Redgarden Engineering 1545 Ford Ct Louisville, CO 80027 May 10, 2011 Redgarden Engineering

LLC

Mr. Osiris Stevens President, Next Step Electric 7011 Fairways Drive Longmont, CO 80503

Dear Osiris,

On May 5, 2011, I examined your installation near east of 75th Street and south of Jay Road in Boulder County. This installation includes a flexible thin-film, amorphous silicon solar cell panel attached to the southern half of a wooden utility pole perhaps twenty feet high. This solar cell was wired into a micro-inverter box and through a junction box with a manual-disconnect and fuses. From there, it was attached to the AC line.

When we arrived around 2:20 pm, it was a cloudy day, but after about half an hour, the sun partially came out. At this point, I made measurements of the DC current coming out of the solar cell into the micro-inverter box as well as of the AC Voltage at the AC fuses. The measurements that I made when the sun partially came out are consistent with a recording taken that day (over the Internet) by Next Step Electric which showed an 18-W spike in power output at approximately the same time.

The electrical wiring appeared to be safe and proper. The solar cell appeared very well-adhered to the utility pole with both adhesive and screws. An aesthetic feature of this and other similar NextStep Electric installations in Boulder County was that it was hard to spot the solar panels at all until I was very close to them. The flexible thin-film, amorphous silicon solar cell panels appear to blend right into the utility poles.

Best Regards, Kunt a ahonow, P.E.

Kurt A. Aronow, PE Principal Engineer



2 August 2012

Mr. Osiris Stevens President NextStepElectric 7011 Fairways Drive Longmont, Colorado 80503 USA

Subject: Reactive power capability of SPARQ microinverter

This is to certify that SPARQ microinverters are capable of producing both the active and reactive power. Our current microinverter can produce up to 300Vars during any time of the day independent of irradiation. The amount of reactive power generation can be controlled remotely using our communication hub. Further, our microinverter tracks the peak power point during the day and generates active power up to 100W. There is no technical limitation for generating higher amounts of reactive and active powers through a redesign of the inverter.

A technical presentation is attached herewith to demonstrate the performance of the microinverter.

Please feel free to contact me if you need any further information on this subject.

Regards Praveen Jain CEO 🔨 pjain@sparqsys.com 613 328 4071

SPARQ Systems Inc. 116 Barrie Street, Kingston, Ontario, Canada K7L 3N6 www.spargsys.com

Gardner W. Mein, P.E. Boulder, CO (303) 543-8947

(303) 543-8947 engineering@mein.com

December 3, 2010

Next Step Electric 7011 Fairways Drive, Suite 1 Longmont, CO 80304

To Whom It May Concern:

Project:	Grid Tie Thin Film PV		
Subject:	Visual Inspection -	Board #1, Longmont CO	
	Energy Production -	Board #3, Boulder CO	

On December 1, 2010 an inspection of two Next Step Electric thin film installations were conducted.

Visual Inspection

The panel and system installation appears to be in line with PV installation best practices. Structurally, the panel is sound and well attached to the structural pole via adhesive and screws on edges. Electrical wiring, system grounding and the balance of systems was both aesthetic and functional. Components are readily accessible with a ladder, but safely out of reach from the public.

Electrical Observation

Using a hand held multimeter, panel production/output (DC volts, AC volts, AC amps) was verified to be in alignment with the reported data that was being monitored and reported via the micro inverter and the communications module for that day. This output data is attached as Exhibit A.

If you have any questions or comments, please do not hesitate to call.

Sincerely,

Gardner W. Mein, P.E.

