UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

EQUINIX, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) 77-0487526 (I.R.S. Employer Identification Number)

Foster Čity, ČA 94404 (650) 513-7000 (Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices) Brandi Galvin Morandi

301 Velocity Way, Fifth Floor

General Counsel and Assistant Secretary Equinix, Inc. 301 Velocity Way, Fifth Floor Foster City, CA 94404 (650) 513-7000

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

The Commission is requested to send copies of all communications to:

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| Approximate date of commencement of proposed sale to the public: | As soon as practicable after this Registration Statement becomes effective. |
|--|---|
| | |

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 delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

CALCULATION OF REGISTRATION FEE

| | Amount | Proposed Maximum | Proposed Maximum | |
|---|---------------------|-----------------------------------|---------------------|----------------------------------|
| Title of each Class of Securities to be Registered | to be Registered | Offering Price per Security(1) | | Amount of Registration Fee(2) |
| Common Stock, par value \$.001 | 3,091,243 | \$ 40.43 | \$ 124,978,954.49 | \$ 14,710.02 |

- (1) The price of \$40.43 per share, which was the average of the high and low prices of the Common Stock on The Nasdaq National Market on October 5, 2005, is set forth solely for the purpose of calculating the registration fee in accordance with Rule 457(c) of the Securities Act of 1933
- (2) Pursuant to Rule 429 promulgated under the Securities Act of 1933, the amount of registration fees does not include the \$874.47 previously paid to the Commission relating to 2,953,353 shares of Common Stock previously registered pursuant to Registration Statement No. 333-104077 and \$18,524.32 previously paid to the Commission relating to 4,144,216 shares of Common Stock previously registered pursuant to Registration Statement No. 333-10224. All of the foregoing shares remain unsold at the close of business on October 5, 2005.

This Registration Statement, which is a new Registration Statement, also constitutes Post-Effective Amendment No. 1 to Registration Statement No. 333-104077, which was declared effective on June 27, 2003, and to Registration Statement No. 333-120224, which was declared effective on December 22, 2004. Such Post-Effective Amendment shall hereafter become effective concurrently with the effectiveness of this Registration Statement and in accordance with Section 8(c) of the Securities Act of 1933. Pursuant to Rule 429 under the Securities Act of 1933, the prospectus filed as part of this Registration Statement also constitutes a prospectus for Registration Statement No. 333-104077 and Registration Statement No. 333-104077 and Registration Statement No. 333-104077 and the 4,144,216 shares of Common Stock remaining unsold from Registration Statement No. 333-120224 will be combined with the 3,091,243 shares of Common Stock to be registered pursuant to this Registration Statement to enable an aggregate of 10,188,812 shares of Common Stock to be offered pursuant the combined prospectus.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this registration statement and accompanying prospectus is not complete and may be changed. The selling stockholder may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This registration statement and accompanying prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated October 6, 2005

10,188,812 Shares



Common Stock

INVESTING IN OUR COMMON STOCK INVOLVES CERTAIN RISKS. SEE "RISK FACTORS" STARTING ON PAGE 2.

This prospectus relates to 10,188,812 shares of our common stock that may be offered for sale or otherwise transferred from time to time by the selling stockholder, i-STT Investments Pte. Ltd., a subsidiary of STT Communications Ltd. The selling stockholder is our single largest stockholder and beneficially owns approximately 37% of our common stock as of the date of this prospectus. The shares being offered by the selling stockholder consist of (i) 7,114,630 currently outstanding shares of common stock, (ii) 1,868,667 shares of common stock issuable by Equinix upon conversion of outstanding shares of series A preferred stock, (iii) 239,841 shares of common stock issuable by Equinix upon conversion of outstanding series A-1 convertible secured notes (assuming conversion on October 30, 2005 of the aggregate principal amount, together with all accrued interest thereon, outstanding on such date) and (iv) 965,674 shares of common stock issuable by Equinix upon exercise of an outstanding series A-1 preferred stock warrant and conversion of the series A preferred stock issuable thereunder into shares of common stock. Equinix will not receive any proceeds from the sale of its common stock by the selling stockholder.

The securities being offered by this prospectus may be sold (directly, or through agents or dealers designated from time to time) in a single transaction or from time to time on terms to be determined at the time of sale. The prices at which these securities may be sold will be determined by the prevailing market price for the shares or negotiated transactions

Our common stock is quoted on The Nasdaq National Market under the symbol "EQIX." On October 5, 2005, the last reported sale price of the common stock on The Nasdaq National Market was \$39.73 per share.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is

, 2005

TABLE OF CONTENTS

| | Page |
|-------------------------------------|--------------|
| | _ |
| ABOUT THIS PROSPECTUS | 1 |
| RISK FACTORS | 2 |
| FORWARD-LOOKING STATEMENTS | 14 |
| <u>USE OF PROCEEDS</u> | 14 |
| SELLING STOCKHOLDER | 15 |
| PLAN OF DISTRIBUTION | 16 |
| <u>LEGAL MATTERS</u> | 17 |
| EXPERTS | 17 |
| WHERE YOU CAN FIND MORE INFORMATION | 17 |
| INCORPORATION BY REFERENCE | 17 |
| | |

i

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we are filing with the Securities and Exchange Commission (the "SEC") utilizing a "shelf" registration process. This prospectus provides you with a general description of the securities that the selling stockholder may offer from time to time. This prospectus does not contain all of the information included in the registration statement. You should read this prospectus together with the additional information described in the section "Where You Can Find More Information" on page 17.

You should rely only on the information provided in this prospectus and in any prospectus supplement, including the information incorporated by reference.

We have not authorized anyone to provide you with different information. The selling stockholder is not offering securities in any jurisdiction where the offer is not permitted. You should not assume that the information in this prospectus, or any prospectus supplement, is accurate at any date other than the date indicated on the cover page of these documents.

Unless the context otherwise requires, the terms "we," "our," "us," "the company" and "Equinix" refer to Equinix, Inc., a Delaware corporation.

RISK FACTORS

In addition to the other information in this report, the following risk factors should be considered carefully in evaluating our business, us and the sale of shares of our common stock contemplated hereby:

Risks Related to Our Business

We have incurred substantial losses in the past and may continue to incur additional losses in the future.

