

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Post-Effective Amendment No. 1
to
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

EQUINIX, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State of other jurisdiction of
incorporation or organization)

77-0487526
(I.R.S. Employee
Identification Number)

301 Velocity Way
Foster City, California 94404
(650) 513-7000

(Address, including zip code, and telephone number including area code, of Registrant's principal executive offices)

Brandi G. Morandi
General Counsel and
Corporate Secretary
EQUINIX, INC.
301 Velocity Way
Foster City, California 94404
(650) 513-7000

(Name and address, including zip code, and telephone number, including area code, of agent for service)

Copy to:
Alan Denenberg
1600 El Camino Real
Menlo Park, California 94025
(650) 752-2000

Approximate date of commencement of proposed sale of the securities to the public: Not applicable.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. _____

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. _____

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

DEREGISTRATION OF SECURITIES

This Post-Effective Amendment No. 1 to the Registration Statement on Form S-3, as amended (No. 333-141609), which was declared effective on March 27, 2007, is being filed to deregister, as of the effectiveness of this post-effective amendment, all unsold convertible subordinated notes due 2012, and the shares of common stock issuable upon conversion of such notes, of Equinix, Inc., the registrant, the sale of which was registered under the Registration Statement. The registrant's obligation to keep the Registration Statement effective has expired.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3, and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Foster City, State of California, on October 30, 2009.

EQUINIX, INC.

By /s/ STEPHEN M. SMITH
Name: **Stephen M. Smith**
Title: **President and Chief Executive Officer**

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|--|---|------------------|
| /s/ STEPHEN M. SMITH Stephen M. Smith | President and Chief Executive Officer (Principal Executive Officer) | October 30, 2009 |
| /s/ KEITH D. TAYLOR Keith D. Taylor | Chief Financial Officer (Principal Financial and Accounting Officer) | October 30, 2009 |
| /s/ PETER F. VAN CAMP Peter F. Van Camp | Executive Chair | October 30, 2009 |
| * Steven T. Clontz | Director | October 30, 2009 |
| * Steven P. Eng | Director | October 30, 2009 |
| * Gary F. Hromadko | Director | October 30, 2009 |
| * Scott G. Kriens | Director | October 30, 2009 |
| * Irving F. Lyons, III | Director | October 30, 2009 |
| * Christopher B. Paisley | Director | |
| By: /s/ PETER F. VAN CAMP Peter F. Van Camp Attorney-in-Fact | | |