sep-2003</td>
<td>150,000</td>
<td>735,000</td>
<td>-</td>
<td>735,000</td>
</tr>
<tr>
<td>R. Copher</td>
<td>V38</td>
<td>19-Nov-2004</td>
<td>350,000</td>
<td>867,000</td>
<td>-</td>
<td>867,000</td>
</tr>
<tr>
<td>B. &amp; R. Copher</td>
<td>V39</td>
<td>27-Sep-2003</td>
<td>500,000</td>
<td>814,000</td>
<td>-</td>
<td>814,000</td>
</tr>
<tr>
<td>B. &amp; R. Copher</td>
<td>V40</td>
<td>27-Sep-2003</td>
<td>500,000</td>
<td>690,000</td>
<td>-</td>
<td>690,000</td>
</tr>
<tr>
<td>R. Copher &amp; J. Holsten</td>
<td>V46</td>
<td>8-Feb-2006</td>
<td>275,000</td>
<td>753,000</td>
<td>-</td>
<td>753,000</td>
</tr>
<tr>
<td>R. Copher &amp; J. Holsten</td>
<td>V47</td>
<td>8-Feb-2006</td>
<td>275,000</td>
<td>929,000</td>
<td>-</td>
<td>929,000</td>
</tr>
<tr>
<td>Spence Co.</td>
<td>V59</td>
<td>3-Oct-2007</td>
<td>1,100,000</td>
<td>718,000</td>
<td>-</td>
<td>718,000</td>
</tr>
<tr>
<td>Spence Co.</td>
<td>V61</td>
<td>6-Feb-2006</td>
<td>3,100,000</td>
<td>3,733,000</td>
<td>-</td>
<td>3,733,000</td>
</tr>
<tr>
<td>Spence Co.</td>
<td>A39</td>
<td>29-Sep-2005</td>
<td>220,000</td>
<td>537,000</td>
<td>-</td>
<td>537,000</td>
</tr>
<tr>
<td>Spence Co.</td>
<td>A40</td>
<td>1-Sep-2005</td>
<td>110,000</td>
<td>532,000</td>
<td>-</td>
<td>532,000</td>
</tr>
<tr>
<td>Spence Co.</td>
<td>C71</td>
<td>22-Oct-2007</td>
<td>230,000</td>
<td>231,000</td>
<td>-</td>
<td>231,000</td>
</tr>
<tr>
<td>Spence Co.</td>
<td>C96</td>
<td>11-Aug-2005</td>
<td>250,000</td>
<td>1,343,000</td>
<td>-</td>
<td>1,343,000</td>
</tr>
<tr>
<td>Spence Co.</td>
<td>SPG1</td>
<td>20-Dec-2006</td>
<td>695,437</td>
<td>1,461,997</td>
<td>1,343,000</td>
<td>2,556,000</td>
</tr>
<tr>
<td>Spence Co.</td>
<td>SPG2</td>
<td>11-Feb-2007</td>
<td>695,437</td>
<td>1,493,034</td>
<td>1,214,000</td>
<td>2,194,000</td>
</tr>
<tr>
<td>Spence Co.</td>
<td>SPG3</td>
<td>11-Feb-2007</td>
<td>1,700,000</td>
<td>2,911,899</td>
<td>1,822,000</td>
<td>4,034,899</td>
</tr>
<tr>
<td>B. Berkowitz</td>
<td>B3</td>
<td>22-Sep-2003</td>
<td>500,000</td>
<td>1,097,338</td>
<td>1,356,662</td>
<td>2,454,000</td>
</tr>
<tr>
<td>B. Berkowitz</td>
<td>B5</td>
<td>24-Sep-2003</td>
<td>500,000</td>
<td>1,154,390</td>
<td>810,610</td>
<td>1,965,000</td>
</tr>
<tr>
<td>B. Berkowitz</td>
<td>B6</td>
<td>24-Sep-2003</td>
<td>500,000</td>
<td>1,112,246</td>
<td>834,754</td>
<td>1,947,000</td>
</tr>
<tr>
<td>G. Gremillion</td>
<td>B7</td>
<td>21-Apr-2004</td>
<td>425,000</td>
<td>1,207,775</td>
<td>1,348,225</td>
<td>2,556,000</td>
</tr>
<tr>
<td>T. &amp; A. Berkowitz</td>
<td>B1</td>
<td>22-Sep-2003</td>
<td>500,000</td>
<td>1,138,092</td>
<td>1,398,908</td>
<td>2,537,000</td>
</tr>
<tr>
<td>T. &amp; A. Berkowitz</td>
<td>B8</td>
<td>24-Sep-2003</td>
<td>500,000</td>
<td>1,135,084</td>
<td>1,428,916</td>
<td>2,564,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>13,625,874</strong></td>
<td><strong>$23,157,995</strong></td>
<td><strong>$13,045,005</strong></td>
<td><strong>$36,203,000</strong></td>
</tr>
</tbody>
</table>

63. We note that FTI’s damages calculations are based on the actual area of land expropriated by Respondent. In all cases, the amount expropriated by Respondent is less than the additional 75 meters which would form the maximum boundaries of the BNMP. Accordingly, FTI has calculated a second damages scenario assuming that the full 75-Meter Strip was expropriated by

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46 We have reported V61 as one property since it was purchased as one lot by Spence Co. and later subdivided into three lots. All purchase dates and purchase prices are from FTI Report, Section 9.4. All damages are as reported in FTI Report, Section 7.1.
Respondent (resulting in Respondent taking the full 125 meters from the mean high-tide line). In that scenario, FTI has calculated damages of US$ 36,543,000, (approximately 1 percent higher, due to the additional area of the partially expropriated SPG and B Lots that was expropriated).

We note that Claimant claims the larger of the two amounts even though Respondent has expropriated a smaller area of the properties.

V. Claimants Knew or Should Have Known that Several of the Subject Properties (or Portions of the Subject Properties) Were Being Reserved for the Park Before Purchase

In preparing their But-For Scenario estimates of the fair market value of Claimants’ properties, FTI does not consider the fact that the properties were reserved for the BNMP by Respondent before Claimants purchased them. In other words, FTI assumes that Claimants did not know the properties could be subject to expropriation. Thus, when preparing their But-For Scenario estimates of fair market value, FTI has ignored the impact that the various decrees, laws, regulations, and judicial rulings have had on the real estate market in Playa Ventanas and Playa Grande.

“In valuing the property before the taking, the influence of the scheme is ignored. Specifically, the dampening effect on the real estate market that the scheme instigated is ignored. But for the scheme, the oceanfront land market would have been robust without government’s influence and the owners would have had the opportunity to sell or develop their property under more favorable market conditions in mid-2007.”

This is a fundamental flaw in FTI’s analysis because Claimants knew (or should have known) before they purchased the properties that the properties they were considering were within the boundaries of the BNMP and could be subject to expropriation. When any asset is purchased, it is important for buyers to perform adequate due diligence in order to establish the fair market value of the asset. Indeed, this is a key requirement in the establishment of an asset’s market value, as explained by FTI:

“[T]he estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm’s length transaction after proper marketing...”

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47 See FTI Report, Section 7.2.
48 FTI Report, p. 18
parties had each acted knowledgeably, prudently and without compulsion.”49

“Both parties are well informed or well advised, and acting in what they consider their own best interests” 50

66. In the course of Claimants’ purchase of the properties, we assume that they sought to determine the fair market value for each property. In doing so, they should have performed basic due diligence to determine whether the properties were encumbered by any liens, easements, or other restrictions that could influence the properties’ fair market values. In our view, several of Claimants’ actions and statements indicate they were aware (or should have been aware) before purchase that the properties were reserved for the BNMP and could be subject to expropriation.

67. In the subsections below, we first provide a brief overview of the timeline for the establishment of the BNMP. Second, we provide a summary of Claimants’ actions and their communications that indicate they were aware of the expropriation risk prior to purchasing their properties.

A. History and Establishment of the Las Baulas National Marine Park

68. On 9 July 1991, the President of Costa Rica and MINAE (previously known as MIRENEM) issued Decree 20518 (“1991 Decree”) creating the BNMP.51 The intended purpose of the decree was to protect the nesting area of the leatherback sea turtle as the government was concerned about tourist development (in particular light, noise, and other pollution) affecting the turtles.52 The 1991 Decree set out the boundaries of the BNMP, which included a “strip of land measuring 75 meters, counted from the public zone [of 50 meters from high tide]” as a protected zone that encompassed tall trees and vegetation where all development would need to be approved by MINAE.53 The 1991 Decree also contemplated that the park was to be subject to the government acquiring private properties located in the area defined.54

69. On 10 July 1995, the Costa Rican Congress passed Law No. 7524 (“1995 Law”), which set out in greater detail the means to achieve the environmental protection objectives that had

49 FTI Report, p. 10
50 FTI Report, p. 10
51 Exhibit C-1b
52 Decree 20518, preamable, Exhibit C-1b
53 Decree 20518, Article 2 (“incluyendo una franja de terreno de 75 metros, contada a partir de la zona pública”), Exhibit C-1b
54 Decree 20518, art. 4, and 5, Exhibit C-1b
motivated the creation of the Park. We understand that the 1995 Law restated the boundaries of the BNMP to extend 125 meters seaward, not inland, from the high tide line.

70. On 10 February 2004, we understand that the Attorney General of Costa Rica (“Procuraduría”) issued an interpretation (“Dictamen”) with regard to the boundaries of the BNMP. The Procuraduría was aware that to exclude any beachfront land from the BNMP would defeat its purpose of protecting the beach nesting sites of the leatherback turtle. In the Dictamen, the Procuraduría, citing the 1991 Decree, defined the BNMP’s boundaries as to include a strip of 125 meters inland.

71. On 23 May 2008, the Supreme Court issued a decision where it adopted the Procuraduría’s interpretation and confirmed that the Park indeed extended 125 meters inland. Four days later, on 27 May 2008, the Supreme Court issued a decision instructing MINAE to either expropriate the land inside the BNMP or, in case funds are not available to expropriate, to allow their owners to develop them.

72. On 16 December 2008, the Constitutional Court annulled all the environmental permits with regard to properties within the BNMP and ordered that MINAE commence with expropriation proceedings for all the related properties. The Constitutional Court also imposed additional restrictions with regard to construction permits within 500 meters of the mean high-tide line.

73. We understand that Claimants allege that on 19 March 2010 MINAE, through SETENA, terminated all pending environmental viability permit applications for lots in the BNMP’s 125-meter zone. We further understand that SETENA was conducting an environmental impact study that would allow it to develop guidelines for development. These guidelines were formally implemented through Resolution No. 1410-2010 on 28 June 2010.

55 Exhibit C-1t, p. 14
56 Exhibit C-1t, p. 3-4, we note the Procuraduría issued a second opinion in 2005 (Exhibit C-1w).
57 Exhibit C-1j, Resultando #2 (whereas #2)
58 Exhibit C-1i, pp. 23-24
59 Exhibit C-1j, p. 21
60 Exhibit C-1j, p. 22
61 Claimants’ Memorial, ¶212j
62 Resolution No. 1410-2010-SETENA, 28 June 2010 (R-012). These guidelines were amended and modified via Resolution No. 2174-2010-SETENA Exhibit C-1zl
B. Indications that Claimants Were Aware of the Existence of the BNMP

74. Claimants were aware (or should have been aware) of the BNMP and its borders before they purchased their properties. Indeed through their witness statements, Claimants have indicated that they were aware that several of their properties were reserved by Respondent for the BNMP and thus were subject to expropriation by Respondent. We examine eight examples below.

75. First, as discussed above, the 1991 Decree indicated that the BNMP’s boundaries extended 125 meters inland from the mean high-tide water line. Even though the 1995 Law was inconsistent with the 1991 Decree due to a typographical error, the Claimants should have been aware that the BNMP’s boundaries extended 125 meters inland. At a minimum, the Claimants should have been aware of the conflicting nature of the 1991 Decree and the 1995 Law and understood that there was a high likelihood that their properties were within the BNMP.

76. Second, in 2003, we understand that Mr. B. Berkowitz met with Mr. Carlos Manuel Rodríguez Echandi, Minister of the Environment and Energy (“MINAE”) to determine the government’s policy with regard to properties bordering the BNMP. We understand that MINAE indicated that the then current policy of the administration was to pursue voluntary conservation restrictions with properties owners rather than to pursue expropriation. In July 2003, MINAE provided Mr. B. Berkowitz with a signed copy of minutes from a meeting MINAE held with several non-profit organizations in June 2003 indicating this position. We understand, however, that these meeting minutes did not specify whether the specific properties Mr. B. Berkowitz was interested in purchasing fell within the boundaries of the BNMP. Furthermore, the minutes also did not indicate that MINAE or Costa Rica agreed to give up their right to expropriate the property. We also understand that the meeting focused on the likelihood of expanding the BNMP beyond the 125 meters inland.

77. Third, on 22 July 2003, the Ministry of Natural Resources, Energy, and Mines (now MINAE) issued a resolution declaring “in the public interest” property in Playa Grande owned by Mrs. Marion Unglaube. This property is adjacent to lot B8 which was purchased by Mr. Brett Berkowitz. However, we understand that this resolution was not published in the Gazette until 5

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63 First Witness Statement of Brett E. Berkowitz, ¶ 9
64 Exhibit C-53
65 Exhibit C-53
November 2003. In our view, the declaration of a property adjacent to the subject property to be in the public interest is something that Claimants knew or should have known when performing their due diligence.

78. Fourth, in 2005 Messrs. Berkowitz and Reddy indicated that they were aware of Respondent’s additional expropriations of properties within 125 meters of the mean high tide.

“I met Bob Reddy…around 2005 when several landowners were discussing the creation of a mixed use nature refuge that would allow developments that were environmentally friendly.”

“…I began to reach out to the other Playa Grande landowners in order to discuss the creation of a mixed use nature refuge that would allow for the type of environmentally responsible development that we were planning in Playa Grande and Playa Ventanas. I recall that I first met Brett Berkowitz in the context of this initiative. We wanted to lobby the Government with respect to this idea to see if expropriation could be avoided.”

“… I then started hearing about the Government having issued notices of expropriation for some of the lots within 75 meters of the inalienable zone.”

79. Indeed, on 14 July 2005, the “B-Lots” in Playa Grande (i.e., Messrs. Berkowitz and Gremillion’s properties) were declared in the public interest. These declarations were published in the Gazette on 1 December 2005. Accordingly, by 2005 Claimants were certainly aware that Respondent viewed properties within 125 meters of the high tide as being within the BNMP and that they would be subject to expropriation.

80. Fifth, by 2005, according to Mr. Robert Reddy, CFO of Spence Co., there was uncertainty surrounding the ability to obtain environmental permits or building permits as well as surrounding the possibility of expropriation.

“In about 2005, SETENA started refusing to review environmental impact assessments for any properties within 75 meters of the inalienable zone.”

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67 First Witness Statement of Brett E. Berkowitz, ¶ 47
68 First Witness Statement of Robert Reddy, ¶ 32
69 First Witness Statement of Robert Reddy, ¶ 29
70 Exhibits C-23c, C-24c, C-25c, C-26c, C-27c, C-28c
71 First Witness Statement of Robert Reddy, ¶ 29
Neither Bob Spence nor Spence Co. submitted building plans for beachfront lots (other than the SPG lots...), as it was considered prudent to await the resolution of the issues surrounding the Park boundaries and the Government’s intentions.  

Sixth, on 1 February 2006, Lot A40 in Playa Grande owned by Spence Co. was declared in the public interest. This declaration was published in the Official Gazette on 30 March 2006. Thus, by early 2006 Claimants were certainly aware that Respondent viewed properties within 125 meters of the high tide as being within the BNMP and that they would be subject to expropriation.

Seventh, by 2006, Claimants had conducted transactions that considered the uncertainty of any development within 125 meters of the mean high tide. Specifically, Spence Co., through its subsidiary Grande Beach Holdings, sold Lot V61 to a related company on 6 February 2006. In the sales agreement, Grande Beach Holdings agreed to make the sale contingent upon the buyer’s ability to secure a building permit within two years (i.e., a “boomerang clause”). When the buyer could not secure a building permit, the property was returned to Spence Co. and a refund was provided to the buyer. In our view, the inclusion of a “boomerang clause” in a sales contract is evidence that both the buyer and seller (both subsidiaries of Spence Co.) agreed that there was significant uncertainty in the development of the property on that date. Indeed, Mr. Reddy indicates that he was aware of disputes with to the BNMP in 2006:

“I had not discussed any issues around the Park...until the fights over the Park began in about 2006.”

Eighth, real estate agents in Costa Rica were aware of the uncertainties surrounding the development of properties within the BNMP. Ms. Penelope Lent, a realtor engaged by Claimants to opine on the value of “beachfront” land in Guanacaste, states that concerns surrounding the expropriation of properties within the boundaries of the BNMP inhibited real estate activity from 2005 to 2008.

“In general, from 2005 to 2008, beachfront land property values ranges anywhere from $500/m2 to over $1,000/m2 depending on

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72 First Witness Statement of Robert Reddy, ¶ 31
73 Exhibit C-16c
74 Claimants’ Appendix B.29
75 Claimants’ Appendix B.29, p. 3
76 Claimants’ Appendix B.30, p. 2
77 First Witness Statement of Robert Reddy, ¶ 33
the market, location and the specific characteristics of the lot. However, during this time I only sold one beachfront lot in the Playa Grande area due to concerns over the legal and expropriation risks upon the creation of the national park.”

C. Claimants Appear to Have Been Speculating That Costa Rica Would Not Expropriate the Properties

84. Although there was information in the marketplace concerning the boundaries of the BNMP and activity undertaken to restrict develop in the BNMP area, including expropriations, Claimants nevertheless still purchased 26 properties in Playa Ventanas and Playa Grande. As can be seen in the timeline below, all properties were purchased by the Claimants after the BNMP was created.