Although we have generated cash from operations since the quarter ended September 30, 2003, for the years ended December 31, 2004 and 2003, we incurred net losses of \$68.6 million and \$84.2 million, respectively. For the six months ended June 30, 2005, we incurred a net loss of \$9.2 million. In light of new rules regarding the expensing of stock-based compensation, we do not expect to become net income positive for the foreseeable future. In addition, if we acquire or build-out additional IBX centers, we will have additional depreciation and amortization expenses that will negatively impact our ability to achieve and sustain profitability. Even without giving effect to the expensing of stock-based compensation, there can be no guarantee that we will become profitable, and we may continue to incur additional losses. Even if we achieve profitability, given the competitive and evolving nature of the industry in which we operate, we may not be able to sustain or increase profitability on a quarterly or annual basis.

We expect our operating results to fluctuate.

We have experienced fluctuations in our results of operations on a quarterly and annual basis. The fluctuations in our operating results may cause the market price of our common stock to decline. We expect to experience significant fluctuations in our operating results in the foreseeable future due to a variety of factors, including:

- · financing or other expenses related to the acquisition, purchase or construction of additional IBX centers;
- mandatory expensing of employee stock-based compensation, including restricted shares;
- · demand for space, power and services at our IBX centers;
- · changes in general economic conditions and specific market conditions in the telecommunications and Internet industries;
- · costs associated with the write-off of unimproved or underutilized property;
- · the provision of customer discounts and credits;
- the mix of current and proposed products and services and the gross margins associated with our products and services;
- · the timing required for new and future centers to become fully utilized;
- · competition in the markets in which we operate;
- conditions related to international operations;
- the timing and magnitude of operating expenses, including taxes, capital expenditures and expenses related to the expansion of sales, marketing, operations and acquisitions, if any, of complementary businesses and assets; and
- the cost and availability of adequate public utilities, including power.

Any of the foregoing factors, or other factors discussed elsewhere in this prospectus or the documents incorporated herein by reference, could have a material adverse effect on our business, results of operations and financial condition. Although we have experienced growth in revenues in recent quarters, this growth rate is not

necessarily indicative of future operating results. It is possible that we may never generate net income on a quarterly or annual basis. In addition, a relatively large portion of our expenses are fixed in the short-term, particularly with respect to lease and personnel expenses, depreciation and amortization, and interest expenses. Therefore, our results of operations are particularly sensitive to fluctuations in revenues. As such, comparisons to prior reporting periods should not be relied upon as indications of our future performance. In addition, our operating results in one or more future quarters may fail to meet the expectations of securities analysts or investors. If this occurs, we could experience an immediate and significant decline in the trading price of our stock.

If the market price of our stock continues to be highly volatile, the value of an investment in our common stock may decline.

Since January 1, 2005, our common stock has traded between \$31.39 and \$46.39 per share. The market price of the shares of our common stock has been and may continue to be highly volatile. Actual sales, or the market's perception with respect to possible sales, of a substantial number of shares of our common stock by STT Communications Ltd. ("STT Communications"), our principal stockholder, or others within a narrow period of time could cause our stock price to fall. Announcements by us or others may also have a significant impact on the market price of our common stock. These announcements may include:

- our operating results;
- new issuances of equity, debt or convertible debt;
- developments in our relationships with corporate customers;
- · announcements by our customers or competitors;
- · announcements with respect to the intentions of STT Communications, our principal stockholder, with respect to its holdings of our common stock;
- · changes in regulatory policy or interpretation;
- · changes in the ratings of our stock by securities analysts;
- purchase or development of real estate and/or additional IBX centers;
- · market conditions for telecommunications stocks in general; and
- · general economic and market conditions.

The stock market has from time to time experienced extreme price and volume fluctuations, which have particularly affected the market prices for emerging telecommunications companies, and which have often been unrelated to their operating performance. These broad market fluctuations may adversely affect the market price of our common stock.

Our inability to use our tax net operating losses will cause us to pay taxes at an earlier date and in greater amounts which may harm our operating results.

We believe that our ability to use our pre-2003 tax net operating losses, or NOLs, in any taxable year is subject to limitation under Section 382 of the United States Internal Revenue Code of 1986, as amended (the "Code"), as a result of the significant change in the ownership of our stock that resulted from our combination with i-STT Investments Pte. Ltd., ("i-STT") and Pihana Pacific, Inc. in 2002, which we call the combination. We expect that a significant portion of our NOLs accrued prior to December 31, 2002 will expire unused as a result of this limitation. In addition to the limitations on NOL carryforward utilization described above, we believe that Section 382 of the Code will also significantly limit our ability to use the depreciation and amortization on our assets, as well as certain losses on the sale of our assets, to the extent that such depreciation, amortization and losses reflect unrealized depreciation that was inherent in such assets as of the date of the combination. These limitations will cause us to pay taxes at an earlier date and in greater amounts than would occur absent such limitations.

We are exposed to potential risks from recent legislation requiring companies to evaluate controls under Section 404 of the Sarbanes-Oxley Act of 2002.

Although we received an unqualified opinion regarding the effectiveness of our internal controls over financial reporting as of December 31, 2004, in the course of our ongoing evaluation of our internal controls over financing reporting, we have identified certain areas which we would like to improve and are in the process of evaluating and designing enhanced processes and controls to address these areas identified during our evaluation, none of which we believe constitutes or will constitute a material change. However, we cannot be certain that our efforts will be effective or sufficient for us, or our independent registered public accounting firm, to issue unqualified reports in the future, especially as our business continues to grow and evolve.

It may be difficult to design and implement effective financial controls for combined operations, and differences in existing controls of any acquired businesses may result in weaknesses that require remediation when the financial controls and reporting are combined.

Our ability to manage our operations and growth will require us to improve our operational, financial and management controls, as well as our internal reporting systems and controls. We may not be able to implement improvements to our internal reporting systems and controls in an efficient and timely manner and may discover deficiencies in existing systems and controls.

If we cannot effectively manage international operations, our revenues may not increase and our business and results of operations would be harmed.

For the years ended December 31, 2004 and 2003, we recognized 13% and 15%, respectively, of our revenues outside North America. For the six months ended June 30, 2005, we recognized 14% of our revenues outside North America. We anticipate that for the foreseeable future, a significant part of the company's revenues will be derived from sources outside North America.

