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October 27, 2005

VIA ELECTRONIC TRANSMISSION AND FACSIMILE

Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549-0406 Mail Stop 6010

Attn: Mr. Jay Mumford

Re: SunPower Corporation - Registration Statement on Form S-1

(File No. 333-127854)

Ladies and Gentlemen:

On behalf of SunPower Corporation (the "Registrant"), we supplementally provide the staff of the Securities and Exchange Commission (the "Staff") with the additional information attached hereto as Appendix A in response to the Staff's Comment 45 in its letter to the Registrant dated September 21, 2005. In addition, we supplementally inform the Staff that the preliminary price range for its offering is \$6.00-\$7.00 per share prior to giving effect to a 1:2 reverse stock split approved by the Board of Directors on October 26, 2005, or \$12.00-\$14.00 per share after giving effect to the reverse stock split.

Questions or comments regarding any matters with respect to the Registration Statement may be directed to the undersigned at (650) 233-4564. Comments can also be sent via facsimile at (650) 233-4545.

Very truly yours,

/s/ Davina K. Kaile Davina K. Kaile

cc: Mr. Jay Mumford Mr. Eric Atallah Mr. Jay Webb

Mr. Thomas II 147

Mr. Thomas H. Werner Mr. Emmanuel T. Hernandez

Appendix A

On behalf of SunPower Corporation ("SunPower" or "the Company"), we would like to supplementally provide the staff of the Securities and Exchange Commission (the "Staff") with information regarding SunPower's history and treatment of options granted, with emphasis on options granted since June 2004. As further discussed below, SunPower has established the fair value of the Company's common stock based on 1) the Company's financial and operational performance, 2) valuations of an independent valuation firm, 3) equity transactions, and 4) estimated IPO market valuations. SunPower retained Duff and Phelps to provide reports on the fair value of the Company's common stock as of May 31, 2005, July 31, 2005, and October 2, 2005. A copy of the reports dated May 31, 2005 and July 31, 2005 have been previously provided to the Staff. A copy of the report dated October 26, 2005 will be provided supplementally to the Staff. This letter will provide you with both a Company overview and a listing of options granted to directors, officers, employees and non-employees.

Company History and Overview

The Company designs, manufactures and sells solar electric power products, or solar power products, based on its proprietary processes and technologies. In addition, SunPower offers high performance imaging detectors based on its solar power technology, primarily for medical imaging applications. Since inception, the Company has focused on the following four main areas:

- Technology: development of the underlying technology and fundraising to support these efforts
- Manufacturing: commencement of production of solar cells and panels
- Revenue: commencement of sales and marketing efforts of its solar power products
- Management and Corporate Development: completion of management team and development of corporate identity and structure

Inception to May 2002

SunPower was incorporated in 1985 by Dr. Richard Swanson to develop and commercialize high-efficiency photovoltaic, or solar, cell technology. Its solar cells were initially used in solar concentrator systems, which concentrate sunlight to reflective dish systems. From 1988 to 2000, The Company focused its efforts on developing high-efficiency solar cells and marketing its infrared detectors.

May 2002 to November 2004

In May 2002, Cypress made its initial investment of \$8.8 million for 12,915,000 shares of SunPower's series one preferred stock (per share price of \$0.6864) at which time it became the Company's majority shareholder. This investment funded operations and the initial development of the Company's solar cell. In 2003 and 2004, the Company continued its A-300 solar cell product and manufacturing process development efforts. In late 2004, SunPower completed the construction of its 215,000 square foot wafer fabrication facility in the Philippines, which is capable of housing four solar cell production lines with a total production capacity of approximately 100 megawatts per year, and installed and qualified its first 25 megawatts per year production line. SunPower funded these activities and its continuing operations through additional loans from Cypress.

November 2004 to June 2005

On November 8, 2004, Cypress completed a reverse triangular merger in which all of the outstanding minority interest of SunPower was retired, effectively giving Cypress 100% ownership of all of SunPower's outstanding shares of capital stock but leaving unexercised warrants and options outstanding. As a condition to the merger transaction, SunPower's Board of Directors also approved an additional Cypress investment of \$16 million for 32,000,000 shares of SunPower's series two convertible preferred stock. This round of funding occurred in January 2005. In June 2004, the Non-Cypress members of the SunPower Board approved both the merger and the \$16 million series two financings terms.

In late 2004, SunPower shipped its first commercial A-300 solar cells from its Philippines manufacturing facility. In March 2005, Cypress invested \$58.0 million for 35,151,515 shares of SunPower's class A common stock. This investment, along with customer advances, funded the purchase of equipment for the Company's second and third 25 megawatts per year production lines in our Philippines manufacturing facility. Through June 2005, SunPower made steady improvements on its output, yields and production costs on its first 25 megawatt line. SunPower also initiated the purchase of equipment for its second and third 25 megawatt lines and signed a multi-year supply agreement with Solon.

During 2005, SunPower also expanded its executive management team with the additions of PM Pai as its Chief Operating Officer, and Emanuel Hernandez as its Chief Financial Officer. In addition, SunPower conducted an underwriter selection process in June 2005.

