

Certifications of Chief Executive Officer and Chief Financial Officer of Tekelec pursuant to Rule 13a-14(b) under the Exchange Act and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of Tekelec (the "Company") on Form 10-Q for the period ended June 30, 2009 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Franco Plastina, President and Chief Executive Officer of the Company, and William H. Everett, Executive Vice President and Chief Financial Officer of the Company, certify, to the best of our knowledge, pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 5, 2009

/s/ FRANCO PLASTINA
Franco Plastina
President and Chief Executive Officer

Date: August 5, 2009

/s/ WILLIAM H. EVERETT
William H. Everett
Executive Vice President and
Chief Financial Officer