To date, the neutrality of our IBX centers and the variety of networks available to our customers has often been a competitive advantage for us. In certain of our acquired IBX centers, in Singapore in particular, the limited number of carriers available reduces that advantage. As a result, we may need to adapt our key revenue-generating services and pricing to be competitive in that market.

We may experience gains and losses resulting from fluctuations in foreign currency exchange rates. To date, the majority of our revenues and costs have been denominated in U.S. dollars; however, the majority of revenues and costs in our international operations have been denominated in Singapore dollars, Japanese yen and Australia and Hong Kong dollars. Although we have and may continue to undertake foreign exchange hedging transactions to reduce foreign currency transaction exposure, we do not currently intend to eliminate all foreign currency transaction exposure. Where our prices are denominated in U.S. dollars, our sales could be adversely affected by declines in foreign currencies relative to the U.S. dollar, thereby making our products more expensive in local currencies. Our international operations are generally subject to a number of additional risks, including:

- costs of customizing IBX centers for foreign countries;
- · protectionist laws and business practices favoring local competition;
- · greater difficulty or delay in accounts receivable collection;
- difficulties in staffing and managing foreign operations;
- · political and economic instability;
- · ability to obtain, transfer, or maintain licenses required by governmental entities with respect to the combined business; and
- · compliance with evolving governmental regulation with which we have little experience.

We are continuing to invest in our expansion efforts but may not have sufficient customer demand in the future to realize expected returns on these investments.

We are considering the acquisition or lease of additional properties, including construction of new IBX centers. We will be required to commit substantial operational and financial resources to these IBX centers, generally 12-18 months in advance of securing customer contracts, and we may not have sufficient customer demand in those cities to support these centers once they are built. In addition, unanticipated technological changes could affect customer requirements for data centers and we may not have built such requirements into our new IBX centers. Any of these contingencies, if they were to occur, could make it difficult for us to realize expected or reasonable returns on these investments.

We may make acquisitions, which pose integration and other risks that could harm our business.

We have recently acquired several new IBX centers, and we may seek to acquire additional IBX centers, real estate for development of new IBX centers, complementary businesses, products, services and technologies. As a result of these acquisitions, we may be required to incur additional debt and expenditures and issue additional shares of our common stock to pay for the acquired business, product, service or technology, which will dilute our existing stockholders' ownership interest and may delay, or prevent, our profitability. These acquisitions may also expose us to risks such as:

- the possibility that we may not be able to successfully integrate acquired businesses or achieve the level of quality in such businesses to which our customers are accustomed:
- the possibility that additional capital expenditures may be required;
- · the possibility that senior management may be required to spend considerable time negotiating agreements and integrating acquired businesses;
- · the possible loss or reduction in value of acquired businesses;
- · the possibility that our customers may not accept either the existing equipment infrastructure or the "look-and-feel" of a new or different IBX center;
- · the possibility that carriers may find it cost-prohibitive or impractical to bring fiber and networks into a new IBX center;
- the possibility of preexisting undisclosed liabilities regarding the property or IBX center, including but not limited to environmental or asbestos liability, of which our insurance may be insufficient or for which we may be unable to secure insurance coverage; and
- the possibility that the concentration of our IBX centers in the Silicon Valley may increase our exposure to seismic activity and that these facilities may be located on or near the fault zones for which we may not have adequate levels of earthquake insurance.

We cannot assure you that the price for any future acquisitions will be similar to prior IBX acquisitions. In fact, we expect acquisition costs, including capital expenditures required to build or render new IBX centers operational, to increase in the future. If our revenue does not keep pace with these potential acquisition and expansion costs, we may not be able to maintain our current or expected margins as we absorb these additional expenses. There is no assurance we would successfully overcome these risks or any other problems encountered with these acquisitions.

The increased use of high power density equipment may limit our ability to fully utilize our IBX centers.

Customers are increasing their use of high density electrical power equipment, such as blade servers, in our IBX centers which has significantly increased the demand for power on a per cabinet basis. Because most of our centers were typically built several years ago, the current demand for electrical power exceeds our designed capacity in these facilities. As electrical power, not space, is typically the limiting factor in our data centers, our ability to fully utilize our centers may be limited in these facilities.

STT Communications holds a substantial portion of our stock and has significant influence over matters requiring stockholder consent.

As of August 31, 2005, STT Communications Ltd, through its subsidiary, i-STT, beneficially owned approximately 37% of our outstanding common stock. In addition, STT Communications is not prohibited from buying shares of our stock in public or private transactions. Because of the diffuse ownership of our stock, STT Communications has significant influence over matters requiring our stockholder approval. As a result, STT Communications is able to exercise significant control over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, which could prevent or delay a third party from acquiring or merging with us. STT Communications also has a right of first offer, which entitles them to participate in an offering of our equity securities, or securities convertible into our equity securities, to maintain their ownership percentage prior to such offering. STT Communications periodically assesses its strategic goals and objectives. Based on its current assessment, it has determined that its holdings of our common stock is no longer a core asset. Therefore, STT Communications does not intend to play a strategic role in Equinix going forward. As a result, STT Communications has asked and we have agreed to assist STT Communications with the orderly divestiture of its holdings of our common stock. If a single holder purchases all or most of STT Communications' shares or if STT Communications retains a substantial portion of its holdings, we could continue to be subject to these risks.

Our business could be harmed by prolonged electrical power outages or shortages, increased costs of energy or general availability of electrical resources.

Our IBX centers are susceptible to regional costs of power, electrical power shortages, planned or unplanned power outages such as those that occurred in California during 2001 and in the U.S. Northeast in 2003, or natural disasters such as the tornados in the U.S. East Coast in 2004, and limitations, especially internationally, on availability of adequate power resources. Power outages could harm our customers and our business. We attempt to limit exposure to system downtime by using backup generators and power supplies, however we may not be able to limit our exposure entirely even with these protections in place, as was the case with a power outage we experienced in our Chicago IBX center in June 2005. In addition, the overall power shortage in California has increased the cost of energy, which we may not be able to pass on to our customers.

In each of our markets, we rely on third parties to provide a sufficient amount of power for current and future customers. At the same time, power and cooling requirements are growing on a per unit basis. As a result, some customers are consuming an increasing amount of power per cabinet. We generally do not control the amount of electric power our customers draw from their installed circuits. This means that we could face power limitations in our centers. This could have a negative impact on the effective available capacity of a given center and limit our ability to grow our business, which could have a negative impact on our financial performance, operating results and cash flows

Increases in property taxes could adversely affect our business, financial condition and results of operations.