Table 5 – Timeline of Claimant’s Purchases and Respondent’s Actions

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 July 1991</td>
<td>MINAE Decree Establishing the BNMP boundaries 125 m inland from mean high-tide line.</td>
</tr>
<tr>
<td>10 July 1995</td>
<td>Law establishing the BNMP boundaries 125 meters seaward from mean high-tide line.</td>
</tr>
<tr>
<td>22 July 2003</td>
<td>Unglaube Property is declared in public interest</td>
</tr>
<tr>
<td>September 2003</td>
<td>Mr. &amp; Mrs. Copher Purchase Lots V39 and V40</td>
</tr>
<tr>
<td>September 2003</td>
<td>Mr. Brett Berkowitz Purchases Lots B1, B3, B5-B8</td>
</tr>
<tr>
<td>September 2003</td>
<td>Mr. Spence Purchases Lots V30-V33</td>
</tr>
<tr>
<td>10 February 2004</td>
<td>Attorney General Decree Establishing BNMP Boundaries 125m inland</td>
</tr>
<tr>
<td>21 April 2004</td>
<td>Mr. Gremillion purchases Lot B7 from Mr. Berkowitz</td>
</tr>
<tr>
<td>November 2004</td>
<td>Mr. Copher purchases Lot B39</td>
</tr>
<tr>
<td>February 2005</td>
<td>Spence Co. Purchases Lot V61</td>
</tr>
<tr>
<td>July 2005</td>
<td>B Lots are declared in the Public Interest</td>
</tr>
<tr>
<td>August 2005</td>
<td>Spence Co Purchases Lot C96</td>
</tr>
<tr>
<td>September 2005</td>
<td>Spence Co. Purchases Lots A39-A40</td>
</tr>
<tr>
<td>February 2006</td>
<td>Messrs. Copher &amp; Holsten Purchase Lots V46-V47</td>
</tr>
<tr>
<td>February 2006</td>
<td>Spence Co. sells Lot V61 with &quot;Boomerang Clause&quot;</td>
</tr>
<tr>
<td>December 2006</td>
<td>Spence Co. purchases SPG1, SPG2, SPG3</td>
</tr>
<tr>
<td>October 2007</td>
<td>Spence Co. purchases V59 and C71</td>
</tr>
</tbody>
</table>

78 FTI Exhibit 10
79 Exhibits C-1b, C-1c, C-23c, C-24c, C-25c, C-26c, C-27c, C-28c, Claimants’ Appendix B.29. In this table, we have relied on the purchase dates as reported by FTI, not as reported by Claimants in their witness statements or memorial. See FTI Report, Section 9.4
85. Mr. B. Berkowitz allegedly purchased Lots B1, B3, B5, B6, and B8 for US$ 2,500,000 in September 2003 even though he did not secure a binding agreement with MINAE or another government agency that would have prevented Respondent from consolidating private properties reserved for the BNMP. In our view, he should not have had the expectation of developing the area of those properties within the boundaries of the BNMP if he was truly investing “a large share of [his] life savings” in those properties.

86. Furthermore, Claimants purchased several lots after the Attorney General issued its opinion that the boundaries of the BNMP extended 125 meters inland on 10 February 2004. Mr. Gremillion allegedly purchased Lot B7 from Mr. B. Berkowitz on 21 April 2004 for US$ 425,000. Moreover, Mr. Gremillion’s alleged purchase took place at least four months after Mrs. Unglaubes’ property – just two lots away – was declared in the public interest.

87. On 19 November 2004, Mr. Copher purchased Lot V38 many months after the Attorney General’s decree and nearly a year after the Unglaubes’ property was declared in the public interest.

88. Spence Co. allegedly purchased Lots SPG1, SPG2, SPG3, V61, A39, C71, and C96 in 2005 or later, after Mr. Reddy indicated he became aware of potential issues with properties in the Park. Mr. Copher and Mr. Holsten purchased Lots V46 and V47 on 8 February 2006. All of these purchases occurred after Mr. Reddy stated that Spence Co. knew that environmental and building permits were not being processed by SETENA within the BNMP and after Messrs. Reddy and B. Berkowitz had discussed creating a “mixed use nature refuge” in order to “see if expropriations could be avoided.” Finally, after Spence Co. sold Lot V61 with a “boomerang clause”, it purchased SPG1, SPG2, SPG3, and V59.

89. Based on the above, it is clear that Claimants were aware of the uncertainties surrounding the ability to develop the properties when they purchased their lots. In our view, and as stated by Mr. Reddy, it is clear that Claimants engaged in speculative purchases of the properties in Playa Ventanas and Playa Grande with the expectation that Respondent would not seek to incorporate the lots into the BNMP.

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80 We note that FTI reported that Mr. Berkowitz purchased his properties at US$ 500,000 per lot, however the evidence submitted indicates that he paid only CRC 500,000 per lot (approximately US$ 1,000). See FTI Report, Section 9.4 and Exhibits C-23b, C-24b, C-25b, C-26b, and C-28b.

81 First Witness Statement of Brett E. Berkowitz, ¶10

82 First Witness Statement of Brett E. Berkowitz, ¶47
“For businesspeople such as ourselves, for the Government to spend hundreds of millions of dollars to expropriate undeveloped land that would not substantially benefit the endangered turtles made no sense whatsoever. Thus we always expected that we would eventually be able to responsibly develop and sell these beautiful and rare properties.”83

“It did not make sense to us that they would expropriate private property that they could not afford to pay for rather than find a way to ensure that the development proceeded in a manner that would not impact the turtles that they were trying to protect.”84

90. Claimants in their memorial also state that they did not expect Respondent to enforce its rights against their properties.

“…Costa Rica has a forty-year history of declaring national parks, but not expropriating the private land situated within their boundaries. Its Governments of the day also gave no indication, throughout, that any had either the intention or the wherewithal to proceed with a large-scale project of expropriations.”85

91. Given the known facts surrounding the development of the BNMP and the timing of Claimants’ alleged purchases, it seems highly likely that Claimants would have negotiated and obtained a discount in acquiring the subject properties for the possibility that the area with 75-Meter Strip would ultimately be expropriated or undevelopable. The terms of Claimants’ purchases would be memorialized in the purchase and sale agreements for the properties. However, Claimants have not produced these documents. These documents are necessary to fully understand how Claimants’ incorporated the risk of losing the 75-Meter Strip within the BNMP.

92. If Claimants did indeed receive a discount on their purchases for the risk related to the expropriation of properties located within the boundaries of the BNMP, or if the Tribunal finds that Claimants acted imprudently by either failing to do adequate due diligence or by acting in direct conflict with the reasonable conclusions from adequate due diligence, then Claimants should not be able to receive the value of the properties as if there were no risk of expropriation. In other words, Claimants should not benefit from the expropriation risk via a lower purchase (or benefit from their lack of due diligence) and benefit via a valuation that assumes no

83 First Witness Statement of Robert Reddy, ¶ 9
84 First Witness Statement of Robert Reddy, ¶ 30
85 Claimants’ Memorial, ¶ 215
expropriation risk was ever present. In our view, Claimants should simply be entitled to a refund of the purchase price paid, at most. However, as Claimants have not produced the underlying sales contracts associated with the purchases of each property, we cannot calculate this amount with certainty.

VI. FTI’s Calculations Are Unreliable and Overstate Claimants’ Alleged Losses

93. We understand that Respondent argues that Claimants are not entitled to damages for a variety of legal reasons, including jurisdictional reasons. However, if the Tribunal finds that Claimants are entitled to damages, our review of FTI’s report and valuation of the properties identified at least six errors that render their market value conclusions and severance damages both unreliable and overstated. In the subsections below, we examine the six errors found.

A. FTI and Claimants Did Not Produce Sales Contracts for the Subject Properties Which Would Resolve Conflicting Data About Claimants’ Purchase Prices and Dates

94. Our review of FTI’s report, Claimant’s memorial and witness statements, and the source documents produced found several discrepancies which call into question the prices, dates, and terms under which Claimants purchased several of the subject properties.

95. FTI appears to generally rely on the “Certification of Property” from the Costa Rican National Registry to determine the subject properties’ purchase date and price.\footnote{FTI’s report does not explain how they determined the purchase price and/or purchase date for any of the subject properties or the comparable properties used in their analysis. However, our review of the Addenda to their report (Section 9.4) appears to indicate that a majority of the purchase prices and dates for the subject properties are per the “Certification of Property” documents produced as sub-exhibit “b” to Exhibits C-3 to C-28.} Claimants, however, appear to rely not only on the “Certification of Property,” but also on share transfer agreements\footnote{See, for example, Transfer of shares from Sendaluz, to Costa Rica Investments, S.A. (Claimants’ Appendix B.8)} and their memory\footnote{Mr. Copher states in his witness statement, “I recall that I paid $340,000.” (First Witness Statement of Ronald E. Copher, ¶ 9)} to support purchase prices and dates. As shown in Table 6 below, we identified discrepancies related to 20 properties between the purchase prices and dates reported by FTI, in the “Certification of Property,” and in Claimants’ witness statements or memorial.
96. In 12 instances, the purchase price reported in FTI’s report was different than was reported in the “Certification of Property” or by Claimants. In eight instances, the purchase price reported by FTI was in the incorrect currency. FTI reported that the Cophers and Mr. Berkowitz purchased Lots 39 and V40 (Cophers) as well as B1, B3, B5, B6, B7, and B8 (Berkowitz) for US$ 500,000 each even though the related “Certification of Property” reveals that they purchased the lots for CRC 500,000 (approximately US$ 1,000) each. Adding to the confusion is Mr. Copher who states that he paid US$ 340,000 for Lot V39. FTI reported Lot A40 as

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Table 6 – Purchase Date and Price Discrepancies Between FTI’s Report, Claimants’ Memorial and Witness Statements, and the Supporting Documentation Produced

<table>
<thead>
<tr>
<th>Lot</th>
<th>Purchase Price</th>
<th>Purchase Date</th>
<th>Claimants</th>
<th>Purchase Date</th>
<th>Claimants</th>
</tr>
</thead>
<tbody>
<tr>
<td>V32</td>
<td>$150,000</td>
<td>30-Sep-2003</td>
<td>20-Aug-2003</td>
<td>$150,000</td>
<td>20-Aug-2003</td>
</tr>
<tr>
<td>V33</td>
<td>$150,000</td>
<td>30-Sep-2003</td>
<td>20-Aug-2003</td>
<td>$150,000</td>
<td>20-Aug-2003</td>
</tr>
<tr>
<td>V40</td>
<td>CRC 500,000</td>
<td>27-Sep-2000</td>
<td>25-Sep-2003</td>
<td>$340,000</td>
<td>25-Sep-2003</td>
</tr>
<tr>
<td>V59</td>
<td>$1,100,000</td>
<td>3-Oct-2007</td>
<td>11-May-2007</td>
<td>$1,100,000</td>
<td>11-May-2007</td>
</tr>
<tr>
<td>V61a</td>
<td>$3,100,000</td>
<td>4-Feb-2005</td>
<td>4-Feb-2005</td>
<td>$3,100,000</td>
<td>4-Feb-2005</td>
</tr>
<tr>
<td>V61b</td>
<td>$950,000</td>
<td>4-Feb-2005</td>
<td>4-Feb-2005</td>
<td>$950,000</td>
<td>4-Feb-2005</td>
</tr>
<tr>
<td>A39</td>
<td>$220,000</td>
<td>22-Feb-2005</td>
<td>22-Feb-2005</td>
<td>$220,000</td>
<td>22-Feb-2005</td>
</tr>
<tr>
<td>C71</td>
<td>$230,000</td>
<td>22-Feb-2005</td>
<td>22-Feb-2005</td>
<td>$230,000</td>
<td>22-Feb-2005</td>
</tr>
<tr>
<td>C96</td>
<td>$250,000</td>
<td>22-Feb-2005</td>
<td>22-Feb-2005</td>
<td>$250,000</td>
<td>22-Feb-2005</td>
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<tr>
<td>SPG2</td>
<td>$1,004,563</td>
<td>11-Feb-2007</td>
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<tr>
<td>SPG3</td>
<td>$1,700,000</td>
<td>11-Feb-2007</td>
<td>11-Feb-2007</td>
<td>$1,700,000</td>
<td>11-Feb-2007</td>
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<tr>
<td>B1</td>
<td>$500,000</td>
<td>22-Sep-2003</td>
<td>22-Sep-2003</td>
<td>$500,000</td>
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<tr>
<td>B3</td>
<td>$500,000</td>
<td>22-Sep-2003</td>
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<td>$500,000</td>
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<td>B5</td>
<td>$500,000</td>
<td>24-Sep-2003</td>
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<td>B6</td>
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<tr>
<td>B8</td>
<td>$500,000</td>
<td>24-Sep-2003</td>
<td>21-Sep-2003</td>
<td>$500,000</td>
<td>21-Sep-2003</td>
</tr>
</tbody>
</table>

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89 See FTI Report, Section 9.4; Exhibits C-3–C28 (sub-exhibit “b” only); First Witness Statement of Bob F. Spence, ¶ 8-10; First Witness Statement of Ronald E. Copher, ¶ 9; First Witness Statement of Robert Reddy, ¶ 20-24, 35; Claimants’ Memorial, ¶ 42-45, 47. We also note that Mr. Copher states that he purchased lots V48 and V49 for $500,000, while FTI and the Certifications of Property indicate that these properties were purchased for $275,000 each. It is unclear if Mr. Copher allocated his $500,000 purchase price differently than was allocated by FTI.

90 FTI Report, pp. 51, 71, 73, 75, 77, 81; Exhibits C-9b, C-23b, C-24b, C-25b, C-26b, C-28b.

91 First Witness Statement of Ronald E. Copher, ¶ 9.
being purchased for US$ 110,000\textsuperscript{92} even though the “Certification of Property” showed it was purchased for CRC 24,100,740 (approximately US$ 50,000).\textsuperscript{93} In 3 of the 12 instances, FTI reported the purchase prices of Lots V61a, V61b, and V61c were collectively US$ 3,100,000. However, this price is the price for which the three lots were sold by Spence Co. in 2006 (apparently not the price paid by Spence Co. for the lots).\textsuperscript{94} In the final instance, FTI reports that Spence Co. purchased Lot V59 for US$ 1,100,000 on 3 October 2007.\textsuperscript{95} However, Claimants’ memorial indicated that Spence Co. purchased the lot on 11 May 2007\textsuperscript{96} and some supporting documents indicate was purchased for US$ 515,000.\textsuperscript{97} Based on the discrepancies above, it is unclear how much Claimants actually paid for at least 13 of the 26 properties at issue.

97. In 16 instances, we found discrepancies between the purchase dates reported by FTI, in Claimants’ memorial and witness statements, and in the “Certification of Property.” In four instances, these discrepancies were minor (i.e., differences of approximately a month). The remaining 12 instances were more significant. For example, FTI reports that V39 and V40 were purchased on 27 September 2000 while Mr. Copher states these properties were purchased in September 2003.\textsuperscript{98} FTI reports that Lots V61a, V61b, and V61c were purchased on 6 February 2006. Mr. Reddy, however, reports the lots were purchased on 4 February 2005 while the “Certifications of Property” reports they were purchased on 17 February 2006 (for V61a) and 15 January 2007 (for V61b and V61c). Similarly, FTI reports that SPG1, SPG2, and SPG3 were purchased on 20 December 2006 (SPG 1) and 11 February 2007 (SPG2 and SPG3). Mr. Reddy, however, states the lots were purchased in 2006 and the “Certifications of Property” indicate they were purchased on 2 November 2007. FTI also reported that C71 was purchased on 22 October 2007 even though Claimants’ Memorial states C71 was sold by Spence Co. to a third party on that date.\textsuperscript{99} Based on the discrepancies above, it is unclear when Claimants purchased at least 15 of the 26 properties at issue.

\textsuperscript{92} FTI Report, p. 59
\textsuperscript{93} Exhibit C-16b
\textsuperscript{94} Claimants’ Appendix B.29
\textsuperscript{95} FTI Report, p. 54
\textsuperscript{96} Claimants’ Memorial, ¶ 37
\textsuperscript{97} FTI Report, p. 84
\textsuperscript{98} FTI Report, pp. 50-51; First Witness Statement of Ronald E. Copher, ¶ 9.
\textsuperscript{99} Claimants’ Memorial, ¶ 33
98. These discrepancies make it impossible to identify when Claimants actually invested in Costa Rica and the amounts that were actually invested. The sale and purchase contracts for the subject properties would alleviate the uncertainty surrounding these discrepancies. Moreover, a review of the subject property sales and purchase contracts is necessary in order to adequately apply the Sales Comparison Approach and ensure that appropriate comparable transactions are being reviewed. As FTI states, the first step in the Sales Comparison Approach is to:

“Research the market to find sales and current offerings of properties that are comparable to the subject property; this includes the verification of all relevant sales data.”\(^{100}\)

99. In order to identify transactions that are comparable to the subject property, it is important to identify any factors that would impact the value of the subject property and the comparable sales transactions. As FTI states, there are several factors that can affect the sales price of land.

“Factors that can affect the sale prices of land include the following:
- Buyer expenditures
- Property rights conveyed
- Finance terms
- Conditions of sale
- Market conditions
- Size
- Location
- Physical Features”\(^{101}\)

100. Many of the factors above would only be disclosed or discussed in the underlying sales contracts. The only sale and purchase contracts produced by Claimants are for the sale of V61 for US$ 3.1 million on 6 February 2006 (i.e., a sale by one of Claimants of a property) and the sale of C71 (again, a sale by one of the Claimants).\(^{102}\) No sale and purchase contracts have been provided which relate to Claimants actual purchases or investments into each of the properties. Without the underlying sales contracts for the properties, it is impossible to know how much Claimants invested in the properties and under what terms or conditions.

\(^{100}\) FTI Report, p. 22
\(^{101}\) FTI Report, pp. 22-23
\(^{102}\) Claimants’ Appendix B.22 and B.29
B. FTI Does Not Apply the Sales Comparison Approach Correctly

101. In describing the Sales Comparison Approach, FTI indicates four factors that impact its reliability:

“The reliability of this technique depends on (a) the degree of comparability of the property appraised with each sale, (b) the length of time since the sale, (c) the accuracy of the sales data, and (d) the absence of unusual conditions affecting the sale.”

102. However, the comparable sales transactions selected by FTI violate the factors described above.

103. First, FTI commonly adjusted their comparable sales transactions by as much as 121 percent upward and 70 percent downwards. In our view, this is evidence that the comparable sales transactions do not have a high degree of comparability.

104. Second, none of the comparable sales transactions selected by FTI took place within 12 months of the valuation date used by FTI. Indeed, FTI relies on comparable sales transactions from 2007, 2006 and 2003 to establish the basis for the value of Claimants’ properties. With such a long time elapsed since the comparable sales transactions took place – along with the increased volatility and declining market values – the comparability of the sales transaction relied upon by FTI is questionable.

