Genesis Lease LTD Form 425 February 25, 2010

Filed by Genesis Lease Limited Pursuant to Rule 425 under the Securities Act of 1933, as amended Subject Company: Genesis Lease Limited Exchange Act Commission File No: 1-33200 The following Fourth Quarter and Year End 2009 Earnings Conference Call investor presentation was made to Genesis Lease Limited shareholders on February 25, 2010, in connection with the Agreement and Plan of Amalgamation, dated as of September 17, 2009, among AerCap Holdings N.V., Genesis Lease Limited and AerCap International Bermuda Limited.