July 2005 to Present

In July 2005, Cypress purchased an additional 24,000,000 shares of class A common stock in exchange for approximately \$20 million of cash, cancellation of all of SunPower's then outstanding indebtedness to Cypress which totaled approximately \$40 million, and cancellation of warrants with an average exercise price of \$0.07 per share to purchase 7.7 million shares of common stock issued in connection with earlier loans. Based on a Black Scholes calculation, the warrants had a fair value of at least \$3.25 per share at the time of their cancellation. As a result of this equity transaction, SunPower no longer has any outstanding indebtedness to Cypress.

Since July 2005, SunPower has continued making improvements on its solar cell and panel production, yields and costs. SunPower also has continued work on the facilities and equipment necessary for its second and third 25 megawatt lines.

On July 20, 2005, SunPower held its organizational meeting, after selecting its underwriters for its initial public offering process.

Options Granted to Directors, Employees and Non-employees since June 2004

The table below outlines, by date of grant, the number of options granted, exercise price, and fair value for options granted since June 2004 to officers, directors, employees, and non-employees.

Date of Option Grant	Grants to Non- Officer Employees	Grants to Directors and Officers	Grants to Non- Employees	Total Options Granted	Vesting Schedule ¹	Exerc	cise Price	Fair Market Value of Common Stock	
6/17/04	1,705,400	2,160,200	178,250	4,043,850	5 Years	\$	1.65	\$	1.65
8/9/04	125,133	0	0	125,133	Fully Vested	\$	1.65	\$	1.65
8/9/04	192,000	50,000	0	242,000	5 Years	\$	1.65	\$	1.65
12/16/04	15,000	0	0	15,000	Fully Vested	\$	1.65	\$	1.65
12/16/04	1,273,350	0	0	1,273,350	5 Years	\$	1.65	\$	1.65
3/17/05	0	850,000	0	850,000	5 Years	\$	1.65	\$	1.65
3/17/05	252,750	500,000	26,000	778,750	5 Years	\$	1.65	\$	1.65
4/24/05	0	2,083,477	0	2,083,477	3 Years	\$	1.65	\$	1.65
6/16/05	233,200	0	0	233,200	5 Years	\$	2.15	\$	2.15
7/7/05	561,250	0	0	561,250	5 Years	\$	3.50	\$	3.50
8/18/05	69,700	0	0	69,700	5 Years	\$	3.50	\$	3.50
9/23/05	36,800	120,000	0	156,800	5 Years	\$	4.75	\$	4.75
9/23/05	13,467	0	0	13,467	Fully Vested	\$	4.75	\$	4.75

In the standard 5-year grants, 20% of the shares vests after 12 months, and 1/60 of the shares vest each month thereafter

The Company believes that its 1996 Stock Incentive Plan (the "Option Plan") meets all of the required criteria set forth in APB Opinion No. 25 and in the Internal Revenue Code of 1986, as amended (the "Code"), that are essential to classify employee option grants as non-compensatory. The terms of the Option Plan require that incentive stock options granted by the Company's Board have exercise prices equal to at least 100% of the fair market value of the Company's common stock at the time of grant. All options granted since June 2004 were granted pursuant to approval of the Board and were intended to be incentive stock options or were otherwise granted at 100% of the then-current fair market value. The Company believes that the actions of its Board to establish the fair market value of the Company's common stock at such dates were prudent and done with due care so as to comply with the requirements of APB Opinion No. 25 as to non-compensatory options and to preserve the status of such options as incentive stock options under the Option Plan and the Code.

The Company has booked stock-based compensation expenses for the deemed fair value of variable stock-based compensation of stock and stock options issued to non-employees and consultants, as well as for immature shares purchased by Cypress from employees of SunPower in the November 2004 reverse triangular merger. Stock-based compensation was \$781,000 and \$184,000 for the year ended December 31, 2004 and the first six months ended June 30, 2005, respectively.

The pricing of SunPower's options is set by SunPower's Board of Directors (the "Board"). The Board, which consists of seasoned business executives, has substantial experience in the valuation of privately held start-up companies such as SunPower. In addition, the Board includes individuals that have considerable experience in operating or financing technology companies and, as a group, are familiar with the issues surrounding the valuation of options and other securities of technology companies. In addition, each such directors represents, or is himself, a significant stockholder of the Company and therefore would experience significant dilution in the event of an issuance of common stock at less than fair market value. The absence of a public trading market required the Board to rely on alternative means for determining the deemed fair market value for the common stock.

The following table sets out information relevant to the Board in determining the value of the Company's common stock since June 2004, and is followed by a discussion of option pricing for the specific grants.

