

**Mail Stop 4561**

September 28, 2006

Steven Goldman  
President and Chief Executive Officer  
Isilon Systems, Inc.  
3101 Western Avenue  
Seattle, Washington 98121

**Re: Isilon Systems, Inc.  
Registration Statement on Form S-1  
Filed September 1, 2006  
File No. 333-137078**

Dear Mr. Goldman:

We have reviewed your registration statement and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with additional information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form S-1

General

1. Comments on your confidential treatment request for Exhibit 10.15 will be provided shortly under separate cover.
2. We will process your amendments without price ranges. Since the price range you select will affect disclosure in several sections of the filing, we will need sufficient time to process your amendments once a price range is included and the

material information now appearing blank throughout the document has been provided. Please understand that the effect of the price range on disclosure throughout the document may cause us to raise issues on areas not previously commented on.

3. Please confirm that you do not intend to use gatefold graphics on the inside cover of the prospectus.

#### Table of Contents

4. The Table of Contents should reference the most material sections of the prospectus. In this regard, please revise to remove the references to each exhibit.
5. Please confirm that the dealer prospectus delivery obligation will be located on the outside back cover page. See Regulation S-K Item 502(b).

#### Prospectus Summary, page 1

#### Company Overview, page 1

6. Please put your statements that you are “the leading provider of cluster storage systems for digital content” in a more complete context for investors by providing qualitative or quantitative documentation to support your claim. Please evaluate this characterization of your business in light of your disclosure on page 7 that some of your competitors have “longer operating histories, greater name recognition, larger customer bases and significantly greater financial, technical, sales, marketing and other resources than [you] have.”
7. With respect to any third-party statements, such as the market data by IDC and ESG, presented in your disclosure, please revise the prospectus as necessary to provide the date of the report or cited industry information and key assumptions underlying the cited statistic. Please provide us with the relevant portions of the industry research reports you cite. To expedite our review, please clearly mark each source to highlight the applicable portion or section containing the statistic and cross-reference it to the appropriate location in your prospectus.
8. Please relocate the paragraph regarding trademarks. Information in the summary must be limited to a brief overview of the key aspects of the offering. See Item 503 of Regulation S-K.

#### Risk Factors, page 7

9. Your reference to unknown or immaterial risks in the third sentence of your introductory paragraph may give readers the impression that there are material

risks that have not been identified. Please revise to simply state that all material risks are described in this section.

10. Please review each risk factor heading to ensure it clearly conveys a separate, detailed risk to investors regarding your company, industry or the offering. Many of the subheadings merely state a fact about your business without fully describing the risks associated with that fact. For example, we note the following “[w]e are substantially dependent on customers in a small number of industries...,” “[i]f we fail to manage future growth effectively, our business would be harmed,” and “[o]ur use of open source and third-party software could impose limitations on our ability to commercialize our products.” Please revise each of your subheadings to ensure that they disclose the specific risk or risks that you are discussing in the text. Additionally, rather than stating that a factor could “adversely affect” or “harm” your business, financial condition and results of operations, the subheading should indicate what the adverse or harmful effects might be, such as reduced income or revenues or loss of customers.

If we are unable to maintain or replace our relationships with customers... page 9

11. We note that your top two customers accounted for approximately 23% of your revenues in fiscal 2005 and 32% of revenues through the first six months of fiscal 2006. Revise to name all customers that accounted for more than 10% of your total revenues during the periods presented in the prospectus here and elsewhere as appropriate. Given that Eastman Kodak represented 60%, 20% and 15% of your total revenues for fiscal 2004, fiscal 2005 and the first six months of fiscal 2006, respectively, it appears that you are substantially dependent on your relationship with this customer and all material agreements with this customer should be filed as exhibits to the registration statement. If you are materially dependent on any other agreements with significant customers, such agreements should be filed as exhibits to the registration statement. See Item 601(b)(10) of Regulation S-K.

A significant percentage of our expenses is fixed . . . , page 13

12. It is unclear from the text of this risk factor why a significant percentage of your expenses is fixed. Please expand your disclosure to put this risk to your business in context for investors.

Use of Proceeds, page 23

13. We note that the vast majority of your net proceeds will be used for working capital and general corporate purposes. Please provide more meaningful disclosure of areas where you intend to use the net proceeds. Revise to disclose the amount outstanding under your credit facility with Silicon Valley Bank, as of

a recent date. Do you anticipate materially increasing expenditures on marketing or research and development? In this regard, we note your disclosure in MD&A that you anticipate most costs increasing in total dollars but decreasing as a percentage of revenues. Revise to provide more robust disclosure on how you intend to use the net proceeds of this offering.