105. Third, FTI’s sales comparison analysis results in a wide range of values after applying their subjective adjustments. For example, FTI uses sales of lots V52, V59, and V61 to value the subject lots of V30-V33, V32-V39, V40, V46-47, and V59. As can be seen in Figure 2 below, FTI’s subjective adjustments to the comparable transactions result in a wide range of potential values per m² for each of the subject properties.

\[103\] FTI Report, p. 22
106. If FTI had made proper adjustments to these properties, they should have arrived at very similar adjusted prices. Instead, the significant disparity between the resulting adjusted prices inserts significant doubt into the valuation conclusions.

107. For example, in the case of Lot V30, an 806.78 m² parcel purchased on 30 September 2003 (according to FTI), FTI’s Sales Comparison Approach would value the lot to be between US$ 502,624 and US$ 849,539 (a US$ 346,915 difference) depending upon which comparable property is utilized. To resolve these huge disparities, FTI appears to simply take an average of the adjusted comparable prices (approximately US$ 805 per square meter).

108. Additionally, FTI’s Sales Comparison Approach is nonsensical when applied to the large SPG and B lots. FTI selected sales of lots that were within the 75-meter strip of the BNMP (lots they refer to as “beachfront” lots) as comparable to the SPG and B lots. While FTI made some subjective adjustments to the prices of these allegedly comparable lots, FTI applied a single price to every square meter of the large SPG and B lots. Clearly, however, the lots closer to beach would sell at a premium to lots that are further from the beach. Indeed, the SPG and B lots run eastward, and in some cases, all the way to the road leading into Playa Grande (near the estuary).

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104 See Appendix 4, FTI and Claimants’ Lot Purchase Prices, Dates and Administrative Appraisals
105 806.78 m² * US$ 623 = US$ 502,624; 806.78 m² * US$ 1,053 = US$ 849,539.
As we shall discuss in subsection E below, FTI's Comparable Sales Approach artificially creates severance damages because of its flawed implementation.

C. FTI’s Appraisals Are Inconsistent with Market Trends

109. FTI’s application of the Sales Comparison Approach results in market values for Claimants’ properties that are inconsistent with the overall market trends. As discussed in Section III above, real estate prices along the Gold Coast are heavily influenced by North American buyers. As such, the prices would be correlated with the Case-Shiller index. Our evaluation of real estate prices along the Gold Coast reveals that prices rose faster than the Case-Shiller index, resulting in a large real estate bubble.

110. As shown in Figure 1 above, prices in the U.S. housing market, as measured by the Case-Shiller housing Index, rose steadily and peaked in 2006 before declining to 2004-levels by mid-2008. However, our review of FTI’s analysis indicates that they assume market prices on 27 May 2008 were still rising along the Gold Coast.106

111. FTI’s inflated market valuation is the result of a fundamental error in FTI’s analysis. FTI applies an adjustment for market conditions to estimate the price of its comparable sales transactions as of 27 May 2008. The adjustment is based on a “monthly inflation” that FTI derives from observing the increases in sales prices for Playa Ventanas Lots V52, which was sold 3 times between 2004 and 2007 and V59, which was sold twice, in 2003 and 2007. Using the sales of these two lots, FTI assumes that all properties were growing in value at a rate of 2 percent per month during 2003-2004, 3 percent per month during 2005-2006, 1 percent per month in 2007, and 0 percent in 2008.107 In our view, however, the market prices of real estate peaked in 2006 (just as they did in the US) and declined thereafter on a precipitous basis.

112. However, even if the FTI’s “monthly inflation” did actually reflect the growth in property values in Costa Rica (which it does not), FTI’s calculations of Claimants’ market values are still overstated vis-à-vis its index. Indeed, as Figure 3 below reveals, FTI’s calculation of Claimants’ properties market values is significantly higher than would be implied by an application of their “monthly inflation” index to the alleged purchase prices of Claimants’ properties on the alleged purchase dates.

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106 See Appendix 5 for details of this calculation
107 FTI Report, p. 24
113. This analysis demonstrates that FTI committed fundamental errors in their implementation of the Comparable Sales Approach.

D. FTI Makes Unsupported Assumptions Concerning Claimants’ Ability to Obtain Environmental and Building Permits and Approvals

114. FTI assumes that the highest and best use of the properties was for the construction and development of single family residential homes at Playa Ventanas and Playa Grande. FTI also assumes that Claimants would have obtained the permits and environmental approvals to subdivide and develop the SPG and B lots as they envisioned. However, it is unclear whether zoning restrictions would have permitted the development Claimants hoped for. There are three factors which FTI ignores in calculating the But For value of Claimants’ properties.

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108 Note that we have summarized investments by individual Claimants. All purchase prices and valuation amounts are as reported in FTI Report, Section 9.4. We have compared the total adjusted values to the total purchase prices and total valuations concluded by FTI. “Copher” represents lots owned by Mr. and Mrs. Ronald Copher jointly as well as Mr. Copher individually. “Berkowitz” represents lots owned by Messrs. Brett, Trevor, and Aaron Berkowitz. We note that we have assumed that the lots V39 and V40 were purchased by the Cophers in September 2003, not 2000 as FTI reports. See Appendix 5, Claimants’ Purchase Price Adjusted for FTI’s Property Value Inflation Factors

109 FTI Report, pp. 31-34
115. First, we understand that there are density restrictions imposed on new developments. Indeed, these density restrictions were imposed on Mrs. Unglaube’s property just south of the B Lots.

116. Second, the 50 meter area from the mean high-tide to the east contained a dense set of mangroves and trees. We understand that lot owners up to this border line were not allowed to cut down this vegetation. This vegetation was necessary to protect the sea turtles from lights and noise that might hinder their nesting. However, several of the original land owners in the area completely cut down this vegetation as shown in Figure 4 below (these are residences in the Playa Grande area).

**Figure 4 – Lot in Playa Grande Where Mangroves Were Completely Removed**

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110 See Appendix 3, Photographs from Site Visit, 8-9 July 2014
117. Indeed, our visual inspection of some of Claimants’ properties indicates that they cleared a significant amount of this vegetation. In Figure 5 below, we show a photograph of V30, V31, V32, and V33 where a significant amount of vegetation was cut down.

**Figure 5 – Photo of Lots V30, V31, V32, and V33 Where Vegetation Was Cut Back (Looking Toward the Pacific Ocean from the Road)**

118. The amount of vegetation cut back can be appreciated by comparing it to a photo of lots V38, V39, and V40 in Figure 6 below.

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See Appendix 3, Photographs from Site Visit, 8-9 July 2014
Figure 6 – Photo of Lots V38, V39, and V40 Where No Vegetation Was Cut Back (Looking Toward the Pacific Ocean from the Road)\textsuperscript{112}

\textsuperscript{112} See Appendix 3, Photographs from Site Visit, 8-9 July 2014

119. We also noted that vegetation was significantly cleared from lot A39 as shown in Figure 7 below.
120. The restriction of cutting down vegetation west of the 50-meter border line meant that property owners would not have a “beachfront” lot or a “beachfront” view. This is evident from the photo of lot C96 in Figure 8 below. Vegetation was cleared up to the 50-meter border, but there is clearly still no view of the beach.

113 See Appendix 3, Photographs from Site Visit, 8-9 July 2014
121. We also understand that there were height restrictions on building in the Playa Grande area to eliminate lights from being seen by the turtles above the mangroves. It appears to us, however, that many property owners (Claimants included) assumed that they could cut back all of the vegetation to allow for a completely unobstructed view of the beach. Mr. Gremillion appears to have had this misguided view.

“The planned two storey home was designed using natural finishings that would blend with the background in Playa Grande. I intended to build one home, close to the beachfront end of the property. The property has almost 40 meters of beachfront. I liked that the remainder of the lot between the house and the road would be wooded and create privacy for the home, but I considered the

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114 See Appendix 3, Photographs from Site Visit, 8-9 July 2014
beachfront portion of the lot to be most valuable, with its proximity to the beach and beautiful ocean views.”

122. The lack of a view can be seen in the photograph taken from the interior of the B Lots in Figure 9 below. The monument in the foreground of the picture marks 50 meters inland from the mean high-tide.

**Figure 9 – Photo of B-Lots – No Beach View at 50-meter line (Looking Toward the Pacific Ocean)**

123. FTI’s misunderstanding of the Claimants’ ability to clear the mangroves or construct homes with views above the mangroves results in their assuming that these properties would have sold at prices above their true market value. Therefore, FTI’s use of comparable lots in the Playa Grande area would overstate the market value of the subject lots. These lots should not be referred to as “beachfront” lots but rather as “near the beach” lots.

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115 First Witness Statement of Glen R. Gremillion, ¶ 10
116 See Appendix 3, Photographs from Site Visit, 8-9 July 2014
124. Third, we understand that there was an environmental concern with regard to the impact that these developments could have on the groundwater source for the region.

125. In 2003, an environmental impact study was performed by the National Service of Groundwater, Irrigation and Drainage (“SENARA”), which studied the groundwater in the Tamarindo aquifer. This study highlighted that an increase in demand for groundwater had occurred due to the rapid growth of unplanned tourism development. This increased demand had upset the water balance in the area. In particular, the report states:

“On the basis of the water balance developed and the quantification of the extraction performed in the field, an alert must be indicated regarding the exploitation that is being made in the watersheds, and thus take some precautions with the area under study related to its exploitation; since it was determined that the amount of water being removed is similar to the amount of water that is infiltrating.”117

“...in both basins accelerated processes of tourism development are taking place with a strong boom in the construction sector and, given that measures to provide sewerage infrastructure are not being considered, every day there will be a greater possibility of contamination of water sources, both underground and surface. Similarly, with the opening of the bridge over the river Tempisque, the influx of tourism to the beaches of the area, will generate a greater increase in the demand for services that cater to their needs (hotels, cabins, etc..) generating a greater pressure on natural resources mainly, water.”118

126. In essence, there was concern about the increasing density of the population in the area and the amount of people that would be tapping in to these groundwater resources. The study concludes that the rate at which the groundwater was being extracted was equal to the rate at

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117 “Con base en el balance hídrico elaborado y en la cuantificación de la extracción realizada en el campo, se debe indicar una alerta en cuanto a la explotación que se está realizando en las cuencas, y de esta manera tomar algunas precauciones en el área de estudio relativas a la explotación; pues se determinó que la cantidad de agua que se está extrayendo tiene un valor similar al agua que se está infiltrando.” SENARA, Hydrological Study of the Huacas-Tamarindo Aquifer, May 2003, p. 34, (R-046)

118 “En ambas cuencas se están dando procesos acelerados de desarrollo turístico con un auge fuerte en el sector construcción y, dado a que no se están considerando medidas para dotar de infraestructura de alcantarillado, cada día habrá una mayor posibilidad de contaminación de las fuentes hídricas, tanto subterráneas como superficiales. En el mismo sentido, con la apertura del puente sobre el río Tempisque, la afluencia del turismo hacia las playas de la zona, generará un mayor incremento en la demanda de servicios para la atención de sus necesidades (hoteles, cabinas, etc..), dándose una mayor presión sobre los recursos naturales principalmente, los hídricos.” SENARA, Hydrological Study of the Huacas-Tamarindo Aquifer, May 2003, p. 35, (R-046)
which it could be refilled.\textsuperscript{119} Therefore, the groundwater system was reaching a maximum level of exploitation. As a result, the government was advised to restrict drilling in the Tamarindo aquifer and to restrict the execution of projects in the area of the aquifer until further evaluation was completed.\textsuperscript{120} Accordingly, based on the concerns of the government and the strain on groundwater resources on the site of Claimants’ properties, it is uncertain to what extent permitting for new single family homes would be approved.

127. If purchasers of properties within the Playa Grande area were unaware of the limited water supply and the possible impact it would have on development in the area, all of the comparable sales referenced by FTI would overstate the true fair market value of the subject properties.

128. Nevertheless, FTI assumes for purposes of its But-For Value that a 44-unit development would be approved at Spence Co.’s SPG lots.\textsuperscript{121} Given the concern with regard to groundwater resources discussed above, such an approval would have been highly uncertain. However, we note that approval for the 44-unit development is even more uncertain as the development plans were created in September 2007 – several months after SPG1 and SPG2 were declared in the public interest in February 2007.\textsuperscript{122} As Claimants’ development plans were created after the land was declared in the public interest, it is unlikely that a hypothetical buyer or seller would have any reasonable expectation that there could be a 44-unit development on the SPG Lots.

129. Due to the density and building restriction as well as the water limitations to the area, it is clear that there were no guarantees that Claimants would have been able to obtain any of the necessary construction and environmental permits for the developments they envisioned. Thus, FTI’s assumption that all of Claimants’ lots could be developed into single family residential units in an unrestricted manner is highly speculative and has caused FTI to greatly overstate the value of Claimants’ properties.

130. Furthermore, we understand that the uncertainties surrounding the properties’ access to water extended into 2009. Indeed in 2009, SENARA commissioned another study that

\textsuperscript{119} Refill volume is 6,906,384 m\textsuperscript{3}/year while the extraction volume is 6,501,024 m\textsuperscript{3}/year. SENARA, Hydrological Study of the Huacas-Tamarindo Aquifer, May 2003, p. 34 (R-046)

\textsuperscript{120} Letter from SENARA to the Municipality of Santa Cruz, ASUB-517-07, 13 November 2007 (R-070)

\textsuperscript{121} FTI Report, pp. 31-34; Development Plan for SPG Lots, Exhibit C-40

\textsuperscript{122} FTI Report, pp. 62, 64, 66; Development Plan for SPG Lots, Exhibit C-40
concluded that rapid unplanned tourism development put the aquifer underlying the properties at risk of overexploitation.\textsuperscript{123} Indeed, the 2009 study by SENARA states:

“The preliminary hydrogeological evaluations show a state of stress in the aquifer where the groundwater recharge potential is similar to water withdrawals by wells.”\textsuperscript{124}

131. Given the status of the aquifer in 2009, any significant new development, such as Spence Co.’s planned 44-unit development on the SPG properties would put further stress on the aquifer, further casting into doubt Claimants’ ability to develop their properties.

E. The Severance Damages Claimed are Manufactured and Illogical

132. In addition to the market value of the actual property expropriated by Respondent Claimants claim severance damages for the partially expropriated SPG and B lots. According to FTI, the severance damages are designed to compensate Claimants for “damages to a remainder property that are compensable.”\textsuperscript{125} FTI concludes that the fundamental nature of the SPG and B lots have changed since Claimants’ properties are now further from the oceanfront after expropriation:

“The effect of the taking on the remainder places the remainder of the subdivision 125 meters more removed from the water line behind the thick row of oceanfront brush, madero negro. The remainder is damaged by not having the associated prime oceanfront land associated with it. The view of beach, ocean and sunsets will be lost by the 75 m setback and the buffer vegetation that will grow undisturbed. The pro rata share of value of the oceanfront land far outweighs the value of the land now 125 meters back from the water line. Therefore, the remainder value has a lesser per unit value (dollar per square meter) than the before unit value and the remainder suffers a severance damage as a result of the taking.”\textsuperscript{126}

133. To calculate the But-For value of the SPG and B lots, FTI considers three comparable sales transactions for beachfront property: 1) Spence Co.’s sale of V61 in February 2006 (which

\textsuperscript{123} SENARA, “Application of hydrogeochemical and isotopic tools in validating the hydrogeological model of the Huacas-Tamarindo aquifer, in the North Pacific of Costa Rica (IAEA – Project RLA-8-041)”, p. 1 (R-071)
\textsuperscript{124} “Las valoraciones hidrogeológicas preliminares muestran un estado de estrés en el acuífero, donde la recarga potencial al acuífero es similar a las extracciones de agua por medio de pozos.” SENARA, “Application of hydrogeochemical and isotopic tools in validating the hydrogeological model of the Huacas-Tamarindo aquifer, in the North Pacific of Costa Rica (IAEA – Project RLA-8-041)”, p. 1 (R-071)
\textsuperscript{125} FTI Report, p. 11
\textsuperscript{126} FTI Report, p. 31
ultimately was rescinded), 2) the sale of Lot 18 in Playa Flamingo’s North Ridge in May 2006, and 3) Mr. Spence’s purchase of Lots V30-V34 in August 2003. FTI first increases the value of the comparable sales transactions for the passage of time using their adjustment index and then adjusts the comparable sales transaction’s price for three additional subjective factors: 1) location (with properties in Playa Ventanas being more valuable), 2) size (larger properties should be purchased for lower cost per m²), and 3) physical characteristics (i.e., beachfront or interior). FTI then computes the average price per square meter for the three comparable sales. To calculate the But-For value of the entire property, FTI multiplies the square meters of the subject properties by the average price per square meter from their comparable sales. FTI then allocates the But-For value of the entire property to the expropriated area and the un-expropriated area based on the size (i.e., square meters) of expropriate and non-expropriated areas. For example, between 14 percent and 16 percent of the SPG properties and between 38 percent and 41 percent of the B Lots were within the 75-Meter Strip. In making this allocation, FTI is inherently assuming that the value of the land within the 75-Meter Strip and the value of the remaining land are the same on a square meter basis.

134. FTI performs a similar analysis to arrive at the Actual Scenario value of the un-expropriated area, but uses different comparable sales. FTI considers four comparable sales transactions for interior property: 1) the sale of A28 in September 2007, 2) the sale of A29 in September 2007, 3) the sale of A30 in September 2007, and 4) Spence Co.’s sale of C71 in October 2007 (which ultimately reverted back to Spence Co. after the buyer failed to comply with the terms of the sale). Again, FTI adjusts these properties for the passage of time and adjusts for the location, size, and physical characteristics of the properties. They then take an average of the adjusted comparable property values on a square meter basis and multiple this average value to the square meters of the un-expropriated area to calculate the Actual value of that area.

135. The difference between the But-For value and the Actual value is quantified by FTI as severance damages.

127 FTI Report, pp. 62-82
128 FTI Report, pp. 62-82
136. While we agree with the concept of severance damages as described by FTI, we do not agree with FTI that Claimants’ have actually suffered any severance damages. Moreover FTI’s calculation of severance damages is seriously flawed.

137. FTI reasoning for severance damages is illogical for two reasons.

138. First, FTI appears to believe that if the 75-Meter Strip would have been allowed to be developed, then there would have been “view[s] of [the] beach, ocean and sunsets”\textsuperscript{129} from the interior lots. This is not correct. As explained previously, the building restrictions in the area and the density requirements would not have even allowed for development tall enough within the 75-Meter Strip to have “view[s] of [the] beach, ocean and sunsets.”

139. This was demonstrated in Figure 8 above and reproduced in Figure 10 below, which is a photograph of Lot C96’s view toward the ocean. As can be seen, the existing 50-meter setback (or “Inalienable Zone”), between the beach and the property line throughout Playa Grande and Playa Ventanas already contains tall and thick vegetation that would obscure a property owners views of the ocean and beach.

