Mr. Larry Spirgel, Assistant Director United States Securities and Exchange Commission 100 F Street, NE Washington, D.C. 20549

RE: Crown Castle International Corp.

Form 10-K for Fiscal Year Ended December 31, 2008

Form 10-Q for Fiscal Quarter Ended March 31, 2009 and June 30, 2009

File No. 001-16441

Dear Mr. Spirgel:

We are responding to your letter dated September 9, 2009, in which you provided comment on the Crown Castle International Corp. ("Company") periodic report on Form 10-K for year ended December 31, 2008 and Form 10-Q for the quarters ended March 31, 2009 and June 30, 2009. For the convenience of the Staff, the Staff's comment is reproduced and is followed by the Company's response.

Staff Comment:

1. We note your response to comment eight from our prior comment letter dated May 5, 2009. We do not believe that the guidance in paragraph B173 of SFAS 141 necessarily applies only to circumstances where the acquired entity is the lessor. This guidance explains that SFAS 141 has changed practice with respect to the valuation of some intangible assets, in particular those that arise from contractual or legal rights. It recognizes that a contract may have value for reasons other than whether the terms are favorable relative to market prices. It appears that in circumstances where there is limited availability of sites on which towers may be constructed within a desirable location, acquired ground leases may have significant value. Please provide us with your analysis of the guidance given these considerations.

Company Response:

Although there is a somewhat limited availability of sites on which towers may be constructed within a desirable location, individual locations are by no means unique. Nonetheless, the Company did consider in its valuation of the customer contracts and related relationship factors such as the (1) critical location of the Company's towers within the wireless carriers network (2) customer cost associated with relocation of its antennas and other equipment to another tower and (3) zoning and other barriers associated with construction of new towers. These considerations are reflected in the economic lives and churn assumptions used in the valuation of the customer contracts and related relationships, the vast majority of which extended for 80 years with minimal churn, well beyond the expiration of all contractual renewal rights under contract (i.e. after 25 to 35 years).

Please also see the Company's response to Staff Comment #2 for justification of the residual value attributed to goodwill after identification of all identifiable tangible and intangible assets, including the intangible assets referred to herein.

Staff Comment:

2. We note your response to comment two from our prior comment letter dated July 1, 2009. Please refer to your response to comment one from your letter dated May 21, 2009 where you state that approximately 75% of the Company's 2008 U.S. site rental revenues, both on a consolidated basis and from the customer contracts acquired in the Global Signal acquisition, were derived from the four largest wireless carriers in the U.S. In light of the fact that there are relatively few customers in your industry, it remains unclear to us why you did not allocate a significantly higher value to your customer contract/relationship intangible asset. In this regard, please describe for us, in detail, each source that contributed to the significant value attributed goodwill, including your assessment of your opportunities for future growth at the time of the acquisition.

Company Response:

The Company paid a purchase price that resulted in goodwill in the Global Signal Merger for two primary reasons: (1) as a strategic measure to ensure that the Company maintained a tower portfolio of a comparable size to its largest competitor and (2) to deliver the control premium necessary to effect the transaction. From a strategic perspective, the Global Signal Merger added approximately 10,750 towers to the Company's portfolio, which nearly doubled the number of U.S. towers the Company owned and brought the Company's number of U.S. towers to a level similar to that of its largest competitor. It is important to note that there were no other available tower portfolios of the size of Global Signal in the U.S.; if the Company's largest competitor would have acquired the Global Signal towers, then our largest competitor would have had approximately three times the number of towers than that of the Company. With regard to the control premium necessary to effect the transaction, the Company paid an approximate 10% premium to the trading price of the target's equity, largely due to the fact that the three largest Global Signal shareholders owned approximately 73% of the Global Signal shares.

The Company had an assumed rate of return on the purchase of Global Signal that was significantly below the Company's normal self-imposed hurdle rate at the time the Global Signal Merger was consummated, primarily because of the two unique factors described in the preceding paragraph. The Company estimated a theoretical value of accepting this lower rate of return by calculating the excess of the total purchase price paid in the Global Signal Merger above the present value of the projected cash flows of Global Signal discounted at a weighted average cost of capital of 10.5%, reflecting the Company's higher self-imposed rates of return. The combined theoretical value that can be ascribed to the reduction in the expected rate of return and control premium is in excess of the goodwill amount recorded by the Company in its allocation of the purchase price for the Global Signal Merger. However, the goodwill amount recorded was limited to the remainder of the purchase price after ascribing value to each of the other identifiable tangible and intangible assets.

Staff Comment:

3. We note your response to comment five from our prior comment letter dated July 1, 2009. It remains unclear to us why each individual tower and the customer contracts related to that tower do not represent the lowest level for which identifiable cash flows are largely independent of other assets and liabilities.

With regard to your analogy to paragraph B45 of SFAS 144, we note that in that case the bus company was contractually required to provide services on each of five separate routes. The Board concluded that the five bus routes would be an appropriate level at which to test for and measure impairment because the entity did not have the option to curtain any one bus route. We do not believe that this analogy applies in your case because a separate contractual obligation exists for each of your towers individually.

You also indicate in your response that you purchase entire tower portfolios, and as a result, you determine the purchase price based upon the aggregate net cash flow for an entire portfolio for sale. We believe that after you complete an acquisition you are required, under paragraph 10 of SFAS 144, to group your long-lived assets for impairment purposes based on the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities.

Please revise, or advise us in more detail.

Company Response:

As noted in the Company's responses in prior letters, the towers represent our customers' "networks" and our customers expect (and in most cases have contracted to ensure that) their networks are not affected by the disposition of towers. The Company is contractually limited in its ability to dispose of towers by various agreements associated with the acquisition or sublease of the vast majority of its towers. Most of the agreements were included with the 8-K filings associated with the Company's various major tower acquisitions or previously filed by the target company. A tower and the related customer contracts are not largely independent of the other towers in a portfolio due in part to the Company's limitations regarding disposal of towers. These limitations on disposal generally only permit dispositions of towers in portfolios, which is consistent with the manner in which towers are traded in the marketplace, and the manner in which substantially all of the Company's towers were acquired, not to mention the manner in which the towers have been operated by the Company thereafter. We believe that consideration of the form of disposition is consistent with Paragraph 7 of SFAS 144, which states that use and eventual disposition of the asset group should be considered in the assessment process related to the recognition and measurement of an impairment loss.

In response to your request in our phone conversation on September 16, 2009 for information regarding certain tower demographics, please note that less than 2.5% of the Company's approximately 22,000 U.S. towers, and approximately 2.3% of the Company's approximately 24,000 total towers, currently have no tenants. The Company continues to pay operating expenses on these towers in anticipation of obtaining tenants on these sites in the future, primarily because of the relevant tower site demographics. In fact, the Company has current visibility to potential tenants on two-thirds of these towers.

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We acknowledge that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filings;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you would like to discuss any of our responses to the comments or if you would like to discuss any other matters, please contact the undersigned at (713) 570-3076. In my absence, please contact Blake Hawk, Executive Vice President and General Counsel at (713) 570-3155.

Sincerely,

/s/ Jay A. Brown

Jay A. Brown

Senior Vice President, Chief Financial Officer and Treasurer

Cc: Robert S. Littlepage