Capitalization, page 24

14. Considering inserting a section to precede your discussion of capitalization to disclose the material terms of your outstanding convertible preferred stock, including the material terms of the conversion of each class of preferred stock and materially complete descriptions of all other agreements (e.g., investors' rights agreement and voting agreement) associated with the issuance of these securities and/or your relationship with the holders of these securities. We note that this information can be gathered from various sections of the registration statement, but locating such information in one section closer to the forepart of the prospectus would clarify your disclosure regarding these securities for investors.

Dilution, page 25

15. Please provide us with your calculation of the pro forma net tangible book value and per share book value of \$12.4 million and \$0.10, respectively as of July 2, 2006 as we cannot readily reconcile this amount. Ensure that these amounts reconcile to your balance sheet and related notes.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview, page 30

16. Consider expanding your "Overview" to include management's perspective on the business. Consider using this section to provide an executive level overview of the company to provide context for the remainder of the MD&A discussion. Identify the factors that your company's executives focus on in evaluating the financial condition and operating performance of your business. Consider addressing the material operations, risks and challenges facing your company and how is management dealing with these issues. Refer to Release 33-8350 on our website at [www.sec.gov](http://www.sec.gov).

Results of Operations, page 35

17. In your discussions of the results of operations, you refer to the type of charges that are aggregated in each income statement line item, however, you have not quantified or discussed the components that contributed to each material change. Please revise the filing to quantify and discuss each material change and identify

- the factor or event that contributed to each change. For instance, your disclosures indicate that the increase in revenue has been driven primarily by an expansion of your customer base, increased purchases or reorders from existing customers and growth in your customers average order size. Revise your disclosure to provide quantification or qualification of the contribution of these factors to your rapid increase in revenues over the periods presented. Disclose revenue attributable to new customers versus repeat customers. Is one of these types of customer more important to the success and growth of your business than the other? Refer to Section to III.D of SEC Release 33-6835 and FRC 501.04 for guidance.
18. Management's discussion and analysis should also include disclosure based on currently known trends, events and uncertainties that are reasonably expected to have material effects upon you. Please revise the filing to discuss any known material trends relating to the growth of your revenues. For example, discuss when your software products are subject to obsolescence or declining sales trends, including any plans to update such applications, if necessary. Please quantify the expected effects of these and other known, material trends, events and uncertainties on your future results to the extent possible. Please see Section III.B.3 of Release No. 33-8350 for additional guidance.
19. We note that your borrowings have materially increased as of July 2, 2006 as a result of the subordinated debt financing closed in the first quarter of 2006. Please revise the filing to explain the reasons for incurring material amounts of additional debt and the use of the proceeds, and analyze how the incurrence and repayment of that debt fits into the overall business plan, in each case to the extent material. In addition, where the debt was incurred for general working capital purposes, the anticipated amount and timing of working capital needs should be discussed, to the extent material. Refer to Section IV.A. of SEC Release 33-8350 for additional guidance

Research and Development Expenses, page 37

20. Tell us if you are substantially dependent on your contract with the third-party engineering provider in Moscow. In this regard, we note your disclosure on page 30 that your operations are more efficient and flexible, in part, because you outsource certain research and development activities. If so, please name this provider and file any agreements with this entity as exhibits to the registration statement.

First Six Months of 2006 Compared to First Six Months of 2005, page 38

21. Revise to quantify the factors contributing to the period over period changes in revenue and gross margin, rather than stating various changes were "primarily due to" certain factors. Revise to name all customers that account for greater than

10% of total revenues during the periods presented. Revise to quantify the extent to which increases in revenues and gross margins are attributable to increases in volume, prices and new products pursuant to Regulation S-K, Item 303(a)(3)(iii). For example, you state that gross margin for product revenue increased, in part, due to "a favorable shift in product mix" and on page 40 you state that service revenue gross margin increased due to higher average selling prices of services. Note this comment also applies to your results of operation discussion for fiscal years 2005 compared to 2004 and 2004 compared to 2003.