\textsuperscript{129} FTI Report, p. 31
140. To further demonstrate this point, we have included as Figure 11 below a photograph from the beach at Playa Grande looking back toward Lot C96. As can be seen below, the vegetation in the Inalienable Zone is extremely tall and thick (especially when compared to the public beach access clearing).

130 See Appendix 3, Photographs from Site Visit, 8-9 July 2014
131 See Appendix 3, Photographs from Site Visit, 8-9 July 2014

141. In Figure 12 below, we include a similar photograph of the beachfront looking back toward the B Lots, demonstrating the thick vegetation within the 50-meter Inalienable Zone.
142. Thus, the portion of the SPG and B lots outside of the 75-Meter Strip are not negatively impacted in anyway. In fact, it is more logical to conclude that the portion of the SPG and B lots adjacent to the 75-Meter Strip are now more valuable that before as they are now the closest lots to the beach.

143. Second, even if the portion of the SPG and B lots immediately adjacent to the 75-Meter Strip were negatively affected by the expropriation (which they were not), the portion of the SPG and B lots that is progressively to the east would not suffer the same negative impact as the portions immediately adjacent to the 75-Meter Strip. However, that is what FTI’s calculations suggest. It is entirely unreasonable in our view to assume, for example, that the portion of the

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132 See Appendix 3, Photographs from Site Visit, 8-9 July 2014
SPG properties adjacent to the road into Playa Grande would be equally affected by severance as those portions of the SPG properties immediately adjacent to the 75-Meter Strip.

144. Thus, there is no logical basis for severance damages claim. But even if there were, FTI’s calculation is seriously flawed. In fact, FTI’s methodology artificially creates severance damages. As previously explained, FTI used the sales price of comparable properties within the 75-Meter Strip (what they call “beachfront” properties) to calculate the But-For value of the entire SPG and B lots. However, FTI then used the sales price of comparable properties outside of the 75-Meter Strip (i.e., “interior” lots) to calculate the Actual value of the entire SPG and B lots. The obvious flaw in this approach is that the But-For value of the entire SPG and B lots is biased higher and the Actual value of the entire SPG and B lots is biased lower. In essence, FTI valued the unexpropriated area of the SPG and B lots (i.e., the remaining “interior” portion of the lots) in the But-For Scenario using “beachfront” properties and valued the same portion of the lot using “interior” lots in the Actual Scenario. Had FTI properly distinguished between the value of properties within the 75-Meter Strip (the “beachfront” portion) and the value of properties outside of the 75-Meter Strip (the “interior” portion), the calculation of severance damages would have been (as it should be) ZERO.

F. FTI Does Not Deduct the Proceeds Received by Claimants from Costa Rica

145. In their calculation of damages FTI does not deduct the amounts already received by Claimants from Costa Rica. However, FTI agrees that these proceeds should be deducted from its damages conclusions.

“The analysis and conclusions contained in this report assumes that the subject properties not already taken were expropriated by the Respondent on the date of value. For instances where the Claimants’ property has been expropriated and some compensation has been paid to Claimants, those proceeds should be deducted from the conclusions contained in this report.”

146. Upon review of the available documents, we found that Respondent has paid Claimants compensation for nine lots.

147. First, Respondent paid Spence Co. a total of CRC 132,107,760 on 14 December 2011 and 24,100,740 on 25 September 2012 for Lot A40. This amount was the compensation for the

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133 FTI Report, p. 8
134 Exhibit C-16i
value of the lot which was set and ordered paid by the Tax Civil and Administrative Court (we note that interest has not been paid).  

148. Second, Respondent paid a total of CRC 42,625,961 on 24 December 2012, for Lot SPG2. We understand that this was a partial payment toward the total due of CRC 697,625,900, set and ordered paid by the Tax Civil and Administrative Court of Appeals. Counsel has informed us that the full amount of the award was collected by Spence Co. in July 2014.

149. Third, we understand that Respondent has set aside a total of CRC 120,417,880 as compensation for lot B3 as ordered by the Tax Civil and Administrative Court on 7 February 2013.

150. Fourth, we understand that Respondent has set aside a total of CRC 326,078,368.35 as compensation for lot B8 as ordered by the Tax Civil and Administrative Court on 29 July 2011.

151. Fifth, we understand that Respondent has made a total of CRC 125,451,449 available to Claimants since lots B1, B5, B6, and B7 were dispossessed on 13 March 2008 and since lot SPG1 was dispossessed on 9 December 2008.

152. Thus, Claimants’ claims should be reduced by the amount of compensation already received, CRC 853,834,400. Moreover, since CRC 571,947,697.35 has already been set aside (i.e., placed in escrow) by Respondent for Claimants, we note that any award should also be reduced by the amount set aside.

VII. FTI Ignores Other Indicators of Value

153. In developing their estimates of the fair market value of Claimants’ properties at 27 March 2008, FTI solely relied upon the Comparable Sales Approach. In doing so, FTI ignored other potentially relevant indicators of value for Claimants’ properties. In particular, Respondent prepared several administrative appraisals for Claimants’ wholly and partially expropriated properties in connection with their being declared in the public interest in 2005 (Playa Grande

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135 First Witness Statement of Robert Reddy ¶ 41; Exhibit C-16h
136 First Witness Statement of Robert Reddy ¶ 43, footnote 48
137 First Witness Statement of Robert Reddy ¶ 43; Exhibit C-21h
138 Exhibit C-24g1, p. 19
139 Exhibit C-28h, p. 26
140 SPG1: Exhibit C-20d, f1; B1: Exhibit C-23d, f1; B5: Exhibit C-25d, f1; B6: Exhibit C-26d, f1; B7: Exhibit C-27d, f1
Lots A40, B1, B3, B5-B8) and 2007 (Playa Ventanas Lots V30-33, 38-40, 46-47, 59, 61a-c and Playa Grande Lots SPG1-2). FTI offers no commentary on the valuations proposed by Respondent.

154. We understand that once a notice of public interest is published, the next step is for Costa Rica’s Tax Authority to perform an administrative appraisal on the property. The landholder would then be notified once the assessor has determined a value, and they can either accept or oppose the administrative appraisal value. This is followed by an expropriation decree which starts the judicial process consisting of a first and second judicial appraisal by independent experts, a judgment of first instance issued by the State, and a final appeal by Claimant. We understand that only one of the wholly expropriated lots (A40) and 8 out of the 9 partially expropriated lots reached the first judicial appraisal phase. Only four lots (A40, SPG2, B3, and B8) reached the final stage.

155. We have been provided with the supporting documentation surrounding the administrative appraisals for the properties. Our review of the appraisal reports indicates that the appraiser considered comparable sales transactions and property listings to arrive at the value for the subject property. Furthermore, the administrative appraisals considered the subject properties’ access to water and electricity, property views, etc. The administrative appraisals also considered the ability to use the property (i.e., the suitability of the property’s soil for construction, the existence of permanent vegetation, etc.) when selecting comparable transactions.

156. The administrative appraisal considers several factors when assigning a value for a property. These factors include, for example:

“1. Characteristics of the area such as: the Existence of the National Marine Park Las Baulas and the Wildlife Refuge Tamarindo, tourism development and availability of utilities, private and urban, access roads and closeness to population centers.

2. Characteristics proper to the real estate property and of the land plot: borders with the National Marine Park Las Baulas, middle position, front sides towards a gravel public road and the Maritime

141 Claimants’ Memorial ¶ 93
142 See for example supporting documents for Berkowitz Lot B8, Exhibit C-28c-h
Terrestrial Zone, flat surface, excellent panoramic view of the ocean, current and potential use, access to public services.


4. Research of values in the area: 4.1) Selling bid of lands in the zone and region; 4.2) Sales carried out; 4.3) Inquiries with experts and knowledgeable people of the area; 4.4) Appraisals performed in the area by the Area of Valuations of the Tax Administration of Puntarenas.

5. Reasons for the appraisal.

6. Criterion of the undersigned.¹⁴³

157. Similar to the Comparable Sales Approach conducted by FTI, we understand that the administrative appraisal process considered the price of properties sold in the area as well as property listings. Ultimately, the administrative appraisals select comparable properties and apply small subjective adjustments in order to arrive at a value per m² of the subject property.¹⁴⁴ Neither Claimants nor FTI considered these contemporaneous appraisals that were prepared by Respondent in connection with the expropriation process. Moreover, neither Claimants nor FTI appear to have considered any of the appraisals submitted by Claimant in appeal of Respondent’s administrative appraisals.

158. Administrative appraisals were prepared in September 2008 for nine of the 13 lots in Playa Ventanas (except for Lots V59 and V61a-c).¹⁴⁵ As shown in Table 7 below, the administrative appraisals calculated land prices (on a m² basis) between 0.59 times and 2.13 times the price (reported by FTI) that Claimants allegedly paid for the properties (the actual prices paid for the properties is not evident however given the documentation submitted by Claimants). On

¹⁴³ See for example Exhibit C-3d, p. 7. (Lot V30 Administrative Appraisal). After reviewing the other available Administrative Appraisals, it appears that they all follow the same general methodology in determining the value of the land.

¹⁴⁴ Administrative Appraisal Manual, 15 November 1996 (R-021). See also, for example, Ministry of Finance, Director General of Tax Administration, Supporting Document for Administrative Appraisal of FINCA FR-5-130540-000, 9 July 2014 (R-076) or Ministry of Finance, Director General of Tax Administration, “Investigation and Determination of Values,” File No. 04-2008 (R-074)

¹⁴⁵ Exhibits C-3d, C-4d, C-5d, C-6d, C-7d, C-8d, C-9d, C-10d, C-11d
average, the administrative appraisals for the Playa Ventanas Lots were 1.34 times the alleged prices paid by Claimants.

Table 7 – Summary of Administrative Appraisals in Playa Ventanas

<table>
<thead>
<tr>
<th>Claimant</th>
<th>Lot</th>
<th>Land Area (m²)</th>
<th>Initial Purchase Date</th>
<th>Administrative Appraisal Date</th>
<th>Price per Adm. Appraisal / Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Spence</td>
<td>V30</td>
<td>806.78</td>
<td>30-Sep-2003</td>
<td>18-Sep-2008</td>
<td>1.47x</td>
</tr>
<tr>
<td>B. Spence</td>
<td>V31</td>
<td>839.53</td>
<td>30-Sep-2003</td>
<td>18-Sep-2008</td>
<td>1.51x</td>
</tr>
<tr>
<td>B. Spence</td>
<td>V32</td>
<td>854.46</td>
<td>30-Sep-2003</td>
<td>18-Sep-2008</td>
<td>2.07x</td>
</tr>
<tr>
<td>B. Spence</td>
<td>V33</td>
<td>913.71</td>
<td>30-Sep-2003</td>
<td>18-Sep-2008</td>
<td>2.13x</td>
</tr>
<tr>
<td>R. Copher</td>
<td>V38</td>
<td>1,076.93</td>
<td>19-Nov-2004</td>
<td>17-Sep-2008</td>
<td>1.02x</td>
</tr>
<tr>
<td>B. &amp; R. Copher</td>
<td>V39</td>
<td>1,011.80</td>
<td>27-Sep-2003</td>
<td>17-Sep-2008</td>
<td>0.70x</td>
</tr>
<tr>
<td>B. &amp; R. Copher</td>
<td>V40</td>
<td>856.87</td>
<td>27-Sep-2003</td>
<td>18-Sep-2008</td>
<td>0.59x</td>
</tr>
<tr>
<td>R. Copher &amp; J. Holsten</td>
<td>V46</td>
<td>935.05</td>
<td>8-Feb-2006</td>
<td>17-Sep-2008</td>
<td>1.19x</td>
</tr>
<tr>
<td>R. Copher &amp; J. Holsten</td>
<td>V47</td>
<td>1,154.49</td>
<td>8-Feb-2006</td>
<td>17-Sep-2008</td>
<td>1.38x</td>
</tr>
</tbody>
</table>

Average for Expropriated Lots in Playa Ventanas: 1.34x

159. As discussed in Section III of this report, land prices in these locations tend to be correlated with those of the U.S. housing market. As the lots appraised were purchased generally in 2003 and 2004 (with the exception of V46 and V47), we would expect to see modest price increases from the purchase date through September 2008 (the date of the appraisal) as U.S. prices by mid-2008 had fallen to mid-2004 levels. Indeed, Lot V38, purchased by Mr. Copher in November 2004, was appraised by Respondent in September 2008 at 1.02 times its purchase price.

160. Administrative appraisals were also performed for nine of the 13 lots located in Playa Grande (all except lots A39, C71, C96, and SPG3). Administrative appraisals were prepared in September 2006 for lot A40 and the B lots and in June 2007 for the SPG1 and SPG2 lots. As shown in Table 8 below, the land prices (on a m² basis) calculated by the September 2006 administrative appraisals were 0.24 times the alleged price Claimants’ paid for the lots (as reported by FTI) while the June 2007 administrative appraisals were 0.53 times the alleged price Claimants’ paid (as reported by FTI) for the SPG lots.

146 See Navigant Appendix 4 – Summary of Claimants’ Lots Valuation Data. We have included in our average Lots V39 and V40, jointly owned by Mr. & Mrs. Ronald Copher. However, in our view, it is unclear how much the Cophers paid for these properties as the values assumed by FTI (US$ 500,000 per lot) conflicts with the supporting evidence produced by Claimants (CRC 500,000 per lot) and by Mr. Copher’s testimony (US$ 340,000 for both lots). We have changed the purchase date of Lots V39 and V40 to 27 September 2003 as the date reported by FTI (27 September 2000) is illogical since Mr. Copher states he purchased the property in September 2003 (First Witness Statement of Ronald E. Copher, ¶ 9). Amounts have been converted to US$ using the prevailing exchange rate as of the date of the administrative appraisal (Central Bank of Costa Rica, Colones-USD Exchange Rates (R-072)).

147 Exhibits C-16d, C-20d, C-21d, C-23d, C-24d, C-25d, C-26d, C-27d, C-28d
161. Although the administrative appraisals appear much lower for the partially expropriated lots in Playa Grande on their face, in our view, Respondent’s appraisals appear reasonable.

162. As regards the B lots, we understand that zoning ordinances allowed for the construction of only one single family residence on each lot. The partial expropriation of these lots left Claimants with smaller lots, but lots upon which Claimants could still construct a similar size single family home. Although FTI allege that the zoning regulations prohibit the construction of a single family home on parcels under 5,000 m², neither Claimants nor FTI has submitted evidence that indicates that they were restricted from building homes on these parcels. Moreover, as the SPG lots were expected to be subdivided into lots of under 1,800 m² and while Palm Beach Estates (the development south of the B lots) was developed with lots of less than 5,000 m², it is unclear why such a restriction would exist on the B lots. Thus, the portion of the property taken did not materially impact the highest and best use of entirety of the B lots. Indeed, the supporting documents to the administrative appraisals indicate that the use of the expropriated portion of the B lots was limited to permanent or semi-permanent vegetation.

163. As regards the SPG lots, these properties were purchased at the height of the market in either 2006 or 2007 (we note again that Claimants and FTI have produced conflicting information with regard to the purchase price and purchase date of the properties). If it is assumed that Claimants could have developed the SPG lots into a 44-unit development (which it

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**Table 8 – Summary of Administrative Appraisals in Playa Grande**

<table>
<thead>
<tr>
<th>Claimant Lot</th>
<th>Expropriated Area (m²)</th>
<th>Expropriation Type</th>
<th>Initial Purchase Date</th>
<th>US$/m²</th>
<th>Administrative Appraisal Date</th>
<th>US$/m²</th>
<th>Price per Adm. Appraisal / Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spence Co. A40</td>
<td>892.62</td>
<td>Whole</td>
<td>1-Sep-2005</td>
<td>$123.23</td>
<td>8-Sep-2006</td>
<td>$51.91</td>
<td>0.42x</td>
</tr>
<tr>
<td>B. Berkowitz B3</td>
<td>2,736.77</td>
<td>Partial</td>
<td>22-Sep-2003</td>
<td>$70.25</td>
<td>22-Sep-2006</td>
<td>$14.00</td>
<td>0.20x</td>
</tr>
<tr>
<td>B. Berkowitz B5</td>
<td>2,878.98</td>
<td>Partial</td>
<td>24-Sep-2003</td>
<td>$68.56</td>
<td>22-Sep-2006</td>
<td>$13.81</td>
<td>0.20x</td>
</tr>
<tr>
<td>B. Berkowitz B6</td>
<td>2,773.95</td>
<td>Partial</td>
<td>24-Sep-2003</td>
<td>$68.34</td>
<td>22-Sep-2006</td>
<td>$13.81</td>
<td>0.20x</td>
</tr>
<tr>
<td>G. Gremillion B7</td>
<td>3,012.20</td>
<td>Partial</td>
<td>21-Apr-2004</td>
<td>$57.70</td>
<td>22-Sep-2006</td>
<td>$12.88</td>
<td>0.22x</td>
</tr>
<tr>
<td>T. &amp; A. Berkowitz B1</td>
<td>2,838.41</td>
<td>Partial</td>
<td>22-Sep-2003</td>
<td>$67.95</td>
<td>22-Sep-2006</td>
<td>$13.81</td>
<td>0.20x</td>
</tr>
<tr>
<td>T. &amp; A. Berkowitz B8</td>
<td>2,830.91</td>
<td>Partial</td>
<td>24-Sep-2003</td>
<td>$67.16</td>
<td>22-Sep-2006</td>
<td>$13.81</td>
<td>0.21x</td>
</tr>
<tr>
<td>Spence Co. SPG1</td>
<td>2,642.81</td>
<td>Partial</td>
<td>20-Dec-2006</td>
<td>$41.39</td>
<td>22-Jun-2007</td>
<td>$18.05</td>
<td>0.44x</td>
</tr>
<tr>
<td>Spence Co. SPG2</td>
<td>3,955.86</td>
<td>Partial</td>
<td>11-Feb-2007</td>
<td>$28.65</td>
<td>21-Jun-2007</td>
<td>$17.67</td>
<td>0.62x</td>
</tr>
</tbody>
</table>

Average for A and B Lots in Playa Grande: 0.24x

Average for SPG Lots in Playa Grande: 0.53x

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148 See Appendix 4 – Summary of Claimants’ Lots Valuation Data.
149 FTI Report, p. 25
150 See, for example, Ministry of Finance, Director General of Tax Administration, Supporting Document for Administrative Appraisal of FINCA FR-5-130540-000, 9 July 2014 (R-076)
cannot), the value of the expropriated area in 2007 should still be lower than the purchase price for the same property in 2006.