Our IBX centers are subject to state and local real property taxes. The state and local real property taxes on our IBX centers may increase as property tax rates change and as the value of the properties are assessed or reassessed by taxing authorities. Many state and local governments are facing budget deficits, which may cause them to increase assessments or taxes. If property taxes increase, our business, financial condition and operating results could be adversely affected.

We may be forced to take steps, and may be prevented from pursuing certain business opportunities, to ensure compliance with certain tax-related covenants agreed to by us in the combination agreement.

We agreed to a covenant in the combination agreement (which we refer to as the FIRPTA covenant) that we would use all commercially reasonable efforts to ensure that at all times from and after the closing of the

combination, none of our capital stock issued to STT Communications would constitute "United States real property interests" within the meaning of Section 897(c) of the Code. Under Section 897(c) of the Code, our capital stock issued to STT Communications would generally constitute "United States real property interests" at such point in time that the fair market value of the "United States real property interests" owned by us equals or exceeds 50% of the sum of the aggregate fair market values of (a) our "United States real property interests," (b) our interests in real property located outside the U.S., and (c) any other assets held by us which are used or held for use in our trade or business. Currently, the fair market value of our "United States real property interests" is significantly below the 50% threshold. However, in order to assure compliance with the FIRPTA covenant, we may be limited with respect to the business opportunities we may pursue, particularly if the business opportunities would increase the amounts of "United States real property interests" owned by us or decrease the amount of other assets owned by us. In addition, we may take proactive steps to avoid our capital stock being deemed "United States real property interest," including, but not limited to, (a) a sale-leaseback transaction with respect to some or all of our real property interests, or (b) the formation of a holding company organized under the laws of the Republic of Singapore which would issue shares of its capital stock in exchange for all of our outstanding stock (this reorganization would require the submission of that transaction to our stockholders for their approval and the consummation of that exchange). We will take these actions only if such actions are commercially reasonable for Equinix and our stockholders. We have entered into an agreement with STT Communications and its affiliate pursuant to which, and effective only upon the closing of any offering of our common stock under this Registration Statement, we will

If regulated materials are discovered at facilities leased or owned by us, we may be required to remove or clean-up such materials, the cost of which could be substantial.

We are subject to various environmental and health and safety laws and regulations, including those relating to the generation, storage, handling and disposal of hazardous substances and wastes. Certain of these laws and regulations also impose joint and several liability, without regard to fault, for investigation and cleanup costs on current and former owners and operators of real property and persons who have disposed of or released hazardous substances into the environment. Our operations involve the use of hazardous substances and materials such as petroleum fuel for emergency generators, as well as batteries, cleaning solutions and other materials. In addition, we lease, own or operate real property at which hazardous substances and regulated materials have been used in the past. At some of these locations, hazardous substances or regulated materials are known to be present in soil or groundwater and there may be additional unknown hazardous substances or regulated materials present at sites we own, operate or lease. To the extent any hazardous substances or any other substance or material must be cleaned up or removed from such property, we may be responsible under applicable laws, regulations or leases for the removal or cleanup of such substances or materials, the cost of which could be substantial. In addition, noncompliance with existing, or adoption of more stringent, environmental or health and safety laws and regulations or the discovery of previously unknown contamination could require us to incur costs or become the basis of new or increased liabilities that could be material.

Our non-U.S. customers include numerous related parties of i-STT.

In the past, a substantial portion of i-STT's financing, as well as its revenues, has been derived from its affiliates, including STT Communications. We continue to have contractual and other business relationships and may engage in material transactions with affiliates of STT Communications. Circumstances may arise in which the interests of STT Communications' affiliates may conflict with the interests of our other stockholders. In addition, entities affiliated with STT Communications make investments in various companies; they have invested in the past, and may invest in the future, in entities that compete with us. In the context of negotiating commercial arrangements with affiliates, conflicts of interest have arisen in the past and may arise, in this or other contexts, in the future. We cannot assure you that any conflicts of interest will be resolved in our favor.

A significant number of shares of our capital stock have been issued during 2002, 2003, 2004 and 2005 and may be sold in the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

We issued a large number of shares of our capital stock to the former Pihana stockholders, STT Communications, and holders of our senior notes in connection with the combination, financing and senior note exchange, to Crosslink Capital, Inc. and its affiliates (collectively, "Crosslink") in connection with Crosslink's purchase of our Series A-2 Convertible Secured Notes, and to the public and STT Communications in connection with our follow-on equity offering in late 2003. The shares of common stock issued in the senior note exchange are currently freely tradable. The shares of common stock issued in connection with the combination have been registered for resale as of June 30, 2003, the shares of common stock issued upon exercise of the warrants issued in connection with the Crosslink financing have been registered for resale as of September 22, 2003 and the shares of common stock issued upon conversion of the convertible secured notes issued in the Crosslink financing have been registered for resale as of July 30, 2004. The shares sold to the public and STT Communications in connection with our follow-on equity offering in November 2003 are freely tradable by the public, subject, in the case of STT Communications, to compliance with Rule 144 resale restrictions applicable to affiliates. In February 2004, we issued \$86,250,000 in aggregate principal amount of 2.5% Convertible Subordinated Debentures due 2024. These debentures are convertible into 2,183,548 shares of our common stock. Holders of these debentures may convert their debentures into shares of our common stock during any calendar quarter if the sale price of our common stock is greater than or equal to 120% of the conversion price per share of our common stock for 20 out of any 30 consecutive trading days or if the trading price of our debentures falls below specified prices. All of these shares are eligible for resale pursuant to a registration statement that became effective on July 30, 2004. In January 2005, 95% of STT Communications' outstanding convertible secured notes and associated interest were converted into shares of our non-voting series A-1 preferred stock. In February 2005, STT Communications elected to convert all of the shares of series A-1 preferred stock into 4.1 million shares of our common stock. The shares of common stock are eligible for resale pursuant to a registration statement that became effective on December 22, 2004. Sales of a substantial number of shares of our common stock by these parties could cause our stock price to fall. In addition, the issuance of the additional shares of our common stock as a result of these transactions will reduce our earnings per share, if any. This dilution could reduce the market price of

An offering of these shares and the related transactions may affect the market for our common stock for some period of time.

