

March 21, 2007

PERSONAL AND CONFIDENTIAL

Mr. Stuart H. Kupinsky
639 Westwood Drive
Birmingham, MI 48009

Dear Stuart,

On behalf of Tekelec, I am very pleased to offer you employment as Senior Vice President, Corporate Affairs, General Counsel, and Corporate Secretary located in Morrisville, NC on the terms set forth in this letter. In this capacity you will be reporting to Mr. Frank Plastina, President and CEO, Tekelec. Your annual base salary would be \$300,000, payable \$11,538.46 bi-weekly in accordance with the Company's payroll practices.

You will be eligible to participate in Tekelec's 2007 Executive Officer Bonus Plan, commencing on your start date. You will be eligible to earn, in accordance with the terms of such Plan if and as approved by the Company's Board of Directors, up to 70% of your annual base salary (prorated in accordance with the terms of the Plan to reflect the fact that you will be employed for only a portion of 2007) as a cash bonus based on the extent to which the Company achieves certain financial milestones in 2007. The terms of your participation in any officer bonus plans after 2007 will be subject to change and the approval of the Board of Directors of Tekelec.

You will be designated as an "Eligible Officer" under Tekelec's Officer Severance Plan, as amended (the "OSP"). If your employment with Tekelec is terminated during the first three years of your employment with Tekelec under circumstances entitling you to receive severance benefits under the OSP, then the percentage applied for purposes of determining the Severance Allowance payable to you under the OSP shall be determined in accordance with Section 4(a) of the OSP, but in any event such percentage shall not be less than 100%.

I will recommend to Tekelec's Compensation Committee that it grant to you, within 120 days following your start date, 38,000 restricted stock units (RSUs) under Tekelec's Amended and Restated 2004 Equity Incentive Plan for New Employees (the "2004 Plan"), effective as of the date of the Compensation Committee's action granting such RSUs (the "grant date"). Your RSUs will vest and the shares covered thereby will automatically issue in four equal quarterly installments, with the first of such installments vesting on May 15, 2008 and one additional installment vesting on May 15th of each calendar year thereafter, as long as you remain an employee of the Company. The RSUs will in all respects be subject to the terms and provisions of the 2004 Plan and the agreement evidencing the grant of RSUs.

I will also recommend to Tekelec's Compensation Committee that it grant to you, within 120 days following your start date, stock-settled stock appreciation rights for 113,000 shares of the Company's Common Stock ("SARs") under the 2004 Plan, effective as of the date of the Compensation Committee's action granting such SARs (the "grant date"). The SARs will vest and become exercisable as to 25% of the shares subject thereto on May 15, 2008, and the remaining 75% will vest and become exercisable in 12 equal installments commencing on August 15, 2008, with one additional installment vesting on the 15th day of the second month of each calendar quarter thereafter, as long as you remain an employee of the

March 21, 2007
Page Two

Company. The SARs entitle you to receive, upon their settlement (the "settlement date"), the total amount of the appreciation (the "Appreciation") in the fair market value of the Company's Common Stock with respect to the number of SARs being exercised, and computed as (A) the excess, if any, of (i) the value of one share of Tekelec Common Stock on the settlement date *over* (ii) the value of one share of Tekelec Common Stock on the grant date, *multiplied by* (B) the number of SARs being exercised. The Appreciation will be payable in shares of Tekelec Common Stock calculated using the closing sales price of Tekelec Common Stock as of the settlement date. The SARs will in all respects be subject to the terms and provisions of the 2004 Plan and the agreement evidencing the grant of SARs.

In connection with your relocation to North Carolina, Tekelec will reimburse you, subject to the terms and conditions of Tekelec's Relocation Policy (a copy of which is enclosed), up to a maximum of \$35,000 (the "Relocation Allowance") for your accountable actual out-of-pocket costs incurred in relocating and the associated income taxes payable by you with respect to your receipt of such reimbursement. In addition to the Relocation Allowance, Tekelec will reimburse you for the reasonable expenses of one house-hunting trip to North Carolina.

As a new employee, you will be eligible to participate in many of Tekelec's benefit programs, which include medical, dental, vision, life and disability plans, a 401(K) plan and an educational assistance program. Your participation in these plans is subject to the terms, conditions and limitations contained in the applicable plan documents and/or policies. The specifics of each program in which you are eligible to participate will be discussed with you following your start date.

Tekelec reserves the right to change its benefit and employee programs, policies or practices from time to time, in its sole discretion, this letter is not intended as any limitation on that right. Additionally, Tekelec provides a Vacation/Personal Time Off policy, which allows employees maximum flexibility and discretion in utilizing Company paid personal time. You will start accruing 20 days per year during your first year of employment. Tekelec also provides for 11 paid holidays per calendar year.

You are aware that Tekelec strictly prohibits employees from unlawfully using confidential or proprietary information belonging to any other person or entity (including all former employers). By signing the enclosed copy of this letter, you agree not to disclose or use, or induce Tekelec or any of its employees or contractors to use, any trade secrets or confidential or proprietary information belonging to any of your former employers or other parties, and further agree that you are not subject to any express or implied contractual obligations, including but not limited to noncompetition and non-solicitation agreements, to any of your former employers under any agreements or understandings whether oral or written.

As a condition of commencing your employment with Tekelec, you will be required to sign Tekelec's standard "Confidentiality and Non-Disclosure Agreement and Assignment of Rights" (a copy of which is enclosed).

In compliance with the Immigration Reform and Control Act of 1986, we request that you provide us with appropriate documentation verifying your work authorization and identification within three days of your start date.

All employment with Tekelec is "at-will" which means that you may resign at any time, with or without notice, and that Tekelec reserves the right to terminate your employment or alter your position, duties, or title with or without notice, for any or no particular reason or cause. While the terms of your employment and compensation will be subject to review, typically annually, and may change from time to time, the at-will nature of all employment with the Company will not and cannot change except by an express written agreement which must be signed by the President of Tekelec.

March 21, 2007
Page Three

In accordance with Tekelec policy, this offer is conditional upon the successful completion of the background and the drug screen. The drug screen must be completed within 24 hours of your receipt of this written offer. I have enclosed the necessary paperwork and address for the drug screening lab location. Their hours of operation are: Monday through Friday, 8:30 am until 5:00 pm.

On your first day of employment, please arrive at 9:00 am at our facilities in Morrisville, NC, and report to Ms. Molly Mancuso, Human Resources Administrator. You will spend the morning with Molly in an orientation session.

This letter agreement contains our entire understanding with respect to your proposed employment with Tekelec and supersedes any prior communications and understandings we may have had regarding the subject. The provisions of this letter may be amended only by a writing signed by you and by an authorized officer of Tekelec. If you have any questions about the meaning of any of the terms or provisions included herein, please let me know at your earliest convenience. This letter agreement shall be construed under the laws of North Carolina.

Stuart, we would be pleased with your affirmative response to our offer of employment and with your joining Tekelec. If you wish to accept this offer, please sign and complete where indicated and return all original pages of this letter to us as soon as possible. Unless accepted, this offer will lapse at 5:00 pm on March 27, 2007.

Should you have any questions, or if there is anything else with which I can assist you, please feel free to contact me at (919) 388-1446. In the meantime, we look forward to the prospect of having you on our Tekelec team.

Sincerely,
TEKELEC

Judith B. Barnett
Director, Human Resources

cc: Frank Plastina

I ACCEPT THE ABOVE OFFER ON THE TERMS AND CONDITIONS DESCRIBED HEREIN; AND I WILL COMMENCE EMPLOYMENT WITH TEKELEC ON: APRIL , 2007

Signature