164. We note that in all cases, Claimants rejected Respondent’s initial offer of compensation. Claimants instead challenged and appealed the administrative appraisals. However, Claimants have not relied on any of the contemporaneous appraisal reports that were prepared in connection with those proceedings. Instead, Claimants produced letters from real estate agents that identified list prices for allegedly similar properties. We do not view this as evidence of value as sellers at this time commonly refused to reduce their prices to reflect actual market conditions.

VIII. Alternative Valuation Approach

165. In our view, the proper approach to determine the compensation owed to Claimants is a refund of their purchase price. Claimants were aware (or should have been aware) of the existence of the BNMP. At the time that Claimants purchased the properties, there was a very distinct possibility that the properties that they were purchasing formed part of the BNMP. Accordingly, Claimants’ purchases were speculative (and likely discounted). Claimants should not now get the benefit of a purchase price that was discounted due to the risk of expropriation and the benefit of a valuation of the properties assuming no expropriation risk would have existed. In essence, Claimants should not profit from the expropriation risk.

166. Based on the information submitted by Claimants and FTI, we are unable to ascertain the actual amounts invested by Claimants in the properties. Due to the myriad of discrepancies in purchase prices and purchase dates presented by Claimants and FTI, it is unclear to us as to how much Claimants actually paid to purchase the properties. Without the underlying sale and purchase contracts that evidence the transfer of the properties to Claimants for a specific amount of compensation on a specific date, this calculation cannot be done with any accuracy or necessary confidence. However, if Claimants were to provide adequate documentation in support of the prices paid for the properties, an appropriate alternative damages award would be to award Claimants their purchase prices. As we will discuss in Section IX below, Claimants do not claim interest until after DR-CAFTA came into effect in Costa Rica on 1 January 2009.

151 See, for example, Letter from J. Demryn (Exhibit C-49); Letter from Penelope Williams Lent (FTI Exhibit 10); Letter from Bob Davey (FTI Exhibit 7); Letter from Penny Wheeeler (FTI Exhibit 5).

152 John McPhaul, “Costa Rica vacation homes hit by crisis,” Reuters, 1 August 2008 (R-063)
Thus if the Tribunal were to award Claimants their purchase price, interest should only be accrued after 1 January 2009.

167. An alternative valuation would be to award Claimants the administrative appraisal values prepared by Respondent. As discussed in Section VII above, Respondent’s administrative appraisals appear reasonable to us as they resulted in modest returns on Claimants’ wholly expropriate properties (which appear to have largely been purchased in 2003 and 2004) and appeared to compensate Claimants for the 75-Meter Strip taken from the SPG and B lots. In some cases, the administrative appraisals could be overstated in terms of fair market value, particularly when factors affecting the value of the properties are taken into account such as the limited water supply available to the area due to the overexploitation of the aquifer, the density restrictions on development, building height restrictions, and the lack of any view of the ocean due to mangroves within the 50-meter Inalienable Zone from the mean high-tide that cannot be cut down. Accordingly, depending upon the damages date decided by the Tribunal, additional adjustments may need to be made to the administrative appraisal to consider the factors discussed above. In our view, it would be appropriate to award Claimants the amount of the administrative appraisals (with any necessary adjustments).153 Again, since Claimants do not claim interest until after DR-CAFTA came into effect in Costa Rica on 1 January 2009, if the Tribunal were to award Claimants the administrative appraisal values, interest should only be accrued after 1 January 2009.

IX. Interest on Amounts Owed

168. Even though Claimants made their investments in US$ and FTI calculates the value of the properties and damages in US$, Claimants claim damages in Costa Rican Colones (“CRC”). Claimants claim damages in Colones as they claim it is the currency in which they managed their investments and because all the direct owners are companies established under Costa Rican law.154 Claimants claim pre-award interest on the alleged value of the expropriated properties from 1 January 2009, the date upon which DR-CAFTA went into effect, until 1 November 2015, the date upon which Claimants estimate an award will be issued by the Tribunal. FTI did not prepare any interest calculation. Instead, Claimants’ counsel applies the legal interest rate as published by the Costa Rican Central Bank in accordance with Article 1163 of the Civil Code to

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153 We note, however, that Claimants previously rejected the compensation in the administrative appraisals.
154 Claimants’ Memorial, ¶ 327
the CRC 18,780,543,990 in damages claimed. This rate is the six-month bank deposit rate in Colones. Claimants’ counsel applies this rate on a semi-annual, compounding basis, resulting in CRC 12,147,713,918 in pre-award interest up to 1 November 2015.\(^{155}\)

169. We do not disagree with Claimants’ request to be paid in Colones and the application of the six-month bank deposit rate as an appropriate interest rate. However, the application of this rate on a semi-annual, compounding basis appears to be in error. We have been referred to a website that provides a proper calculation of interest under Article 1163 of the Civil Code. Using the property values and severance damages calculated by Claimants, the website calculated simple interest of CRC 8,372,001,190.56 through 31 December 2014 (we note the website does not calculate interest after 31 December 2014).\(^{156}\) When an additional 10 months of simple interest (CRC 1,072,056,052.76) is added using the 2014 interest rate, total interest is CRC 9,444,057,243.32, approximately 22 percent less than Claimants’ calculation.\(^{157}\) The difference appears to the result of the application of interest on a simple basis (which is the common form of calculating interest using legal or statutory rates in a wide variety of jurisdictions) rather than a compound basis. Therefore, if the Costa Rican legal interest rate is to be applied, simple interest should be used.

___________________________
Brent C. Kaczmarek, CFA
15 July 2014

\(^{155}\) Claimants’ Memorial, ¶ 332


\(^{157}\) CRC 18,780,543,990 * 6.85% * 10/12 = CRC 1,072,056,052.76
    CRC 1,072,056,052.76 + CRC 8,372,001,190.56 = CRC 9,444,057,243.32
Brent C. Kaczmarek, CFA

Mr. Kaczmarek is a Managing Director in the Dispute & Investigative Division and leads the firm’s International Arbitration group. Mr. Kaczmarek serves as an expert and consultant on issues involving business and investment valuation, finance, accounting, and economics in a wide range of industries such as financial services, manufacturing, energy, utilities, telecoms, mining, healthcare, luxury goods, and business services.

Mr. Kaczmarek has been appointed as a financial and valuation expert for private companies as well as sovereign states in more than 100 disputes including more than 100 international arbitrations, and more than 80 investor-state arbitrations. He has been appointed as an expert in more than 20 cases where damages claimed exceeded US$ 1 billion (including 7 matters where damages claimed have exceeded US$ 10 billion).

The disputes Mr. Kaczmarek has helped clients and arbitral tribunals resolve have been in North, Central and South America; Western, Central, and Eastern Europe; the Commonwealth of Independent States; the Russian Federation; Southeast Asia; the Caribbean; Africa; and the Middle East. Mr. Kaczmarek received the internationally-recognized designation of Chartered Financial Analyst from the CFA Institute in 1998.

Expert Engagements in International Arbitration or Foreign Litigation

Mr. Kaczmarek has served as financial expert and/or consultant in the following international arbitrations and foreign litigations:

- **Spence International Investments, LLC et al v Republic of Costa Rica; (Multilateral Investment Treaty Dispute, ICSID);** Prepared an expert report (July 2014) regarding the fair market value of real property along the Gold Coast of Costa Rica that was reserved for a national park (Engaged by Respondent, expert and consultant).
- **Spentex B.V v Republic of Uzbekistan; (Bilateral Investment
Appendix 1

Brent C. Kaczmarek, CFA

_Treaty Dispute, ICSID_; Prepared an expert report (July 2014) regarding the losses and fair market value of textile mills in Uzbekistan that are alleged to have been forced into insolvency by government actions (Engaged by Claimant, expert and consultant).

- **Eulen, S.A. v Jose C. Lorenzo** (*Share Purchase Agreement Dispute, ICC*); Prepared an expert report (June 2014) regarding the alleged damages suffered by Claimant due to alleged withholding of material information (Engaged by Respondent).

- **Autoridad Portuaria De Manta v Terminales Internacionales De Ecuador, S.A. (In Liquidation) Iihc, Ltd (Now Hutchison Port Investments, Ltd.), and Hutchison Port Holdings, Ltd.,** (*Contract Dispute, Quito Chamber of Commerce*); Prepared an expert report (June 2014) regarding the alleged damages suffered by Claimant due to the termination of concession contract to operate the Manta port in Ecuador (Engaged by Respondent).

- **Vladislav Kim et. al v Republic of Uzbekistan**; (*Bilateral Investment Treaty Dispute, ICSID*); Prepared an expert report (April 2014) regarding the fair market value of investments held by Kazakhstan nationals in cement plants in Uzbekistan that were impacted by government actions (Engaged by Claimant, expert and consultant).

- **Mercer International Inc. v. Government of Canada**; (*Bilateral Investment Treaty Dispute, ICSID*); Prepared an expert report (March 2014) measuring the impact of the differential treatment received by a pulp mill to sell its self-generated green energy and buy regulated utility power on the fair market value of the mill (Engaged by Claimant, expert and consultant).


- **Fábrica de Vidrios Los Andes, C.A. and Owens-Illinois de Venezuela, C.A. v Bolivarian Republic of Venezuela**; (*Bilateral Investment Treaty Dispute*): Prepared two expert reports (July 2013, March 2014) valuing Claimant’s economic interest in two glass manufacturing plants that were expropriated by official decree (Engaged by claimant, expert and consultant).


- **Karkey Karadeniz Elektrik Uretim A.S. v The Islamic Republic Of Pakistan: (Bilateral Investment Treaty Dispute, ICSID)**: Prepared an expert report (January 2014) value of two powerships and other losses suffered by claimant as a result of the cancellation of a power purchase agreement and the detention of the ships in the Port of Karachi. (Engaged by respondent, expert and consultant).

- **Pac Rim Cayman LLC v Republic of El Salvador: (Foreign Investment Law Dispute)**: Prepared two expert reports (January 2014, July 2014) measuring the fair market value of a gold mining project (Engaged by respondent, expert and consultant).

- **Novera AD, Novera Properties B.V., and Novera Properties N.V. v Republic of Bulgaria: (Bilateral Investment Treaty Dispute, ICSID)**: Prepared an expert report (November 2013) assessing the losses and value of a sanitation services concessions that were terminated (Engaged by respondent, expert and consultant).

- **Baggerwerken Decloedt En Zoon NV v The Republic of the Philippines: (Bilateral Investment Treaty Dispute, ICSID)**: Prepared an expert report (August 2013) assessing the banking, financial, and operational data associated with a dredging project and an opinion on the proper manner in which damages ought to be quantified for a second project that ultimately did not move forward. Oral evidence given in March 2014 (Engaged by respondent, expert and consultant).

- **Agility For Public Warehousing Company K.S.C. v The Islamic Republic of Pakistan: (Bilateral Investment Treaty Dispute)**: Prepared an expert report (August 2013) calculating the fair market value of a customs processing enterprise that was terminated by respondent. (Engaged by claimant, expert and consultant).

- **Tidewater Investment SRL and Tidewater Caribe S.A. v Bolivarian Republic of Venezuela: (Bilateral Investment Treaty Dispute, ICSID)**: Prepared two expert reports (July 2013, January 2014) determining the fair market value of an offshore supply vessel company that was expropriated by official decree. Oral evidence provided in June 2014 (Engaged by claimant, expert and consultant).

- **Progas Energy Limited, Progas Holdings Limited, Sheffield Engineering Company Limited v The Islamic Republic of Pakistan: (Bilateral Investment Treaty Dispute, UNCITRAL)**: Prepared two expert reports (July 2013, March 2014) determining the fair
market value of bulk liquids import terminal that failed due to energy price regulation. (Engaged by claimant, expert and consultant).

- **Orascom Telecom Holdings S.A.E. v People’s Democratic Republic of Algeria: (Bilateral Investment Treaty Dispute, ICSID)**: Prepared two expert reports (June 2013, March 2014) regarding the fair market value of a mobile telecom operator and the alleged damages it suffered from alleged treaty violations (Engaged by respondent, expert and consultant).

- **Republic of Philippines v PIATCO: (Court of Appeals, Third Division Manila, Philippines)**: Prepared an affidavit (August 2013) on behalf of the Office of the Solicitor General of the Philippines regarding the proper approach to determine the replacement cost of an airport terminal (Engaged by Plaintiff, expert and consultant).

- **Fraport AG Frankfurt Airport Services Worldwide v Republic of the Philippines: (Bilateral Investment Treaty Dispute, ICSID)**: Prepared two expert reports (June 2013, August 2013) regarding compensation issues and potential money laundering activities. Oral evidence given in September 2013 (Engaged by respondent, expert and consultant).

- **Adel a Hamadi al Tamimi v Sultanate of Oman: (Free Trade Agreement Dispute, ICSID)**: Prepared two expert reports (June 2013, March 2014) regarding the fair market value of a limestone quarry allegedly affected by violations of a free trade agreement. (Engaged by respondent, expert and consultant).

- **Ali Allawi v The Islamic Republic of Pakistan: (Bilateral Investment Treaty Dispute, UNCITRAL)**: Prepared two expert report (March 2013 and March 2014) determining the fair market value of bulk liquids import terminal that failed due to energy price regulation. (Engaged by claimant, expert and consultant).

- **Rusoro Mining Limited v Bolivarian Republic of Venezuela: (Bilateral Investment Treaty Dispute, ICSID AF)**: Prepared two expert reports (March 2013 and June 2014) to determine the fair market value of various operating and exploration gold mining properties in the Bolivar state of Venezuela and other losses suffered by claimant as a consequence of alleged breaches of a BIT and the nationalization of the gold mining sector. (Engaged by claimant, expert and consultant).

- **HQ AB v Mats Qviberg, Stefan Dahlbo, Curt Lönnström, Thomas Erséus, Mikael König, Johan Piehl, Carolina Dybeck Happe, Anne-Marie Pålsson, Pernilla Ström, Johan Dyrefors, KPMG AB, and Investment AB Öresund: (Breach of Fiduciary Duty, Stockholm District Court)**: Prepared two expert reports (February 2013 and June 2014) regarding improper valuations prepared by a bank under IAS 39 and IFRS 7 in its derivative trading portfolio (Engaged by claimant, expert and consultant).
• **Vigotop Limited v Republic of Hungary:** *(Bilateral Investment Treaty Dispute, ICSID)*; Prepared two expert reports (January 2013, September 2013) regarding the fair market value of planned mega-casino and leisure resort outside of Budapest, Hungary that was allegedly cancelled in violation of a BIT. Oral evidence given in November 2013 (Engaged by respondent, expert and consultant).

• **Renee Rose Levy de Levi and Grencitel S.A. v Republic of Peru:** *(Bilateral Investment Treaty Dispute, ICSID)*; Prepared two expert reports (December 2012, June 2013) regarding the impact of the designation of certain lands as being historical on the fair market value of an early stage development project. Oral evidence given in November 2013 (Engaged by Respondent, expert and consultant).

• **First National Petroleum Corp. v OAO Tyumenneftegaz:** *(Breach of Contract Dispute, SCC)*; Prepared two expert reports (December 2012 and April 2013) calculating the historical cash flows and current fair market value of various oil fields in Russia subject to a joint venture agreement. Oral evidence given in July 2013 (Engaged by Claimant, expert and consultant).

• **Gambrinus, Corp. v Bolivarian Republic of Venezuela:** *(Bilateral Investment Treaty Dispute, ICSID)*; Prepared two expert reports (November 2012, August 2013) establishing the fair market value of a fertilizer production plant subject to an official expropriation decree. Oral evidence given in March 2013 (Engaged by Claimant, expert and consultant).

• **Türkiye Petrolleri Anonim Ortaklığı v Republic of Kazakhstan:** *(Energy Charter Treaty Dispute, ICSID)*; Prepared two expert reports (November 2012, September 2013) assessing the impact of changes in the tax regime applicable to oil and gas producers on the fair market value of certain oil fields under a joint venture agreement (Engaged by respondent, expert and consultant).


• **OI European Group B.V. v Bolivarian Republic of Venezuela:** *(Bilateral Investment Treaty Dispute)*; Prepared two expert reports (August 2012, June 2013) on the fair market value of Claimant’s economic interest in two glass manufacturing plants that were expropriated by official decree. Oral evidence given in September 2013 (Engaged by claimant, expert and consultant).

• **Nova Scotia Power Inc. v Bolivarian Republic of Venezuela:** *(Bilateral Investment Treaty Dispute, ICSID AF)*; Prepared an expert report (May 2012) on the fair market value of
Claimant’s intangible rights to purchase coal at prices less than market prices (Engaged by claimant, expert and consultant).

- **Luigiterzo Bosca v Republic of Lithuania**: *(Bilateral Investment Treaty Dispute; UNCITRAL)*; Prepared two expert reports (March and June 2012) quantifying the fair market value of an alcohol production enterprise and the losses associated with an opportunity to acquire a shareholding in the facility. Oral evidence given in September 2012. The tribunal found Lithuania to have breached the treaty, but did not award any damages (Engaged by respondent, expert and consultant).


- **Devas Multimedia Private Limited v Antrix Corporation Limited**: *(Breach of Contract; ICC)*; Prepared two expert reports (February 2012, March 2013) on the fair market value of a multimedia company planning to offer mobile audio/visual and broadband wireless interest services through a hybrid satellite-terrestrial system. (Engaged by claimant, expert and consultant).


- **ConocoPhillips Algeria Ltd. v Sonatrach S.P.A**: *(Breach of Contract, UNCITRAL)*; Prepared two expert reports (January 2012 and August 2012) quantifying the loss suffered by claimant due to respondents alleged failure to implement an equity determination in a unitized oil field in Algeria. (Engaged by claimant, expert and consultant).
• The Attorney General of the Turks & Caicos Islands v Salt Cay Devco Ltd., Salt Cay Estates Ltd., Salt Cay Golf Club Ltd., & SC Hotel Management Ltd.: (Fraud and Bribery Claims, Supreme Court of Turks & Caicos): Prepared three expert reports (December 2011, March 2012, and May 2012) quantifying the fair market value of an early stage, hotel and resort development project on Salt Cay island and the losses claimed by both parties. (Engaged by respondents, expert and consultant).