The shares being offered represent a substantial portion of our outstanding common stock and will substantially increase the number of publicly traded shares of our common stock. No prediction can be made about the effect, if any, of this offering on the market price for our common stock. Sales or distributions of substantial amounts of our common stock, or the perception that such sales or distributions may occur, could adversely affect prevailing market prices for our common stock.

We depend on a number of third parties to provide Internet connectivity to our IBX centers; if connectivity is interrupted or terminated, our operating results and cash flow could be materially adversely affected.

The presence of diverse telecommunications carriers' fiber networks in our IBX centers is critical to our ability to attract new customers. We believe that the availability of carrier capacity will directly affect our ability to achieve our projected results. Our new IBX centers require construction and operation of a sophisticated redundant fiber network. Any hardware or fiber failures on this network may result in significant loss of connectivity to our new IBX expansion centers. This could affect our ability to attract new customers to these IBX centers or retain existing customers.

We are not a telecommunications carrier, and as such we rely on third parties to provide our customers with carrier services. We rely primarily on revenue opportunities from the telecommunications carriers' customers to

encourage them to invest the capital and operating resources required to build facilities from their locations to our IBX centers. Carriers will likely evaluate the revenue opportunity of an IBX center based on the assumption that the environment will be highly competitive. We cannot assure you that any carrier will elect to offer its services within our IBX centers or that once a carrier has decided to provide Internet connectivity to our IBX centers that it will continue to do so for any period of time.

The construction required to connect multiple carrier facilities to our IBX centers is complex and involves factors outside of our control, including regulatory processes and the availability of construction resources. If the establishment of highly diverse Internet connectivity to our IBX centers does not occur or is materially delayed or is discontinued, our operating results and cash flow will be adversely affected. Further, many carriers are experiencing business difficulties or announcing consolidations. As a result, some carriers may be forced to downsize or terminate connectivity within our IBX centers, which could have an adverse effect on our operating results.

Any failure of our physical infrastructure or services could lead to significant costs and disruptions that could reduce our revenue and harm our business reputation and financial results.

Our business depends on providing customers with highly reliable service. We must protect our customers' IBX infrastructure and their equipment located in our IBX centers. We continue to acquire IBX centers not built by us. If these IBX centers and their infrastructure assets are not in the condition we believe them to be in, we may be required to incur substantial additional costs to repair or upgrade the facilities. The services we provide in each of our IBX centers are subject to failure resulting from numerous factors, including:

- human error;
- physical or electronic security breaches;
- fire, earthquake, flood and other natural disasters;
- · water damage;
- · fiber cuts;
- power loss:
- · sabotage and vandalism; and
- failure of business partners who provide our resale products.

Problems at one or more of our IBX centers, whether or not within our control, could result in service interruptions or significant equipment damage. We have service level commitment obligations to certain of our customers, including our significant customers. As a result, service interruptions or significant equipment damage in our IBX centers could result in difficulty maintaining service level commitments to these customers. For example, in June 2005, we recorded \$360,000 in service level credits to various customers associated with a power outage that affected our Chicago IBX center. If we incur significant financial commitments to our customers in connection with a loss of power, or our failure to meet other service level commitment obligations, our liability insurance and revenue reserves may not be adequate. In addition, any loss of services, equipment damage or inability to meet our service level commitment obligations could reduce the confidence of our customers and could consequently impair our ability to obtain and retain customers, which would adversely affect both our ability to generate revenues and our operating results.

Furthermore, we are dependent upon Internet service providers, telecommunications carriers and other website operators in the U.S., Asia and elsewhere, some of which have experienced significant system failures and electrical outages in the past. Users of our services may in the future experience difficulties due to system failures unrelated to our systems and services. If for any reason, these providers fail to provide the required services, our business, financial condition and results of operations could be materially adversely impacted.

A portion of the managed services business we acquired in the combination involves the processing and storage of confidential customer information. Inappropriate use of those services could jeopardize the security of customers' confidential information causing losses of data or financially impacting us or our customers and subjecting us to the risk of lawsuits. Efforts to alleviate problems caused by computer viruses or other inappropriate uses or security breaches may lead to interruptions, delays or cessation of our managed services.

There is no known prevention or defense against denial of service attacks. During a prolonged denial of service attack, Internet service may not be available for several hours, thus negatively impacting hosted customers' on-line business transactions. Affected customers might file claims against us under such circumstances. Our property and liability insurance may not be adequate to cover these customer claims.

We resell products and services of third parties that may require us to pay for such products and services even if our customers fail to pay us for the products and services, which may have a negative impact on our operating results.

In order to provide resale services such as bandwidth, managed services and other network management services, we contract with third party service providers. These services require us to enter into fixed term contracts for services with third party suppliers of products and services. If we experience the loss of a customer who has purchased a resale product, we will remain obligated to continue to pay our suppliers for the term of the underlying contracts. The payment of these obligations without a corresponding payment from customers will reduce our financial resources and may have a material adverse affect on our financial performance and operating results.

IBM accounts for a significant portion of our revenues, and the loss of IBM as a customer could significantly harm our business, financial condition and results of operations.

For the six months ended June 30, 2005 and 2004, IBM accounted for 12% and 13%, respectively, of our revenues. We expect that IBM will continue to account for a significant portion of our revenue for the foreseeable future. Although the term of our IBM contract runs through 2009, IBM currently has the right to reduce its commitment to us pursuant to the terms and requirements of its customer agreement. If we lose IBM as a customer or if it significantly reduces the level of its commitment, our business, financial condition and results of operations could be adversely affected.

We may not be able to compete successfully against current and future competitors.

Our IBX centers and other products and services must be able to differentiate themselves from those of other providers of space and services for telecommunications companies, web hosting companies and other colocation providers. In addition to competing with neutral colocation providers, we must compete with traditional colocation providers, including local phone companies, long distance phone companies, Internet service providers and web hosting facilities. Similarly, with respect to our other products and services, including managed services, bandwidth services and security services, we must compete with more established providers of similar services. Most of these companies have longer operating histories and significantly greater financial, technical, marketing and other resources than us.