Quarterly Results of Operations, page 42

22. We note your use of the non-GAAP measure, EBITDA as a performance measure on page 43 of the filing. Tell us how you considered Item 10(e)(1)(i) and (ii) of Regulation S-K and Question 8 of Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures to include the following disclosures:

- the manner in which management uses the non-GAAP measure to conduct or evaluate its business;
- the economic substance behind management's decision to use such a measure;
- the manner in which management compensates for these limitations when using the non-GAAP financial measure; and
- the substantive reasons why management believes the non-GAAP financial measure provides useful information to investors.

Also, tell us why you have not provided a reconciliation of EBITDA to the most directly comparable GAAP financial measure pursuant to Item 10(e)(1)(i)(B) of Regulation S-K. We also refer you to question 15 of the FAQ.

Liquidity and Capital Resources, page 44

23. Your disclosure appears to be a mere recitation of changes and other information evident from the financial statements. Please revise your disclosure to focus on the primary drivers of and other material factors necessary to an understanding of your cash flows and the indicative value of historical cash flows. In addition, where there has been material variability in historical cash flows, your discussion should focus on the underlying reasons for the changes, as well as on their reasonably likely impact on future cash flows. We refer you to the Commission's "Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations" Release No. 33-8350, Section IV. B for guidance.

Business, page 48

24. We note your disclosure on page 52 regarding NBC's use of your solutions during the 2004 Summer Olympics. Please confirm that NBC has reviewed this disclosure.
25. Revise to provide materially complete discussions of your relationship with your suppliers and distributors, including your selling arrangements with value-added resellers and other distribution partners.
26. Please also revise your disclosure to address governmental regulation within your industry. For example, on page 17 you reference U.S. export controls relating to your products that include encryption technology. As another example, are you subject to any environmental regulation, such as that noted on page 17.
27. Revise to provide the disclosure required by Item 101(d)(1) regarding financial information about geographic areas in this section or cross-reference to the location of such disclosure in your financial statements.

Sales and Marketing, page 57

28. We note your statement on page 8 that a significant portion of your quarterly sales typically occur near the end of the quarter. Revise your disclosure in this section, if applicable, to disclose any seasonal aspects of your business. See Item 101(c)(1)(v) of Regulation S-K.

Manufacturing, page 58

29. We note your disclosure in the risk factors section that you are substantially dependent upon your relationship with Sanmina SCI Corporation. Revise to disclose the material terms of your contractual relationship with this supplier consistent with your application for confidential treatment.
30. To the extent applicable, revise to provide the disclosure required by Items 101(c)(1)(vi) and (viii) regarding working capital and backlog.

Competition, page 58

31. Revise to state, if known or reasonably available, your competition position within the markets in which you compete. See Item 101(c)(1)(x).

Management, page 61

Executive Compensation, page 66

32. It is unclear why the commissions paid to Mr. Scollard are characterized as “other annual compensation” rather than salary or bonus. See Item 402(b)(2)(iii) of Regulation S-K. Please advise.

Employment Agreements and Change in Control Arrangements, page 68

33. Please revise to describe the terms and conditions of all employment agreements with your named executive officers. See Item 402(h) of Regulation S-K. For example, please revise to disclose the terms of the “issuance of certain stock options and other customary benefits” associated with each agreement. Revise to state the terms under which Mr. Scollard receives commissions.

Principal and Selling Shareholders, page 79

34. Please note that once you determine the participants and size of the secondary component of this offering, you should revise this section to provide the information required by Item 507 of Regulation S-K.

Description of Capital Stock, page 81

35. Please file a copy of the warrants described in this section as an exhibit with your next amendment. Please also confirm that exhibit 4.2, the Fourth Amended and Restated Investors’ Right Agreement, is the only agreement governing the registration rights described on pages 81-82.

Where You Can Find Information, page 92

36. Revise to clarify that upon effectiveness of this registration statement you will be subject to reporting requirements.

Report of Independent Registered Public Accounting Firm, page F-2

37. We note that auditor’s opinion refers to generally accepted accounting standards accepted in the United States. Pursuant to The Public Company Accounting Oversight Board Bylaws and Rules AS 1 (“AS 1”), the auditor’s opinion should reference standards of the Public Company Accounting Oversight Board. Tell us how the auditor’s opinion included in your filing complies with the guidance in AS 1 or revise accordingly.



Consolidated Balance Sheets, page F-3

38. Please revise your consolidated balance sheet to reflect both the automatic conversion of all shares of convertible preferred stock into common stock as well as the reclassification of the preferred stock warrant liability to additional paid-in-capital upon completion of this offering.