• Flughafen Zürich A.G. and Gestión e Ingeniería IDC S.A. v Bolivarian Republic of Venezuela: (Bilateral Investment Treaty Dispute, ICSID): Prepared four expert reports (October 2011, August 2012, February 2013, and August 2013) quantifying the fair market value of a concession to operate the second largest airport in Venezuela on Isla Margarita that was allegedly subject to various treaty violations and analyzing the performance of the airport after a takeover by the state. Oral evidence given in June 2013 (Engaged by claimant, expert and consultant).

• TECO Guatemala Holdings, LLC v Republic of Guatemala: (DR-CAFTA Dispute): Prepared an expert report (September 2011 and May 2012) quantifying the impact of an altered regulatory framework on the fair market value of the largest electricity distributor in Guatemala. Oral evidence given in March 2013. The tribunal ruled in favor of Claimant but awarded only historical damages (Engaged by claimant, expert and consultant).

• Convial Callao S.A & CCI-Compania de Concesiones de Infraestructura S.A. v Republic of Peru: (Bilateral Investment Treaty Dispute, ICSID): Prepared two expert reports (July 2011 and February 2012) on the fair market value a toll road project subject to alleged violations of a BIT. Oral evidence given in March 2012. The tribunal determined that Peru did not breach the treaty (Engaged by respondent, expert and consultant).


• Italia Ukraina Gas S.p.a v NJSC Naftogaz of Ukraine: (Breach of Contract, SCC); Prepared two expert reports (June 2011 and August 2012) concerning the gas trade between Russia and Europe and the appropriate methodology to determine the price of possible gas exports from Ukraine at the western border with Slovakia. Oral evidence given in September 2012. The tribunal awarded Claimant US$ 12 million of the US$ 180 million claimed (Engaged by respondent, expert and consultant).

• SIMCO Consortium and Wood Group Engineering (North Sea) Limited v PDVSA Petroleo S.A.: (Breach of Contract, ICC): Prepared three expert reports (March 2011,
September 2011, February 2012) quantifying the losses claimed under a long-term contract involving water injection and treatment services in Lake Maracaibo, Venezuela. Oral evidence given in April 2012. The disputed was subsequently settled (Engaged by claimant, expert and consultant).

- **Yukos Universal Limited v Russian Federation:**  
  *Energy Charter Treaty Dispute, UNCITRAL*; Prepared two expert reports (September 2010, March 2012) quantifying the fair market value (and related losses) of claimant’s investment in Yukos Oil Company OJSC and/or the merged YukosSibneft under various scenarios for alleged violations of the ECT by Russia. Oral evidence given in October 2012 (Engaged by claimant, expert and consultant).

- **Hulley Enterprises Limited v Russian Federation:**  
  *Energy Charter Treaty Dispute, UNCITRAL*; Prepared two expert reports (September 2010, March 2012) quantifying the fair market value (and related losses) of claimant’s investment in Yukos Oil Company OJSC and/or the merged YukosSibneft under various scenarios for alleged violations of the ECT by Russia. Oral evidence given in October 2012 (Engaged by claimant, expert and consultant).

- **Veteran Petroleum Limited v Russian Federation:**  
  *Energy Charter Treaty Dispute, UNCITRAL*; Prepared two expert reports (September 2010, March 2012) quantifying the fair market value (and related losses) of claimant’s investment in Yukos Oil Company OJSC and/or the merged YukosSibneft under various scenarios for alleged violations of the ECT by Russia. Oral evidence given in October 2012 (Engaged by claimant, expert and consultant).

- **Petrobras America Inc. v Larsen Oil & Gas Ltd:**  

- **Yemen Company for Mobile Telephony – Sabafon v Republic of Yemen:**  
  *Investment Law Dispute, UNCITRAL*; Prepared an expert report (October 2010) assessing the performance of a CDMA operator owned by the government and the alleged impact of alleged preferential treatment granted to a state owned competitor on the fair market value of telecommunications provider. The dispute was subsequently withdrawn (Engaged by respondent, expert and consultant).

- **Gold Reserve Inc. v Bolivarian Republic of Venezuela:**  
  *Bilateral Investment Treaty Dispute, ICSID AF*; Prepared four expert reports (September 2010, July 2011, May 2013, June 2013) to determine the fair market value of two gold/copper mining properties in the Bolivar
state of Venezuela. Oral evidence provided in October 2013 (Engaged by claimant, expert and consultant).

- **Rozukrenergo AG v EMFESZ kft: (Breach of Contract, SCC);** Prepared two expert reports (September 2010, December 2010) assessing the position respondent would have occupied in the Hungarian gas trade, but for claimant’s alleged failure to fulfill its long-term supply agreement with respondent. Oral evidence provided in January 2011. The tribunal ruled in favor of Claimant (Engaged by respondent, expert and consultant).

- **Chevron Corporation and Texaco Petroleum Company v. Republic of Ecuador: (Bilateral Investment Treaty Dispute, UNCITRAL);** Prepared an expert report (September 2010) quantifying the changes made to the financial framework of a concession agreement signed in 1964 between Texaco, Gulf Oil, and Ecuador and the actual and but for economic benefits the parties received under the concession contract. The tribunal ruled in favor of Claimant (Engaged by claimant, expert and consultant).


- **Sojitz Corporation v Prithvi Information Systems Ltd: (Breach of Contract, LCIA);** Prepared an expert report (June 2010) quantifying the claims of both parties for alleged breaches of an equipment procurement contract. Oral evidence given in September 2010 (Engaged by respondent, expert and consultant).

- **Maersk Olie, Algeriet A/S v Peoples Republic of Algeria: (Bilateral Investment Treaty Dispute, ICSID);** Prepared two expert reports (June 2010, May 2011) on the fair market value of hydrocarbon rights that were lost as a consequence of windfall tax legislation passed by the government. The case settled before an oral hearing on the merits with Claimant receiving US$ 2.2 billion in additional oil over the life of the contract (Engaged by claimant, expert and consultant).

- **Rozukrenergo AG v NJSC Naftogaz of Ukraine: (Breach of Contract, SCC);** Finalized an expert report (April 2010) quantifying the fair market value of 11 billion cubic meters of
natural gas in underground storage facilities in Ukraine. (Engaged by respondent, expert and consultant).

- **British Petroleum America Production Company v Repsol YPF S.A.** (*Breach of Contract, AAA*); Prepared an expert report (March 2010) quantifying the losses claimant suffered due to alleged breaches of a contract involving LNG supplies from Trinidad & Tobago to Spain. The case settled before an oral hearing on the merits (Engaged by claimant, expert and consultant).

- **HICEE B.V. v Slovak Republic;** (*Bilateral Investment Treaty Dispute, UNCITRAL*); Prepared an expert report (February 2010) on the fair market value of two health insurance companies operating in the Slovak healthcare market following new legislation which rendered them not-for-profit companies. The tribunal rejected jurisdiction in the arbitration (Engaged by claimant, expert and consultant).

- **Anadarko Algeria Company LLC & Maersk Olie, Algeriet AS v Sonatrach S.P.A.:** (*Breach of Contract Dispute, UNCITRAL*); Prepared two expert reports (February 2010, December 2010) on the fair market value of interests held by Claimants in a production sharing agreement for the exploration and exploitation of liquid hydrocarbons in Algeria. Oral evidence given in July 2011. The case settled before the issuance of an award with Claimants receiving US$ 6.6 billion in additional oil over the life of the contract (Engaged by claimant, expert and consultant).

- **Quimica e Industrial del Borax Ltda. and others v. Republic of Bolivia:** (*Bilateral Investment Treaty Dispute, ICSID*); Prepared two expert reports (September 2009, August 2013) on the fair market value of a non-metallic mining concession in Bolivia that was the subject of an expropriation decree. Oral evidence given in October 2013 (Engaged by claimant, expert and consultant).

- **Concesionaria Dominicana de Autopistas y Carreteras, S.A. v Dominican Republic:** (*Breach of Contract Dispute, ICC*); Prepared three expert reports (June 2009, December 2009, July 2010) quantifying the fair market value of a toll road concession and the losses claimed by Claimant and Respondent due to delays in completing the construction of a toll road and critiquing claimant’s damages analysis. Oral evidence given in November 2010. The tribunal ruled in favor of Claimant, but relied upon our evidence and awarded US$ 35 million (Engaged by respondent, expert and consultant).

- **Murphy Exploration and Production Company International v Republic of Ecuador:** (*Bilateral Investment Treaty Dispute, UNCITRAL*); Prepared four expert reports (March 2009, January 2010, September 2012, and July 2014) valuing Claimant’s interest in various oil fields in the Republic of Ecuador under the assumption that a law, which significantly
Reduced the profitability of the oil production activities, was a breach of the relevant BIT (Engaged by claimant, expert and consultant).


- **Carpatsky Petroleum Corporation v OJSC Uknafta:** *(Breach of Contract, SCC)*; Prepared two expert reports (December 2008 and August 2009) quantifying the value of a natural gas field in Ukraine and the damages allegedly suffered by claimant for being denied the right to fully participate in the co-development of the field. Oral evidence given in September 2009. Claimant was awarded US$ 145.7 million for its interest in the gas field (Engaged by Claimant, consultant and expert).


- **Mercuria Energy Group Limited v Republic of Poland:** *(Energy Charter Treaty Dispute, Stockholm Chamber of Commerce)*; Submitted two expert reports (April 2009, October 2010) quantifying the fair market of a wholesale fuel business in Poland and the related damages suffered by one of the largest independent energy traders due to the imposition of a fine on the Claimant’s. Oral evidence given in February 2011. The tribunal found that Respondent had not breached the ECT (Engaged by Claimant, expert and consultant).

- **Grand River Enterprises Six Nations, Ltd., Jerry Montour, Kenneth Hill, and Arthur Montour Jr. v United States of America:** *(NAFTA Chapter 11 Dispute, UNCITRAL)*; Prepared two expert reports (December 2008, April 2009) on the fair market value of a tobacco manufacturing enterprise and its US distributor, as well as the impact of certain regulatory actions on those values, before a NAFTA arbitration panel. Claimant declined cross examination. Damages sought exceed US$250 million. All claims were dismissed on jurisdictional grounds or the merits (Engaged by Respondent, consultant and expert).

- **Abaclat et al. v Argentine Republic:** *(Bilateral Investment Treaty Dispute, ICSID)*; Prepared five expert reports (November 2008, May 2009, November 2012, July 2013, and
November 2013) regarding the manner in which data was gathered, organized, and analyzed for more than 180,000 Italian investors in defaulted Argentine bonds. Third report quantified the losses the remaining 60,000 claimants suffered as a consequence of Argentina’s alleged breaches of a BIT. Oral evidence given in April 2010. The tribunal upheld jurisdiction and agreed with our testimony that the data was sufficiently organized to proceed with a mass claim (Engaged by Claimants, consultant and expert).

- **Chemtura v Canada**: *(NAFTA Chapter 11 Dispute, UNCITRAL)*; Prepared an expert report (October 2008) on the fair market value and alleged losses suffered by an investor in agricultural pesticide products after the product was de-registered following a scientific review of its safety. Oral evidence given in September 2009. Damages sought exceeded US$ 80 million. The tribunal found Canada not liable for breaches of the NAFTA (Engaged by Respondent, consultant and expert).


- **Piero Foresti, Laura De Carli and others v. Republic of South Africa**: *(Bilateral Investment Treaty Dispute, ICSID)*; Prepared three expert reports – a commercial report assessing the impact of the Mineral and Petroleum Resources Development Act and other legislation on the granite producing industry in South Africa; and two reports concerning the impact of the legislation on the fair market value of two major granite producing companies in South Africa (July 2008). Damages sought exceeded US$ 50 million. The case was withdrawn by Claimants after their applications for new order mining rights was approved and other matters agreed upon with the Department of Minerals and Energy (Engaged by Claimants, expert and consultant).


- **Electroandina S.A. (Chile) v YPF S.A. (Argentina)**: *(Breach of Contract, ICC)*; Prepared an expert report quantifying the contractual damages suffered due to an alleged breach of a
long-term natural gas supply contract. The case was withdrawn by claimant before submitting its written pleading (Engaged by Claimant, expert and consultant).


- **Ioannis Kardassopoulos v Georgia**: *(Energy Charter Treaty & Bilateral Investment Treaty Dispute, ICSID)*; Prepared two expert reports (January 2008, July 2008) on the valuation of a mixed capital oil pipeline company and a state-owned pipeline management company as estimates for an investor’s losses for alleged breaches of the ECT and BIT. Oral evidence given in March 2009. The tribunal awarded Claimant 100 percent of the amount set forth in our reports (Engaged by Claimant, expert and consultant).

- **Ron Fuchs v Georgia**: *(Bilateral Investment Treaty Dispute, ICSID)*; Prepared two expert reports (January 2008, July 2008) on the valuation of a mixed capital oil pipeline company and a state-owned pipeline management company as estimates for an investor’s losses for alleged breaches of a BIT. Oral evidence given in March 2009. The tribunal awarded Claimant 100 percent of the amount set forth in our reports (Engaged by Claimant, expert and consultant).

- **Rumeli Telecom A.S. & Telsim Mobil Telekomunikasyon Hizmetleri A.S. v Republic of Kazakhstan**: *(Bilateral Investment Treaty Dispute, ICSID)*; Prepared an expert report (May 2007) on the valuation of a mobile telecommunications company in Kazakhstan. Damages sought exceeded US$300 million. We opined the company was insolvent and poorly run by Claimant and valued Claimant’s shares at US$0 under a liquidation analysis. Oral evidence given in October 2007 (Engaged by Respondent, expert and consultant). The tribunal issued an award concurring with our financial assessment of the company and its management, but awarded Claimant US$125 million for its shares without supporting analysis.

- **Saluka Investments B.V., Nomura Principle Investment plc, and the Czech Republic (Settlement Procedure Related to the Arbitrations Concerning the Collapse of IP banka)**; Appointed as a valuation expert by the Czech Republic to prepare an expert report on the restructuring and valuation of IP banka a.s. (April 2007) under the settlement terms agreed between the parties for submission to an arbitral tribunal. Oral evidence given in March/April 2008. Claimant’s valuation was CZK 68.4 billion and our valuation was CZK 27.4 billion. The Tribunal’s award set the value at CZK 34.2 billion.
Cargill, Inc. v. United Mexican States: (NAFTA Chapter 11 Dispute, ICSID AF); Prepared two expert reports (December 2006, June 2007) quantifying the value of Claimant’s high fructose corn sweetener (“HFCS”) investments in Mexico and the related losses it suffered following various governmental acts which reduced the demand for HFCS in Mexico. Damages sought exceed US$ 100 million. Oral evidence given in October 2007 (Engaged by Claimant, expert and consultant). The tribunal adopted our damages model and made 3 modifications which reduced damages to US$ 77,329,240 (plus pre-award interest). This is the largest award under NAFTA Chapter 11 to date.

EDF (Services) Limited v Romania: (Bilateral Investment Treaty Dispute, ICSID); Prepared two expert reports (October 2006, March 2008) regarding the value of a concession to operate the commercial spaces in Romania’s international airports and the damages allegedly sustained by the former concession holder from the United Kingdom. Damages sought exceed $80 million. Oral evidence given in September 2008. The tribunal issued a decision finding Romania not liable on all counts (Engaged by Respondent, expert and consultant).

Glamis Gold, Ltd v. United States of America: (NAFTA Chapter 11 Dispute, UNCITRAL); Submitted three expert reports (September 2006, March 2007, August 2007) on the fair market value of a gold mining project in California at three different points in time. Claimant alleged the mining licenses were indirectly expropriated when new reclamation regulations affecting metallic mining were passed in 2002. Damages sought were US$ 50 million. Oral evidence given in August 2007. We opined the mining claims were still worth US$ 21.5 million immediately after the new regulations. The tribunal dismissed the expropriation claim finding the mining claims were still worth “more than US$ 20 million” (Engaged by respondent, expert and consultant).

United Coal Company v Gerdau S.A.: (Breach of Contract Dispute, ICDR); Provided expert and consulting services regarding alleged breaches of a coal supply agreement. Case was amicably settled before any pleadings where exchanged (Engaged by respondent, expert and consultant).

Azpetrol International Holdings, Azpetrol Group & Azpetrol Oil Services Group v Republic of Azerbaijan: (Energy Charter Treaty Dispute, ICSID); Retained as the quantum expert to value an oil services and retail fuel distribution company that was allegedly expropriated by the Republic of Azerbaijan. The parties settled after a hearing on jurisdiction (Engaged by Claimant, expert and consultant).

I&I Beheer B.V. v Bolivarian Republic of Venezuela: (Bilateral Investment Treaty Dispute, ICSID); Prepared an expert report (September 2006) analyzing certain financial instruments allegedly issued by an agricultural bank in the early 1980s and critiquing the calculation of investment losses claimed by a Dutch investor in those financial
instruments. Damages sought exceed US$ 400 million. Case was discontinued after Claimant failed to file a Reply Memorial on the merits (Engaged by respondent, expert and consultant).

- **Técnicas Reunidas, S.A. and Eurocontrol, S.A. v Republic of Ecuador:** *(Bilateral Investment Treaty Dispute, ICSID);* Prepared an initial quantification of the losses suffered by an engineering consulting firm contracted to overhaul the Esmeraldas oil refinery in Ecuador. Case settled before proceeding to the pleadings stage (Engaged by claimant, expert and consultant).

- **Plama Consortium Limited v. Republic of Bulgaria:** *(Energy Charter Treaty Dispute, ICSID);* Prepared two expert reports (July 2006, July 2007) on the financial performance, turnaround strategy, and fair market value of an oil refinery that was allegedly expropriated through various acts of the State before the International Center for Settlement of Investment Disputes. Damages sought exceeded $300 million. Oral evidence given in February 2008. The tribunal rejected all of claimant’s legal claims and reached a view consistent with our view that claimant’s business and financial strategy was flawed and that strategy caused the investment’s failure (Engaged by respondent, expert and consultant).

- **Nreka v. Czech Republic:** *(Bilateral Investment Treaty Dispute, UNCITRAL);* Prepared four expert reports (June 2006, August 2006, October 2007, November 2007) on the value of commercial property in Prague, Czech Republic and the alleged economic harm suffered by a Croatian investor due to the cancellation of certain leasing arrangements before an ad hoc arbitral tribunal employing the UNCITRAL rules of arbitration. Damages sought were approximately US$ 1.7 million. Oral evidence given in October 2006 and February 2008. We opined that damages correctly calculated would be US$ 0.5 million. The tribunal issued an award for approximately US$ 1.25 million (Engaged by respondent, expert and consultant).