Because of their greater financial resources, some of our competitors have the ability to adopt aggressive pricing policies, especially if they have been able to restructure their debt or other obligations. As a result, in the future, we may suffer from pricing pressure that would adversely affect our ability to generate revenues and adversely affect our operating results. In addition, these competitors could offer colocation on neutral terms, and may start doing so in the same metropolitan areas in which we have IBX centers. Some of these competitors may also provide our target customers with additional benefits, including bundled communication services, and may do so in a manner that is more attractive to our potential customers than obtaining space in our IBX centers. If these competitors were able to adopt aggressive pricing policies together with offering colocation space, our ability to generate revenues would be materially adversely affected.

We may also face competition from persons seeking to replicate our IBX concept by building new centers or converting existing centers that some of our competitors are in the process of divesting. We may experience competition from our landlords in this regard. Rather than leasing available space in our buildings to large single tenants, they may decide to convert the space instead to smaller square foot units designed for multi-tenant colocation use. Landlords may enjoy a cost effective advantage in providing services similar to those provided by our IBXs, and this could also reduce the amount of space available to us for expansion in the future. Competitors may operate more successfully or form alliances to acquire significant market share. Furthermore, enterprises that have already invested substantial resources in outsourcing arrangements may be reluctant or slow to replace, limit or compete with their existing systems by becoming a customer. In addition, other companies may be able to attract the same potential customers that we are targeting. Once customers are located in competitors' facilities, it may be extremely difficult to convince them to relocate to our IBX centers.

Because we depend on the retention of key employees, failure to maintain stock option incentives may be disruptive to our business.

Our success in retaining key employees and discouraging them from moving to a competitor is an important factor in our ability to remain competitive. As is common in our industry, our employees are typically compensated through grants of stock options in addition to their regular salaries. We occasionally grant new stock options to employees as an incentive to remain with the company. To the extent we are unable to adequately maintain these stock option incentives due to stock option expensing or otherwise and should employees decide to leave the company, this may be disruptive to our business and may adversely affect our business, financial condition and results of operations.

Because we depend on the development and growth of a balanced customer base, failure to attract and retain this base of customers could harm our business and operating results.

Our ability to maximize revenues depends on our ability to develop and grow a balanced customer base, consisting of a variety of companies, including network service providers, site and performance management companies, and enterprise and content companies. The more balanced the customer base within each IBX center, the better we will be able to generate significant interconnection revenues, which in turn increases our overall revenues. Our ability to attract customers to our IBX centers will depend on a variety of factors, including the presence of multiple carriers, the mix of products and services offered by us, the overall mix of customers, the IBX center's operating reliability and security and our ability to effectively market our services. In addition, some of our customers are, and are likely to continue to be, Internet companies that face many competitive pressures and that may not ultimately be successful. If these customers do not succeed, they will not continue to use the IBX centers. This may be disruptive to our business and may adversely affect our business, financial condition and results of operations.

Our products and services have a long sales cycle that may materially adversely affect our business, financial condition and results of operations.

A customer's decision to license cabinet space in one of our IBX centers and to purchase additional services typically involves a significant commitment of resources. In addition, some customers will be reluctant to commit to locating in our IBX centers until they are confident that the IBX center has adequate carrier connections. As a result, we have a long sales cycle. Furthermore, we may expend significant time and resources in pursuing a particular sale or customer that does not result in revenue. Delays due to the length of our sales cycle may materially adversely affect our business, financial condition and results of operations.

We are subject to securities class action litigation, which may harm our business and results of operations.

In the past, securities class action litigation has often been brought against a company following periods of volatility in the market price of its securities. During the quarter ended September 30, 2001, putative stockholder

class action lawsuits were filed against us, a number of our officers and directors, and several investment banks that were underwriters of our initial public offering. The suits allege that the underwriter defendants agreed to allocate stock in our initial public offering to certain investors in exchange for excessive and undisclosed commissions and agreements by those investors to make additional purchases in the aftermarket at pre-determined prices. Plaintiffs allege that the prospectus for our initial public offering was false and misleading and in violation of the securities laws because it did not disclose these arrangements. In July 2003, a special litigation committee of our board of directors agreed to participate in a settlement with the plaintiffs. The settlement agreement, as amended, is subject to court approval and sufficient participation by defendants in similar actions. If the proposed settlement, as amended, is not approved by the court or a sufficient number of defendants do not participate in the settlement, the defense of this litigation may continue and therefore increase our expenses and divert management's attention and resources. An adverse outcome in this litigation could seriously harm our business and results of operations. In addition, we may, in the future, be subject to other securities class action or similar litigation.

Risks Related to Our Industry

If the use of the Internet and electronic business does not grow, our revenues may not grow.

Acceptance and use of the Internet may not continue to develop at historical rates and a sufficiently broad base of consumers may not adopt or continue to use the Internet and other online services as a medium of commerce. Demand for Internet services and products are subject to a high level of uncertainty and are subject to significant pricing pressure, especially in Asia-Pacific. As a result, we cannot be certain that a viable market for our IBX centers will materialize. If the market for our IBX centers grows more slowly than we currently anticipate, our revenues may not grow and our operating results could suffer.

Government regulation may adversely affect the use of the Internet and our business.

Various laws and governmental regulations governing Internet related services, related communications services and information technologies, and electronic commerce remain largely unsettled, even in areas where there has been some legislative action. This is true both in the U.S. and the various foreign countries in which we operate. It may take years to determine whether and how existing laws, such as those governing intellectual property, privacy, libel, telecommunications services, and taxation, apply to the Internet and to related services such as ours. We have limited experience with such international regulatory issues and substantial resources may be required to comply with regulations or bring any non-compliant business practices into compliance with such regulations. In addition, the development of the market for online commerce and the displacement of traditional telephony service by the Internet and related communications services may prompt an increased call for more stringent consumer protection laws or other regulation both in the U.S. and abroad that may impose additional burdens on companies conducting business online and their service providers. The compliance with, adoption or modification of, laws or regulations relating to the Internet, or interpretations of existing laws, could have a material adverse effect on our business, financial condition and results of operation.

Industry consolidation may have a negative impact on our business model.

The telecommunications industry is currently undergoing consolidation. As customers combine businesses, they may require less colocation space, and there may be fewer networks available to choose from. Given the competitive and evolving nature of this industry, further consolidation of our customers and/or our competitors may present a risk to our network neutral business model and have a negative impact on our revenues. In addition, increased utilization levels industry-wide could lead to a reduced amount of attractive expansion opportunities available to us.