Note 1. Organization and Significant Accounting Policies

Revenue Recognition, page F-11

39. Please clarify for us how you recognize revenue on sales to distributors. Tell us if you offer these distributors any rights-of-return or other incentives (i.e. discounts as noted on page 39, price concessions, etc), and if so, tell us how you account for them. For each of the distributor incentives, tell us how you determined that your fee is fixed and determinable upon the product's shipment to the distributor. Tell us how you considered paragraph 6 of SFAS 48 and EITF 01-9 in accounting for return rights and other considerations. In addition, describe your ability to reasonably estimate the effects of the various programs offered to resellers. Please revise the filing to incorporate your response. See SAB Topic 13A(4)(b) and paragraph 8 of SFAS 48.
40. We note your disclosure on page F-11 that states that sales are fixed and determinable at the execution of an agreement, "based on specific products and quantities to be delivered at specified prices." Please clarify this statement for us and explain if the licensing fee is determined based on the number of units being distributed or copied, or the expected number of users of the product. Tell us how your accounting complies with paragraphs 26 and 43-47 of SOP 97-2.
41. We also note that for PCS services, VSOE is measured by the renewal rate offered to a customer. Clarify for us whether the renewal rates for PCS services are stated in your initial multiple element software license arrangements to your customers. If your renewal rates are stated in the initial contract, then tell us what percentage of your customers actually renew at the stated rates. If the rates are not stated in the contract, then please address the issue that if your renewal rates vary from customer to customer, how you can reasonably establish VSOE. Explain to us how your determination of VSOE complies with paragraphs 10 and 57 of SOP 97-2.
42. In addition to the above, we note disclosure on page 35 of the filing that indicates "Pricing of our products depends, in part, on our cost of goods at the time we determine the overall pricing of our products and the size of the cluster and software modules purchased." Clarify for us, whether this has any effect on the

PCS renewal rate. If so, tell us how you have determined that this meets the VSOE requirement of paragraph 10 of SOP 97-2.

Note 2. Net Loss Per Common Share and Pro Forma Net Loss Per Common Share, page F-15

43. We note that you have redeemable convertible preferred stock. Tell us how you considered EITF 03-06 in determining whether the Company's convertible preferred stock (Series A through E) should be considered a participating security for the purpose of computing earnings per share. Revise your disclosures to include a discussion of EITF 03-06 and its impact on the Company's earnings per share calculations. Also, consider including tabular disclosures for the potentially dilutive securities that are not included in the calculation of net loss per share broken down by type (i.e. warrants, outstanding options, shares subject to vesting provisions and conversion of preferred stock).

Note 5. Notes Payable, page F-17

44. Revise your disclosures to include the amounts outstanding under each agreement at your interim financial statement date (July 2, 2006).

Note 6. Mandatorily Redeemable convertible Preferred Stock and Stockholders' Deficit

Mandatorily Redeemable Convertible Preferred Stock, page F-19

45. We note that the Company issued Series E convertible preferred stock on July 19, 2006 with an initial conversion price of \$2.4406. Tell us how you considered EITF 98-5 and EITF 00-27 in determining whether this instrument included a beneficial conversion feature. Provide objective evidence that supports the fair value of the underlying common stock at the date of issuance and explain any difference between the fair values used in your analysis to the mid-point of your estimated offering price range.

Warrants, page F-21

46. We note from your disclosures on page 34 that the Company estimated the fair value of the warrants to purchase convertible preferred stock using the Black-Scholes option valuation model. Please provide the assumptions used in your calculations at July 2, 2006 including the estimated fair value of the underlying convertible preferred stock. Also, provide us with objective evidence which supports your determination of the fair value of the convertible preferred stock. Considering your preferred stock will automatically convert into shares of the Company's common stock at a 1:1 ratio upon the effectiveness of your IPO, tell

us how this valuation compares to the mid-point of your estimated offering price range and explain the reasons for any difference.

47. We note that upon the closing of this offering, the Company's outstanding warrants will convert to warrants to purchase shares of your common stock and will no longer be subject to FSP 150-5. At that time, the Company will reclassify the then-current aggregate fair value of the warrants from current liabilities to additional paid-in-capital and will cease to record any related periodic fair value adjustments. Tell us how you analyzed the warrants pursuant to SFAS 133 and EITF 00-19 in determining that equity classification upon conversion is appropriate. Also, tell us how the Company determined that the warrants met the scope exception of paragraph 11(a) of SFAS 133. Provide us with your analysis using each of the conditions outlined in paragraphs 12 to 32 of EITF 00-19 to determine whether the warrants should be classified in equity or as a liability. We note from your disclosures on page 82 that the warrants have registration rights. Tell us if these warrants also have liquidated damages provisions. If so, tell us how you considered the guidance in EITF 05-4 and the different views on this issue as outlined in Issue Summary No. 1 to EITF 05-4 in analyzing the registration rights agreement and in considering whether you are required to classify the warrants as liabilities.