METRIC	Q2'04	Q3'04	Q4'04	Q1'05	Q2'05	Q3'05
						
Net Revenue in \$000's	\$ 2,054	\$ 2,502	\$ 4,740	\$ 11,092	\$16,400	
Net Income (Loss) in \$000's	\$(6,220)	\$(7,428)	\$ (10,354)	\$ (7,237)	\$(6,336)	
S&P Valuation (Common \$/shr)					\$2.13 (May 31)	\$3.46 (July 31) \$4.71 (Oct. 2)
CY Equity Investments			$Merger^1$	\$ 58M		\$ 84M
Price / Share			\$ 1.65	\$ 1.65		\$3.50
Management Additions				PM Pai	E. Hernandez	
Major Events			Start of commercial production		Solon supply agreement	Org meeting S-1 filed
Stock Grant Prices	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65	\$1.65 to \$2.15	\$3.50 to \$4.75

As a condition to the merger transaction, SunPower's Board of Directors also approved an additional Cypress investment of \$16.0 million for 32,000,000 shares of SunPower's series two convertible preferred stock. This round of funding occurred in January 2005.

Discussions with the underwriters indicated to the Company the potential for an Initial Public Offering price of between \$5.50 to \$6.50 per share in late Q4 2005 or early Q1 2006, provided the Company:

- Increase its revenues from a projected \$76 million in 2005 to over \$200 million in 2006.
- Efficiently ramp production and yields on its second and third 25 megawatt per year production lines by early 2006.
- Secure sufficient silicon to support its manufacturing ramp, especially given the current shortage of material in the market.
- Further stabilizes its manufacturing to achieve positive gross margins.
- · Successfully implement its thin wafer production plan without adversely affecting manufacturing yield or product reliability.

Additionally, for the Company to achieve such valuation, the capital markets should continue to remain stable with no major events of disruption.

June 2004 to April 2005 (\$1.65/shr)

The fair market value of options issued during this time period was based on the \$1.65 per share price at which Cypress bought out the minority shareholders in November 2004. By June 2004, Cypress had already offered \$1.65 per share for the buyout, which the Board took into consideration when pricing the June 2004 options. The buy-out value was based on a single 25 megawatt solar cell production line that had yet to achieve the projected business model production yields and output, and the Company continued to price its options at \$1.65 per share. In maintaining this price through April 2005, the board considered the following factors:

- SunPower was still in its initial phase of commercial production and had not demonstrated it could achieve the targeted production levels and costs.
- The Company experienced negative gross margins that were indicative of the challenges faced in ramping its commercial production.
- SunPower continued to incur losses in Q4'04, Q1'05 and Q2'05.
- SunPower experienced dilution from the issuance of additional shares to Cypress to fund ongoing business activities and capital expenditures. It was also probably that the Company would need to raise more capital to fund its expansion plans and continuing losses.
- SunPower had a highly leveraged capital structure will aggregate debt raised from Cypress of over \$70 million through June 2005.
- The Company had not yet secured the silicon supply commitments necessary to fund its planned expansion.

June 2005 (\$2.15/shr)

In June 2005, the Company determined that the fair market value of its shares had increased to \$2.15, based on:

- · An independent contemporaneous valuation done by Duff and Phelps as of May 31, 2005 that valued SunPower's common shares at \$2.13 per share
- Progress made by the Company in achieving its business plans including:
 - Launch of high efficiency inverter products and higher efficiency panels in June 2005
 - Signing of a major supply agreement with Solon in April 2005
 - Expansion of its management team to include an experienced COO in March 2005, and a CFO in April 2005
 - Improvements in production outs and yields in the first 25 megawatt line
- However, certain adverse factors were also evaluated, including:
 - Continuing negative gross margins experienced by the Company,
 - Negative financial consequences of increase in price of silicon
 - Uncertain market conditions for availability of silicon

July 2005 to August 2005 (\$3.50/shr)

The Company determined that the fair market value of its common shares had further increased to \$3.50 base on:

• A second valuation done by Duff and Phelps as of July 31, 2005 that valued SunPower's common shares at \$3.46 per share.

- Growth in revenues experienced by the Company.
- Continuing negative gross margins experienced by the Company.
- Uncertain market conditions relating to pricing and availability of silicon.

September 2005 (\$4.75/shr)

The Board approved option grants on September 23, 2005 at a price equal to the higher of \$4.00 or a valuation to be done by Duff and Phelps. Duff and Phelps conducted a valuation and determined SunPower's shares to be valued at \$4.71 per share as of October 2, 2005.

Summary

The increase in the fair market value of the Company since June 2004 has been primarily driven by the following factors:

- The \$1.65 per share price at which Cypress bought out the minority shareholders in November 2004.
- Three valuations done by an independent valuation expert, Duff and Phelps, as of May 31, 2005, July 31, 2005, and October 2, 2005 that valued SunPower's common shares at \$2.13 ,\$3.46, \$4.71 per share respectively.
- Underwriters estimate of a potential Initial Public Offering price of between \$5.50 to \$6.50 per share in late Q4 2005 or early Q1 2006, provided the Company successfully hits its financial targets and source sufficient silicon supply.
- Company-specific performance, particularly in the first half of 2005, the Company made significant progress in virtually all areas, including manufacturing productivity, capacity expansion, marketing of its products and the depth and breadth of its management team. The most tangible measure of the result has been a greater than 48% increase in net revenues, from \$11.1 million in the quarter ended March 30, 2005 to net revenues of \$16.5 million in the quarter ending June 30, 2005.

In combination, the above-noted factors are consistent with the fair market values of the Company's common stock throughout the year.