Terrorist activity throughout the world and military action to counter terrorism could adversely impact our business.

The September 11, 2001 terrorist attacks in the U.S., the ensuing declaration of war on terrorism and the continued threat of terrorist activity and other acts of war or hostility appear to be having an adverse effect on business, financial and general economic conditions internationally. These effects may, in turn, increase our costs due to the need to provide enhanced security, which would have a material adverse effect on our business and results of operations. These circumstances may also adversely affect our ability to attract and retain customers, our ability to raise capital and the operation and maintenance of our IBX centers. We may not have adequate property and liability insurance to cover catastrophic events or attacks.

FORWARD-LOOKING STATEMENTS

This prospectus, including the documents incorporated by reference herein, contains forward-looking statements that involve risks and uncertainties. Statements contained in this prospectus or incorporated by reference herein that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the 1934 Act, including statements regarding our financial outlook, competitive position, business strategies, expectations, beliefs, intentions or other strategies regarding the future. All forward-looking statements included or incorporated by reference in this document are based on information available to us on the date hereof, and we assume no obligation to update any such forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including, but not limited to, those set forth in this prospectus under "Risk Factors." You should carefully consider the risks described in the "Risk Factors" section, in addition to the other information set forth in this prospectus and incorporated by reference herein, before making an investment decision.

USE OF PROCEEDS

All net proceeds from the sale of our common stock will go to the selling stockholder. Accordingly, we will not receive any proceeds from the sale of the shares by the selling stockholder.

SELLING STOCKHOLDER

The following table sets forth certain information, as of August 31, 2005, with respect to the number of shares of common stock owned by the selling stockholder named below, on an actual basis and as adjusted to give effect to the sale of the shares offered hereby. The shares are being registered to permit public secondary trading of the shares, and the selling stockholder may offer the shares for resale from time to time. See "Plan of Distribution" on page 16.

STT Communications periodically assesses its strategic goals and objectives. Based on its current assessment, it has determined that its holdings of our common stock is no longer a core asset. Therefore, STT Communications does not intend to play a strategic role in Equinix going forward. As a result, STT Communications has requested us to and we have agreed to assist STT Communications with the orderly divestiture of its holdings of our common stock. We are filing this registration statement to facilitate this process. The terms of any particular offering of shares, which may include all or a portion of the shares, will be described in one or more prospectus supplements. The completion of any such offering will depend upon a number of factors, including general market conditions and other factors that STT Communications may deem relevant.

The shares being offered by the selling stockholder consist of 7,114,630 currently outstanding shares of common stock, 1,868,667 shares of common stock issuable by Equinix upon conversion of outstanding shares of series A preferred stock, 239,841 shares of common stock issuable by Equinix upon conversion of outstanding series A-1 convertible secured notes (assuming conversion on October 30, 2005 of the aggregate principal amount, together with all accrued interest thereon, outstanding on such date) and 965,674 shares of common stock issuable by Equinix upon exercise of an outstanding series A-1 preferred stock warrant and conversion of the series A-1 preferred stock issuable thereunder into shares of common stock.

| | Shares Beneficially Owned Prior to Offering | | Shares Beneficially Owned After the Offering* | | |
|--|---|---------|--|--------|---------|
| Name and Address of Selling Stockholder | Number | Percent | Shares Being Offered | Number | Percent |
| i-STT Investments Pte. Ltd. 51 Cuppage Road, #10-11/17 Starhub Centre Singapore 229469 | 10,188,812 | 37.46% | 10,188,812 | 0 | 0% |

^{*} Assumes sale of all the shares offered; however, the selling stockholder may or may not sell all or any of the offered shares.

PLAN OF DISTRIBUTION

The term "selling stockholder," as used in this prospectus, includes limited partners, donees and pledgees selling shares that are received from the selling stockholder.

The shares covered by this prospectus may be sold by the selling stockholder or its transferees, distributees, pledgees, donees or other successors in interest at various times in one or more of the following transactions:

- · in the over-the-counter market;
- on The Nasdaq National Market;
- in privately negotiated transactions; or
- in a combination of any of the above transactions.

In addition, the selling stockholder may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by third parties or borrowed from third parties to settle those sales or to close out any related open borrowings of stock, and may use securities received from us or others in settlement of those derivatives to close out any related open borrowings of stock. The third parties in such sale transactions will be underwriters and will be identified in the applicable prospectus supplement (or a post-effective amendment). All such short sale transactions will be conducted in accordance with Regulation SHO promulgated under the Securities Exchange Act of 1934.

The selling stockholder may sell its shares at market prices prevailing at the time of the sale, at prices related to such prevailing market prices, at negotiated prices or at fixed prices.

The selling stockholder may use broker-dealers to sell its shares. If this happens, broker-dealers will either receive discounts or commissions from the selling stockholder, or they will receive commissions from purchasers of shares for whom they acted as agents.

LEGAL MATTERS

The legality of the securities offered hereby will be passed upon for Equinix by Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, Menlo Park, California.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2004 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Rooms. Our SEC filings are also available to the public from the SEC's website at "http://www.sec.gov."

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934:

- 1. Annual Report on Form 10-K for the year ended December 31, 2004, filed on March 10, 2005
- 2. Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, filed on May 4, 2005
- 3. Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, filed on August 4, 2005
- 4. Report on Form 8-K, filed on April 25, 2005
- 5. Report on Form 8-K, filed on June 14, 2005
- 6. Report on Form 8-K, filed on June 16, 2005
- 7. Report on Form 8-K, filed on July 18, 2005
- 8. Report on Form 8-K, filed on August 16, 2005
- 9. Report on Form 8-K, filed on September 13, 2005
- 10. Report on Form 8-K, filed on September 20, 2005
- 11. A description of Equinix common stock is contained in Equinix's registration statement (333-39752), filed on August 9, 2000

You may request, and we will provide you with, a copy of these filings, at no cost, by calling us at (650) 513-7000 or by writing to us at the following address:

Equinix, Inc.
301 Velocity Way, Fifth Floor
Foster City, CA 94404
Attn: Investor Relations

This prospectus is part of a registration statement we filed with the SEC. You should rely only on the information or representations provided in this prospectus. We have authorized no one to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front of the document.

10,188,812 Shares

equinix EQUINIX, INC.