Stock Options and Unvested Common Stock, page F-22

48. Tell us when you first initiated discussions with underwriters, when the underwriters first communicated their estimated price range for your stock and the range they communicated to you. If you do not include a range in your next amendment, supplementally tell us the estimated price range.
49. Please provide the following information in chronological order for stock options and other equity related instruments granted or issued for the one year period preceding the most recent balance sheet date and through the date of your response. Reconcile the amounts and related disclosures to your financial statements as well as to the Item 15. "Recent Sales of Unregistered Securities" disclosures on page II-2:
- The nature and type of stock option or other equity related transaction;
  - The date of grant/issuance;
  - Description/name of option or equity holder;
  - The reason for the grant or equity related issuance;
  - The number of options or equity instruments granted or issued;
  - The exercise price or conversion price;
  - The fair value of underlying shares of common stock;

- The total amount of deferred compensation or value assigned to beneficial conversion feature reconciled to your financial statement disclosures; and
- The amount and timing of expense recognition.

Continue to provide us with updates to the requested information for all equity related transactions subsequent to this request through the effective date of the registration statement.

50. We note your disclosures on page 32-34 regarding the Company's stock-based compensation valuations. With regards to this information, please provide the following:
- Provide us with objective evidence which supports your determination of the fair value of the underlying shares of common stock at each grant or issue date.
  - Discuss and quantify the impact on the Company's fair value of any events, which occurred between the dates the options, warrants or convertible equity were granted and the date the registration statement was filed.
  - Reconcile and explain the differences between the mid-point of your estimated offering price range and the fair values asserted in your analysis. Describe significant intervening events within the Company and the broader market that explain the changes in fair value of your common stock up to and after the filing of the registration statement.
  - Clarify whether the valuations were prepared contemporaneously or retrospectively.
  - Explain how you evaluated the difference in the sales price of the Series D and Series E convertible preferred stock to the estimated fair value of the shares of common stock as determined during the same periods. In this regard reconcile the difference and support the difference with objective evidence.
  - For the fair value estimates prepared by the ad hoc committee of the Board of Directors, provide a discussion of the specific factors considered in selecting the comparable companies used in the market capitalization analysis and discuss the "other metrics" used and how you weighted such methods.
  - Disclose the discount rates used in the Duff & Phelps analysis and tell us how you determined the appropriateness of such rates.
  - Continue to provide us with updates to the above analysis for all equity related transactions subsequent to your balance sheet data and through the effective date of the registration statement.
51. We note the assumptions used in calculating the fair value of options issued to non-employee advisory board members included volatility estimates of "comparable public companies" that ranged from 63% - 65% for fiscal 2003 –

2005. We further note that the volatility assumptions used to fair value the Company's employee stock options for the six months ended July 2, 2006 ranged from 46.6% - 47%. Explain the decrease in your volatility assumptions during the first half of fiscal 2006. Also, pursuant to paragraph A240(e)(2)(b) of SFAS 123R revise to disclose the reasons why it is not practicable for the Company to estimate the expected volatility of its share price, the appropriate industry sector index that you selected to calculate the Company's volatility, the reasons for selecting that particular industry index and how you calculated historical volatility using that index.

## Part II

### Exhibits, page II-3

52. Please file the Voting Agreement referenced on page 64 as an exhibit with your next amendment.

\* \* \*

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Megan Akst at (202) 551-3407 or Kathleen Collins, Accounting Branch Chief, at (202) 551-3499 if you have questions regarding comments on the financial statements and related matters. Please contact Rebekah Toton at (202) 551-3857 with any other questions. If you require further assistance you may contact me at (202) 551-3730.

Sincerely,

Barbara C. Jacobs  
Assistant Director

cc: Via Facsimile (206) 883-2699  
Craig Sherman, Esq.  
Mark L. Handfelt, Esq.  
Wilson Sonsini Goodrich & Rosati  
Telephone: (206) 883-2500