- **Duke Energy International Peru Investments No. 1, Ltd v. Republic of Peru:** *(Legal Stability Agreement Dispute, ICSID);* Prepared two expert reports (June 2006, December 2006) on the effect certain tax regulations had on the value of various assets in the electricity sector of Peru that were privatized and the consequential damages resulting from a change in such regulations to an investor in the power generation sector before the International Center for Settlement of Investment Disputes. Damages sought exceed US$ 35 million. Oral evidence given in May 2007 (Engaged by claimant, expert and consultant). The tribunal issued an award in favor of Claimant for US$ 20 million on one of its two claims and accepted our calculation of Claimant’s loss on the successful claim without adjustment.
• **CIT Group, Inc. v. Argentine Republic:** *(Bilateral Investment Treaty Dispute, ICSID)*; Submitted two expert reports (October 2005, February 2008) quantifying the fair market value a leasing enterprise in the Argentine Republic in the aftermath of its economic crisis before the International Center for Settlement of Investment Disputes and claimant’s investment losses in that enterprise. Damages sought exceed US$ 100 million. Claimant and Respondent agreed to discontinue the arbitration in May 2009 (Engaged by claimant, expert and consultant).


• **The National Property Fund of the Czech Republic and the Czech Republic v. Nomura Principal Investment plc:** *(Share Purchase Agreement Dispute, Zurich Chamber of Commerce)*; Prepared two expert reports (August 2005, December 2005) on behalf of the Czech Republic regarding the costs to transform the Czech banking sector in its transition to a market economy with emphasis on the cost to bailout the third largest Czech bank after its collapse. Total damages sought by Claimants exceeded US$ 5 billion. Oral evidence given in April 2006 (Engaged by claimant, expert and consultant). The case settled before an award was issued.

• **UEG Araucaria Ltda. v. Companhia Paranaense de Energia:** *(Breach of Power Purchase Agreement, ICC)*; Prepared two expert reports (May 2005, December 2005) for the International Court of Arbitration on the value of a gas-fired thermal power plant in the Brazilian state of Parana and losses sustained by a consortium of investors contracted to build it. Damages sought exceeded US$ 2 billion. Oral evidence given in January 2006 (Engaged by claimant, expert and consultant). The case settled before an award was issued.

• **Saluka Investments B.V. v. Czech Republic:** *(Bilateral Investment Treaty Dispute, UNCITRAL)*; Prepared two expert reports (February 2005, March 2005) to an arbitral tribunal organized by the Permanent Court of Arbitration on the cause of failure for a large Czech financial institution. Damages sought were estimated at US$ 1.4 billion. Oral evidence given in April 2005. (Engaged by respondent, expert and consultant). The case settled before a damages phase was scheduled.

• **GAMI Investments v. United Mexican States**: *(NAFTA Chapter 11 Dispute, UNCITRAL)*; Prepared and submitted two expert valuation reports (February 2003, February 2004) on behalf of a US investor to a NAFTA arbitral tribunal on the valuation of a minority stake in a company operating five sugar refineries in Mexico. Damages sought exceeded $25 million. Claimant did not prevail on the merits in part because the Mexican Supreme Court declared the expropriation unconstitutional and ordered the government to return the sugar mills before the oral hearing in the NAFTA arbitration. Attended hearing, but was not called to provide oral evidence (Engaged by claimant, expert and consultant).

• **Victor Pey Casado and the President Allende Foundation v. Republic of Chile**: *(Bilateral Investment Treaty Dispute, ICSID)*; Prepared two expert reports (January 2003, March 2003) on behalf of the Republic of Chile on the 1973 value of an expropriated newspaper company before the International Center for Settlement of Investment Disputes. Damages sought were US$ 515 million. Our damages calculation was US$ 7 million plus 5.8 percent interest. The tribunal found in favor of Claimant on liability and awarded US$ 10 million plus 5 percent interest. Not called to provide oral evidence. Provided a third expert report (October 2008) regarding Claimant’s Request for Revision. The damages award was subsequently annulled (Engaged by respondent, expert and consultant).

• **Ceskoslovenska obchodni banka v. Slovak Republic**: *(Bilateral Investment Treaty Dispute, ICSID)*; Assisted in the preparation of two expert reports (August 1999, October 2001) on accounting and valuation issues associated with the restructuring of the third largest bank in the Czech Republic and quantified the amounts owed to the bank by the Slovak Republic due to their participation in the restructuring. Expert reports were submitted to arbitral tribunal established under International Centre for the Settlement of Investment Disputes. Award issued (December 2004) in Claimant’s favor for $877 million in damages and costs (Engaged by claimant, consultant only).

• **MTD Equity Sdn. Bhd. and MTD Chile S.A. v Republic of Chile**: *(Bilateral Investment Treaty Dispute, ICSID)*; Advised the Ministry of Economy of the Republic of Chile regarding the proper amount due to the Claimant given the tribunal’s award on the merits and quantum (Engaged by Respondent, consultant).
• **Invesmart v Czech Republic**: *(Bilateral Investment Treaty Dispute, UNCITRAL)*; Provided consulting services regarding the hypothetical restructuring and valuation of a Czech commercial bank that was the 5th largest in the country before it failed (Engaged by Respondent, consultant only).

• **RDEVCO, L.L.C. v Tanzania Electric Supply Company, Ltd.** *(Breach of Contract Dispute, ICC)*; Providing consulting services regarding the alleged breach of a power offtake agreement for an emergency 100MW natural gas fired power project in Tanzania. (Engaged by Respondent, consultant only).

• **United States of America v Government of Canada**: *(Trade Dispute, LCIA)*; Retained in a state to state arbitration to provide an expert report on the quantum of compensatory adjustments that should be paid due to a breach of a trade settlement agreement over softwood lumbers exports from Canada to the United States. (Engaged by Claimant, consultant only).

• **Investor v European State**: *(Energy Charter Treaty Dispute, ICSID)*; Finalized an expert report quantifying the impact of construction delays and incremental permit restrictions on the fair market value of a 1,700 MW coal-fired power plant. Prior to claimants’ submission of its Memorial on the merits, the case was settled (Engaged by Claimant, expert and consultant).

• **Investor v North African State**: *(Bilateral Investment Treaty Dispute)*; Advising an investor on the fair market value of natural gas infrastructure and other losses (Engaged by claimant, expert and consultant).

• **North American Investor v South American State**: *(Bilateral Investment Treaty Dispute)*; Prepared a preliminary report on the fair market value of exploration property containing metallic resources. (Engaged by claimant, expert and consultant).

• **Investor v South American Government**: *(Bilateral Investment Treaty Dispute, ICSID)*; Providing expert and consulting services regarding the fair market value of a coffee roasting and distribution enterprise subject to alleged violations of a BIT (Engaged by claimant, expert and consultant).

• **Asia Investor v South American State**: *(Bilateral Investment Treaty Dispute)*; Providing expert and consulting services regarding the value of metallic mine. (Engaged by claimant, expert and consultant).

• **Investor v State**: *(North American Free Trade Agreement Chapter 11 Dispute, UNCITRAL)*; Providing expert and consulting services regarding affected investments in the pharmaceutical sector. (Engaged by respondent, expert and consultant).
- **Asian Investor v Asian State**: *(Bilateral Investment Treaty Dispute)*; Providing expert and consulting services regarding the value of a telecommunications enterprise. (Engaged by claimant, expert and consultant).
- **Barbados Investor v South American State**: *(Bilateral Investment Treaty Dispute)*; Providing expert and consulting services regarding investments in an oil field (Engaged by claimant, expert and consultant).
- **Eastern Europe Investors v Eastern Europe State**: *(Bilateral Investment Treaty Dispute)*; Providing expert and consulting services regarding affected investments in the banking services sector. (Engaged by claimants, expert and consultant).
- **CORFO v RWE Thames Water**: *(Shareholder Agreement Dispute)*; Provided an analysis of the diminution in value of the shares of Essbio (the third largest water works company in Chile) on behalf of CORFO (the state business development agency in Chile) to resolve a shareholder dispute between CORFO and RWE Thames Water following an investigation into contract irregularities. The analysis indicated a loss of value to CORFO of at least US$ 11.7 million. The arbitration was settled via a payment from RWE Thames Water for US$ 11.1 million.
- **Slovakia Bankruptcy Proceeding**: *(Breach of Contract)*; Prepared a loan valuation report (January 2000) on behalf of Ceskoslovenska obchodni banka for a bankruptcy court in Slovakia to quantify a bank’s claims against its insolvent client. (Engaged by claimant, consultant)
- **Ministry of Finance Guarantee**: *(Post-privatization Assistance)*; Reviewed and verified an Eastern European bank’s loan accounting for a defaulted loan. The review was used as the basis for the issuance of an amended sovereign guarantee over the loan. The original guarantee was required by a strategic foreign investor seeking to purchase the government’s majority shareholding in the bank.

**Expert Engagements in US Litigation or Arbitration**

Mr. Kaczmarek has served as financial expert and consultant in the following US litigations and/or arbitrations:

- **Tiffany & Company and Tiffany (NJ) LLC v Costco Wholesale Corporation**: *(Trademark Infringement)*; Prepared an expert report (November 2013) quantifying the economic
benefits enjoyed by defendant for its use of the Tiffany name in marketing and selling engagement rings. Deposed in November 2013.


- **Columbia/HCA v. Texas Workers Compensation Commission:** *(Breach of Contract, Eastern District of Texas)*; Provided expert testimony on the amount of unpaid workers compensation claims for fifty hospitals over 6 years after a legislative change to the reimbursement formula for providers was subsequently determined to be unconstitutional. Deposition taken in 2000 (Engaged by plaintiff, expert and consultant)

**Consulting Engagements in Domestic Litigation**

Mr. Kaczmarek has served as a financial consultant in the following US litigations and/or domestic arbitrations:

- **GTE v Worldcom: (Antitrust Claim):** Evaluated and quantified the cost synergies for the planned merger of the second and third largest U.S. long-distance providers in an attempt to prove the merger would not result in lower prices for consumers (Engaged by claimant).

- **Internet Backbone Transaction: (Post-Acquisition Dispute):** Helped rebut a multi-million dollar claim for lost business value in a dispute related to the divestiture, sale and transfer of a large internet backbone (Engaged by defendant).
• **Water Utility Investment Analysis:** *(Breach of Fiduciary Duty)*; Valued several interest rate swaps and assessed the cash flow impact of selling those swaps for a Southern California Water District to rebut claims by the water district that advice given by an investment bank constituted a breach of fiduciary duty. (Engaged by defendant).

• **Investment Pool Analysis:** *(Breach of Fiduciary Duty)*; Performed duration calculations on several exotic fixed income securities to measure the risk and leverage factors for a large Southern California County investment pool. The analysis was used to demonstrate the imprudent management of the pool by the fund manager. (Engaged by defendant).

• **CSU, et al v. Xerox:** *(Antitrust Claim)*; Analyzed the claims of more than 2 dozen independent service organizations against Xerox for monopolizing the service market of high speed copiers and printers by controlling the distribution of replacement parts. The case is often cited as a landmark case in intellectual property rights v. antitrust behavior. (Engaged by defendant).

• **Xerox v. CSU:** *(Intellectual Property Dispute)*; Developed an expert report on damages suffered by Xerox for patent infringement against replacement parts, trade secret violations for password and theft, and copyright infringement for software and user manual theft and reproduction. (Engaged by claimant).

• **Plaintiff v. Senior PGA Tour:** *(Antitrust Claim)*; Prepared an expert report on behalf of the Senior PGA TOUR to a Federal Court that defined the relevant market for senior professional golfers and refuted allegations by a player that the rules and practices of the TOUR were anticompetitive (Engaged by defendant).

• **Columbia Central Florida Laboratory v. Winter Park Healthcare Group:** *(Breach of Contract)*; Supported a Florida hospital in defense of a breach of contract dispute regarding the termination of outpatient laboratory billing contracts (Engaged by defendant).

• **Diesel Engine Manufacturer Dispute:** *(Predatory Pricing Claim)*; Conducting cost accounting analysis to assist a U.S. diesel engine manufacturer refute allegations that its sales prices were predatory in the Southern California market.

• **Gedeon Wales, et al v. Jack M. Berry, Inc.:** *(Breach of Contract)*; Reviewed the accounting records for more than 500 migrant workers and prepared an analysis and expert report on the underpayment of wages and bonuses to those workers over three harvest seasons (Engaged by claimants).

• **Electronics Dispute:** *(Antitrust Claim)*; Analyzed and defined the relevant product market for a global manufacturer of polymeric-positive temperature coefficient devices to refute allegations of anti-competitive behavior (Engaged by defendant).
Investigations

- **Anti-Money Laundering Investigation:** *(Violations of AML and BSA Regulations)*; Recovered millions of transactions in deposit, trust and securities accounts for Embassy and international banking clients of a troubled Washington D.C. bank and evaluated those accounts and transactions for suspicious activity as required by a consent order issued by the Office of the Comptroller of the Currency.

- **DOJ / OIG Investigation:** *(Medicare and other Federal Health Program Fraud)*; Assisted Columbia/HCA, an owner of more than 300 acute care hospitals in the US, develop strategies, quantify exposure, and negotiate settlements regarding Medicare and other governmental program claims of fraud brought by the Department of Justice, Office of Inspector General and the Department of Health & Human Services. (Engaged by defendant)

- **DOJ / DEA Investigation:** *(Narcotics Inventory Violations)*; Developed financial models and forecasts for a national institutional pharmacy company to help assess bankruptcy risk and successfully negotiated a federal fine on behalf of the company for DEA violations stemming from improper oversight of narcotics inventories.

- **Medicare Cost Report Review:** *(Medicare Reimbursement Assessment)*; Reviewed aspects of the reimbursement received by more than 300 hospitals over 5 years in an effort to resolve how much money CMS owed the hospital system due to delayed audits pending a fraud review (Engaged by claimant).

- **Puerto Rico Department of Health:** *(Fraud Investigation)*; Evaluated the enrollment policies and procedures of the Puerto Rico Medicaid office and investigated more than 500,000 Medicaid beneficiaries applications for fraud. The review found that more than 100,000 beneficiaries were fraudulently receiving services. Those beneficiaries were removed from the program saving the DOH millions of dollars in monthly premiums (Engaged by claimant).

- **Health Plan Revenue Recovery:** *(Underpayment Analysis)*; Developed and executed a methodology to assist more than a dozen Health Maintenance Organizations recover years of unpaid premiums (total recoveries exceed more than $120 million to-date) from the Federal Employee Health Benefits Program. Findings led to a contractual revisions between all health plans participating in the program (Engaged by claimants).

- **Medicare Reimbursement Reviews:** *(Revenue Assessment)*; Reviewed low-income patient statistics for more than 30 Puerto Rico hospitals to determine if the hospitals had been properly reimbursed by Medicare. Reviews led to more than $15 million in additional revenue recoveries (Engaged by claimants).
• **Medical Device Manufacturer:** *(Failed Technology Implementation)*; Assisted an international medical device and software company perform an internal review of its implementation services for intensive care monitoring devices by independently reviewing the facts surrounding the failed implementation.

• **Loan Review:** *(Fraud Investigation)*; Performed a financial review of a $12 million dollar loan portfolio for a regional bank accusing its contracted service agent of improperly disposing of loan assets and other fraudulent activities.

• **Real Estate Partnership Review:** *(Fraud Investigation)*; Assisted a Texas law firm in uncovering fraudulent activities of several wealthy Mexican investors that siphoned millions of dollars from the limited partners of a real estate partnership.

**Other Management Consulting Assignments**

• Provided troubled company and turn-around management consulting to a global manufacturer of co-generation plants and valve and fitting devices and successfully secured critical financing needed to avoid bankruptcy.

• Provided advice to a national trade association in valuing an internet software division and assisted management in making strategic decisions regarding the future of the division.

• Developed a management reporting system to help two large hospitals reduce operating costs and improve profitability.

• Prepared a statistical sampling plan to be used annually in determining both profitability and taxable income for a trade association with for-profit and non-profit activities.

• Assisted the nation’s largest long-distance telecommunications company in analyzing and streamlining departmental functions within the environmental health and safety division.

• Identified and measured an appropriate cost base to calculate landing fees at a major U.S. international airport.

• Conducted annual surveys of lodging rates for the General Services Administration in more than 500 markets nationwide to determine the appropriate rates to reimburse government employees traveling on official business such that a sufficient level of room supply is available each night to meet overall demand.
Speaking Engagements


- *Damages in ICSID Arbitrations* – Prepared a presentation to the ICSID Secretary and senior counsel on ideas the institute could undertake to improve how damages are dealt with in ICSID arbitrations – February 2010


- *Remedies in Commercial, Investment and Energy Arbitrations* – Panelist at the Conference sponsored by the University of Texas School of Law, the Permanent Court of Arbitration, and the Houston Arbitration Club – April 2008.

- *The Role of the Quantum Expert in International Arbitration* – Guest lecturer at Georgetown University Law School – December 2006 and November 2007


- *Quantum Matters in International Investment Arbitration*, The Hague, Netherlands – June 2005

- *Medicare’s Improper Application of Section 1886 of the Social Security Act Pertaining to Puerto Rico Hospitals*, Simposio Anual Del Sector Salud de Puerto Rico, March 2005


Technical Competencies

- Proficient in relational database packages such as MS SQL Server, Microsoft Access, FoxPro, and Paradox.