Common Stock

, 2005

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses, other than the underwriting discounts and commissions, payable by the Registrant in connection with the sale of the common stock being registered. All the amounts shown are estimates except for the registration fee.

| Securities and Exchange Commission Registration Fee | \$ 14,710 |
|---|------------|
| Legal Fees and Expenses | \$ 200,000 |
| Accounting Fees and Expenses | \$ 200,000 |
| Transfer Agent and Registrar Fees | \$ 10,000 |
| Printing and Engraving Expenses | \$ 400,000 |
| Miscellaneous | \$ 15,290 |
| | |
| Total | \$ 840,000 |
| | |

The Registrant and the selling stockholder and its affiliate have entered into an agreement pursuant to which the Registrant, in certain circumstances, is entitled to reimbursement of certain expenses from the selling stockholder and its affiliate.

Item 15. Indemnification of Officers and Directors.

Section 145 of the Delaware General Corporation Law authorizes a court to award or a corporation's board of directors to grant indemnification to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended (the "Act"). Article VI of the Registrant's Bylaws provides for mandatory indemnification of its directors and officers and those serving at the Registrant's request as directors, officers, employees or agents of other organizations to the maximum extent permitted by the Delaware General Corporation Law. The Registrant's Amended and Restated Certificate of Incorporation provides that, pursuant to Delaware law, its directors shall not be liable for monetary damages for breach of the directors' fiduciary duty as directors to the Registrant and its stockholders. This provision in the Amended and Restated Certificate of Incorporation does not eliminate the directors' fiduciary duty, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to the Registrant for acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws. The Registrant has entered into indemnification agreements with its officers and directors. The indemnification agreements provide the Registrant's officers and directors with further indemnification to the maximum extent permitted by the Delaware General Corporation Law. The Registrant maintains liability insurance for its directors and officers. In addition, the Registration Rights Agreement, dated as of December 30, 2002, by and among Equinix, Inc. and the Initial Purchasers named therein and party thereto (the "Registration Rights Agreement"), and the Governance Agreement, dated as of December 30, 2002, by and among Equinix, Inc., STT Communications Ltd., i-STT Investments Pte. Ltd. and the certain stockholders of Pihana Pacific, Inc. named therein and party thereto (the "Governance Agreement"), each contain certain provisions pursuant to which Equinix, its directors and officers and their respective controlling persons may be indemnified against liability arising under the Securities Act. For more information, you should read the full text of the Registration Rights Agreement and the Governance Agreement, each of which are filed as exhibits hereto.

Item 16. Exhibits.

(a) Exhibits

| Exhibit Number | Description of Document |
|-------------------|---|
| 4.10(1) | Registration Rights Agreement (See Exhibit 10.75). |
| 5.1 10.60(1) | Opinion of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP Governance Agreement by and among Equinix, Inc., STT Communications Ltd., i-STT Investments Pte. Ltd. and the Pihana Pacific, Inc. stockholder named therein, dated as of December 31, 2002. |
| 10.75(1) | Registration Rights Agreement by and among Equinix and the Initial Purchasers, dated as of December 31, 2002. |
| 23.1 | Consent of PricewaterhouseCoopers LLP |

(1) Incorporated herein by reference to the exhibit of the same number in the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement: (i) to include any prospectus required by section 10(a)(3) of the Securities Act of 1933; (ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and (iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
 - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 15, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registrent, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES—FORM S-3

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 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Foster City, State of California, on this 6th day of October, 2005.

| | | Peter F. Van Camp | |
|---------------|-----|-------------------|--|
| By: | /s/ | PETER F. VAN CAMP | |
| EQUINIX, INC. | | | |

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints Peter F. Van Camp and Keith Taylor, and each of them, his true and lawful attorneys-in-fact and agents with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to sign any registration statement for the same offering covered by this Registration Statement that is to be effective on filing pursuant to Rule 462(b) promulgated under the Securities Act of 1933, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|---------------------------|---|-----------------|
| /s/ PETER F. VAN CAMP | Chief Executive Officer and Director (Principal Executive | October 6, 2005 |
| Peter F. Van Camp | Officer) | |
| /s/ Keith D. Taylor | Chief Financial Officer (Principal Financial and Accounting | October 6, 2005 |
| Keith D. Taylor | Officer) | |
| /s/ LEE THENG KIAT | Chairman of the Board | October 6, 2005 |
| Lee Theng Kiat | | |
| /s/ Scott Kriens | Director | October 6, 2005 |
| Scott Kriens | | |
| /s/ Andrew S. Rachleff | Director | October 6, 2005 |
| Andrew S. Rachleff | | |
| /s/ MICHELANGELO VOLPI | Director | October 6, 2005 |
| Michelangelo Volpi | | |
| /S/ STEVEN POY ENG | Director | October 6, 2005 |
| Steven Poy Eng | | |
| /S/ GARY HROMADKO | Director | October 6, 2005 |
| Gary Hromadko | | |
| /s/ Louis J. Lavigne, Jr. | Director | October 6, 2005 |
| Louis J. Lavigne, Jr. | | |
| /s/ Steven T. Clontz | Director | October 6, 2005 |
| Steven T. Clontz | | |

INDEX TO EXHIBITS

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| 23.1 | Consent of PricewaterhouseCoopers LLP |

⁽¹⁾ Incorporated herein by reference to the exhibit of the same number in the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002.

October 6, 2005

Equinix, Inc. 301 Velocity Way Foster City, CA 94404

Re: REGISTRATION STATEMENT ON FORM S-3

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-3 filed by Equinix, Inc. (the "Company") with the Securities and Exchange Commission (the "Commission") on October 6, 2005 (the "Registration Statement"), in connection with the registration under the Securities Act of 1933, as amended, of up to 3,091,243 shares of the Company's Common Stock of certain stockholders of the Company (the "Shares"). As your counsel in connection with this transaction, we have examined the proceedings taken and are familiar with the proceedings proposed to be taken by you in connection with the sale of the Shares.

It is our opinion that the Shares are legally and validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the said Registration Statement, and further consent to the use of our name wherever appearing in said Registration Statement, including the prospectus constituting a part thereof, and in any amendment or supplement thereto.

Very truly yours,

/s/ Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP

GUNDERSON DETTMER STOUGH VILLENEUVE FRANKLIN & HACHIGIAN, LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 10, 2005 relating to the financial statements, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in Equinix, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2004. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

San Jose, California

October 6, 2005