- Proficient in data mart or cube technologies such as QueryObject Systems and Microsoft OLAP Services.
• Familiar with object oriented programming languages including VBA and PAL. Also familiar with VB 6.0 and C++, HTML, Java, VB Script, and Active Server Pages.
<table>
<thead>
<tr>
<th>Doc. Ref.</th>
<th>Document</th>
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<tr>
<td>R-012</td>
<td>Resolution No. 1410-2010-SETENA, 28 June 2010</td>
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<tr>
<td>R-021</td>
<td>Administrative Appraisal Manual, 15 November 1996</td>
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<tr>
<td>R-046</td>
<td>SENARA, Hydrological Study of the Huacas-Tamarindo Aquifer, May 2003</td>
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<tr>
<td>R-062</td>
<td>Williams, Adam; Real Estate on Slow Upswing; Tico Times; 10 September 2010</td>
</tr>
<tr>
<td>R-063</td>
<td>John McPhaul, “Costa Rica vacation homes hit by crisis,” Reuters, 1 August 2008</td>
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<td>R-064</td>
<td>S&amp;P/Case-Shiller U.S. National Home Price Index, S&amp;P Dow Jones Indices LLC</td>
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<td>R-065</td>
<td>Rebecca Clower, “Guanacaste Costa Rica Real Estate: State of the Market address, or (Recognizing a steal when you see one),” Articlesbase, 20 September 2010</td>
</tr>
<tr>
<td>R-066</td>
<td>“Surcharge still around Guanacaste,” Costa Rica News, 2 June 2010</td>
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<tr>
<td>R-067</td>
<td>“Real Estate Continues Upward Trend,” The Costa Rica News, 4 October 2010</td>
</tr>
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<td>R-070</td>
<td>Letter from SENARA to the Municipality of Santa Cruz, ASUB-517-07, 13 November 2007</td>
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<tr>
<td>R-071</td>
<td>SENARA, “Application of hydrogeochemical and isotopic tools in validating the hydrogeological model of the Huacas-Tamarindo aquifer, in the North Pacific of Costa Rica (IAEA – Project RLA-8-041)”</td>
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<tr>
<td>R-072</td>
<td>Central Bank of Costa Rica, Colones-USD Exchange Rates</td>
</tr>
<tr>
<td>R-076</td>
<td>Ministry of Finance, Director General of Tax Administration, Supporting Document for Administrative Appraisal of FINCA FR-S-130540-000, 9 July 2014</td>
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</tbody>
</table>
View of Lots V30-V33, which have largely been cleared of their mangroves and vegetation, looking toward the Pacific Ocean.
View of Lots V30-V33, which have largely been cleared of their mangroves and vegetation, looking toward the Pacific Ocean.
View of Lots V30-V33, looking toward the Pacific Ocean. The lots have largely been cleared of their mangroves and vegetation, looking toward the Pacific Ocean.
View of the street adjacent to Lots V30-V33.
View of Lots 38-40 toward the Pacific Ocean. Note that the lots are listed for sale by Claimants.
View of V38-V40 from the road looking toward the Pacific Ocean.
View of Lot V59 looking toward the Pacific Ocean.
View of Lot V60 (a 2,093.26 m² lot) which is currently for sale at US$ 849,000 (US$ 405/m²) and includes a 172 m² 2 bedroom, 2 bath home (http://grettelfisher.point2homes.biz/Playa_Ventana/Guanacaste/Homes/Ventana_BF/Playa_Ventana/Agent/Listing_103233933.html)
View of Lot V61 looking toward the Pacific Ocean.
View of Lot V61 looking toward the Pacific Ocean. Note that Lot V61 is listed as being for sale.
View of SPG Lots from the road, looking toward the Pacific Ocean.
View of SPG Lots from the road, looking toward the Pacific Ocean.
View of Playa Grande and the oceanfront mangroves and vegetation adjacent to the B Lots.
View of Playa Grande and the oceanfront mangroves and vegetation adjacent to the B Lots.
View of Playa Grande and the oceanfront mangroves and vegetation adjacent to the B Lots.
View of the B Lots, including the mangroves and vegetation, from Playa Grande
View of the B Lots, including the mangroves and vegetation, from Playa Grande.
View of oceanfront mangroves and vegetation from Playa Grande near the B Lots.
View toward the Pacific Ocean from the interior of the B Lots
View toward the road from the interior of the B Lots.
View toward the Pacific Ocean from the interior of the B Lots. The monument in the foreground marks the end of the 50-meter Inalienable Zone.
View with the B-Lots in the foreground that have been cleared of native vegetation and adjacent lot owned by the government in the background that has not been cleared of native vegetation.
View toward the Pacific Ocean from Lot C96. The mangroves in the Inalienable Zone 50 meters inland from the mean high-tide line obscure any oceanfront vistas.
View of the mangroves within the Inalienable Zone from the property line of C96 looking toward the Pacific Ocean.
View of the mangroves within the Inalienable Zone from the property line of C96 looking toward the Pacific Ocean.
Public beach access adjacent to C96. We have highlighted in red the property line and beginning of the 50 meter Inalienable Zone.
View of the public beach access adjacent to C96 from Playa Grande.
View of the mangroves in the 50-meter Inalienable Zone from Playa Grande.
Views of the mangroves, vegetation, and Playa Grande from the public beach access adjacent to C96.
Views of the mangroves, vegetation, and Playa Grande from the public beach access adjacent to C96.

Expert Report of Brent C. Kaczmarek, CFA
Photographs from Site Visit Taken on
8-9 July 2014
View of Lot A40 from the street looking toward the Pacific Ocean.
View of Lot A39, which has largely been cleared of its mangroves and vegetation, looking toward the Pacific Ocean.
Beachfront property in Playa Grande where the 50 meter Inalienable Zone had been cleared prior to the creation of the BNMP.
Expert Report of Brent C. Kaczmarek, CFA
Photographs from Site Visit Taken on
8-9 July 2014

Beachfront property in Playa Grande with mangroves and vegetation in the 50 meter Inalienable Zone removed.
Properties for sale in Palm Beach Estates.
Properties for sale in Palm Beach Estates.
Property for sale in Palm Beach Estates.
Property owned by the Unglaubes for sale, including a main house, guesthouse, garage, bodega and a pool and apartment to be constructed. Sales price is US$ 510,000 (US$ 121) per m2 before construction of the pool/apartments or US$ 630,000 (US$ 150) after additional construction.)
Property for sale in Palm Beach Estates in South Playa Grande US$ 87,000 for 1,000 m² lot (US$ 87/m²)
Property for sale in Palm Beach Estates. Sales price of US$ 69,000 for 1,218 m2 (US$ 56.65 per m2)
For sale signs in Palm Beach Estates in South Playa Grande.
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<tr>
<th>Lot No.</th>
<th>Claimant</th>
<th>Folio Real No.</th>
<th>Land Area (m²)</th>
<th>Purchase Date</th>
<th>Purchase Price</th>
<th>Purchase Price/m²</th>
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<tbody>
<tr>
<td>[1] V30</td>
<td>B. Spence</td>
<td>3-042330-000</td>
<td>806.79</td>
<td>30-Sep-03</td>
<td>$200,000</td>
<td>$247.90</td>
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<td>[2] V31</td>
<td>B. Spence</td>
<td>3-042332-000</td>
<td>839.53</td>
<td>30-Sep-03</td>
<td>$200,000</td>
<td>$238.23</td>
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<td>[3] V32</td>
<td>B. Spence</td>
<td>3-042334-000</td>
<td>854.46</td>
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<td>$175.55</td>
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<td>[4] V33</td>
<td>B. Spence</td>
<td>3-042236-000</td>
<td>913.71</td>
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<td>[5] V38</td>
<td>R. Copher</td>
<td>3-042346-000</td>
<td>1,076.93</td>
<td>19-Nov-04</td>
<td>$350,000</td>
<td>$325.00</td>
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<tr>
<td>[6] V39</td>
<td>B. &amp; R. Copher</td>
<td>3-042348-000</td>
<td>1,118.03</td>
<td>27-Sep-00</td>
<td>$500,000</td>
<td>$494.17</td>
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<tr>
<td>[7] V40</td>
<td>B. &amp; R. Copher</td>
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<td>856.87</td>
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<td>[8] V41</td>
<td>R. Copher &amp; J. Holsten</td>
<td>3-042362-001 &amp; 002</td>
<td>935.05</td>
<td>8-Feb-06</td>
<td>$275,000</td>
<td>$293.03</td>
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<tr>
<td>[9] V47</td>
<td>R. Copher &amp; J. Holsten</td>
<td>3-042364-001 &amp; 002</td>
<td>1,154.49</td>
<td>8-Feb-06</td>
<td>$275,000</td>
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<td>[10] V59</td>
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<td>892.58</td>
<td>3-Oct-07</td>
<td>$1,100,000</td>
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<td>[11] V61a</td>
<td>Spence Co.</td>
<td>3-144808-000</td>
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<td>6-Feb-06</td>
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<td>[12] V61b</td>
<td>Spence Co.</td>
<td>3-154452-000</td>
<td>899.58</td>
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<td>[13] V61c</td>
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<td>908.13</td>
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<td>$950,000</td>
<td>$991.10</td>
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<tr>
<td>[14] A39</td>
<td>Spence Co.</td>
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<td>902.02</td>
<td>29-Sep-05</td>
<td>$220,000</td>
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<td>[15] A40</td>
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<td>[16] C71</td>
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**Wholly Expropriated Lots**

<table>
<thead>
<tr>
<th>Lot No.</th>
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<th>Purchase Price/m²</th>
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</thead>
<tbody>
<tr>
<td>[18] SPG1-But For BFSPG1-Actual</td>
<td>Spence Co.</td>
<td>3-131865-000</td>
<td>16,801.77</td>
<td>20-Dec-07</td>
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<td>[19] SPG2-But For BFSPG2-Actual</td>
<td>Spence Co.</td>
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<td>24,270.20</td>
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<td>$695,437</td>
<td>$28.65</td>
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<tr>
<td>[20] SPG3-But For BFSPG3-Actual</td>
<td>Spence Co.</td>
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<td>46,245.33</td>
<td>11-Feb-07</td>
<td>1,700,000</td>
<td>$36.76</td>
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<tr>
<td>[21] B1-But For BF1-Actual</td>
<td>T. &amp; A. Berkowitz</td>
<td>3-130938-000</td>
<td>7,388.14</td>
<td>4,517.93</td>
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<td>[22] B3-But For BF3-Actual</td>
<td>B. Berkowitz</td>
<td>3-130540-000</td>
<td>7,177.53</td>
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<td>[23] B5-But For BF5-Actual</td>
<td>B. Berkowitz</td>
<td>3-130542-000</td>
<td>7,292.53</td>
<td>4,413.55</td>
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<td>$500,000</td>
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<td>[24] B8-But For BF8-Actual</td>
<td>B. Berkowitz</td>
<td>3-130543-000</td>
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<td>[25] B7-But For BF7-Actual</td>
<td>G. Greenmon</td>
<td>3-130544-000</td>
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<td>[26] B6-But For BF6-Actual</td>
<td>T. &amp; A. Berkowitz</td>
<td>3-130545-000</td>
<td>7,444.45</td>
<td>4,633.54</td>
<td>24-Sep-03</td>
<td>$500,000</td>
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**Partially Expropriated Lots**

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<td>[23] BF3-But For BF3-Actual</td>
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<td>7,177.53</td>
<td>4,380.76</td>
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<td>[24] BF5-But For BF5-Actual</td>
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<td>7,316.35</td>
<td>4,542.40</td>
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<td>$500,000</td>
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<td>[26] BF8-But For BF8-Actual</td>
<td>B. Berkowitz</td>
<td>3-130545-000</td>
<td>7,444.45</td>
<td>4,633.54</td>
<td>24-Sep-03</td>
<td>$500,000</td>
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</tbody>
</table>
## Wholly Expropriated Lots

|---------|------|----------|---------------|----|------|----------|---------------|----------------|---------------|

## Partially Expropriated Lots

|---------|------|----------|---------------|----|------|----------|---------------|----------------|---------------|

## Total Damages

- Wholly Expropriated Lots Subtotal: $13,895,000
- Partially Expropriated Lots Subtotal: $22,308,000
- Grand Total: $36,203,000
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<tr>
<th>Notes</th>
<th>Lot No.</th>
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<tbody>
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<td></td>
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<td>[12]</td>
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<td>[13]</td>
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<td>[17]</td>
<td>C96</td>
<td>8-Sep-2006</td>
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<td>Date</td>
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<td>[18]</td>
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<td>[21]</td>
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<td>22-Sep-2006</td>
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<tr>
<td>[22]</td>
<td>B5-But For B5-Actual</td>
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<td>[23]</td>
<td>B5-But For B5-Actual</td>
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<tr>
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<tr>
<td>[25]</td>
<td>B7-But For B7-Actual</td>
<td>22-Sep-2006</td>
</tr>
<tr>
<td>[26]</td>
<td>B8-But For B8-Actual</td>
<td>22-Sep-2006</td>
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Sources and Notes:
Figures in red indicate inconsistent data
Subject Property and FTI Purchase data from FTI Expert Report, Section 9.4 - Individual Property Descriptions and Valuation

[1] Certification of Property Data: Exhibit C-3b; Witness Statement Data: Witness Statement of Bob F. Spence ¶¶ 8-10; Comparables Data: FTI Expert Report, p. 45; Administrative Appraisals from Exhibit C-3d
[2] Certification of Property Data: Exhibit C-4b; Witness Statement Data: Witness Statement of Bob F. Spence ¶¶ 8-10; Comparables Data: FTI Expert Report, p. 46; Administrative Appraisals from Exhibit C-4d
[3] Certification of Property Data: Exhibit C-5b; Witness Statement Data: Witness Statement of Bob F. Spence ¶¶ 8-10; Comparables Data: FTI Expert Report, p. 47; Administrative Appraisals from Exhibit C-5d
[4] Certification of Property Data: Exhibit C-6b; Witness Statement Data: Witness Statement of Bob F. Spence ¶¶ 8-10; Comparables Data: FTI Expert Report, p. 48; Administrative Appraisals from Exhibit C-6d
[5] Certification of Property Data: Exhibit C-7b; Witness Statement Data: Witness Statement of Ronald E. Copher ¶¶ 9, 13; Comparables Data: FTI Expert Report, p. 49; Administrative Appraisals from Exhibit C-7d
[6] Certification of Property Data: Exhibit C-8b; Claimants’ Memorial Data from Claimants’ Memorial ¶¶ 9, 13; Witness Statement Data: Witness Statement of Ronald E. Copher ¶¶ 9, 13; Comparables Data: FTI Expert Report, p. 50; Administrative Appraisals: Exhibit C-8d
[7] Certification of Property Data: Exhibit C-9b; Claimants’ Memorial Data from Claimants’ Memorial ¶¶ 9, 13; Witness Statement Data: Witness Statement of Ronald E. Copher ¶¶ 9, 13; Comparables Data: FTI Expert Report, p. 51; Administrative Appraisals: Exhibit C-9d
[8] Certification of Property Data: Exhibit C-10b; Witness Statement Data: Witness Statement of Ronald E. Copher ¶ 17, Mr. Copher stated that Lots V46 and V47 were brought for US$550,000 but does not allocate a specific price to each lot; Comparables Data: FTI Expert Report, p. 52; Administrative Appraisals: Exhibit C-10d
[9] Certification of Property Data: Exhibit C-11b; Witness Statement Data: Witness Statement of Ronald E. Copher ¶ 17, Mr. Copher stated that Lots V46 and V47 were brought for US$550,000 but does not allocate a specific price to each lot; Comparables Data: FTI Expert Report, p. 53; Administrative Appraisals: Exhibit C-11d
[10] Certification of Property Data: Exhibit C-12b; Witness Statement Data: Witness Statement of Robert Reddy ¶ 24; FTI reports a Sales Price of $515,000 on 11 May 2007 in their Sales Comparables section of their report; FTI Expert Report, p. 84; Comparables Data: FTI Expert Report, p. 84
[12] Certification of Property Data: Exhibit C-14b; Witness Statement Data from from Witness Statement of Robert Reddy ¶ 23; Comparables Data: FTI Expert Report, p. 85
[18] Certification of Property Data: Exhibit C-20b; Witness Statement Data: Witness Statement of Robert Reddy ¶ 35; Comparables Data: FTI Expert Report, p. 62; Administrative Appraisals: Exhibit C-20d; Appraisal Value includes $24,942,414 for the value of the expropriated part of the lot and $30,418,086 for severance damages to the remainder for a total of $42,625,356
[19] Certification of Property Data: Exhibit C-21b; Witness Statement Data: Witness Statement of Robert Reddy ¶ 35; Comparables Data: FTI Expert Report, p. 64; Administrative Appraisals: Exhibit C-21d; Appraisal Value includes $36,393,912 for the value of the expropriated part of the lot and $30,418,086 for severance damages to the remainder for a total of $66,812,998
[21] Certification of Property Data: Exhibit C-23b; Claimants’ Memorial Data from Claimants’ Memorial ¶ 42; Comparables Data: FTI Expert Report, p. 71; Administrative Appraisals: Exhibit C-23d
[22] Certification of Property Data: Exhibit C-24b; Claimants’ Memorial Data from Claimants’ Memorial ¶ 42; Comparables Data: FTI Expert Report, p. 71; Administrative Appraisals: Exhibit C-24d
[23] Certification of Property Data: Exhibit C-25b; Claimants’ Memorial Data from Claimants’ Memorial ¶ 44; Comparables Data: FTI Expert Report, p. 75; Administrative Appraisals: Exhibit C-25d
[24] Certification of Property Data: Exhibit C-26b; Claimants’ Memorial Data from Claimants’ Memorial ¶ 45; Comparables Data: FTI Expert Report, p. 77; Administrative Appraisals: Exhibit C-26d
[25] Certification of Property Data: Exhibit C-27b; Claimants’ Memorial Data from Claimants’ Memorial ¶ 46; Comparables Data: FTI Expert Report, p. 79; Administrative Appraisals: Exhibit C-27d
[26] Certification of Property Data: Exhibit C-28b; Claimants’ Memorial Data from Claimants’ Memorial ¶ 47; Comparables Data: FTI Expert Report, p. 81; Administrative Appraisals: Exhibit C-28d
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<tr>
<th>Claimant</th>
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<th>Purchase Date</th>
<th>Purchase Price</th>
<th>FTI Index, Beginning Month</th>
<th>FTI Index, Ending Month</th>
<th>FTI Adjustment Index</th>
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<th>FTI’s But-For Property Values</th>
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<td>B7</td>
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Expert Report of Brent C. Kaczmarek, CFA  
Claimants' Purchase Prices Adjusted for FTI’s Property Value Inflation Factors | | | | | | | | |  
Appendix 5 | | | | | | | | |  
Sources and Notes:  
[1] The Purchase Dates, Purchase Prices, and But-For Property Values are per FTI Report, Section 9.4. For Lots V39 and V40 we have assumed that these properties were purchased on 27 September 2003 (see Witness Statement of Ronald E. Copher, ¶9).  
[2] The Index, Beginning Month is the FTI Index calculated below during the month the property was purchased.  
[3] FTI Index, Ending Month is the FTI Index calculated below for May 2008.
## FTI's Assumed Monthly Inflation in Real Estate Property Values

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<th>Year</th>
<th>Percentage</th>
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<tr>
<td>2004</td>
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<tr>
<td>2005</td>
<td>3%</td>
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</tr>
<tr>
<td>2007</td>
<td>1%</td>
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<td>2008</td>
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## Index of Property Values Coasted Using FTI's Monthly Property Value Inflation Rates (January 2003 = 100)

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Sources and Notes: