

# POWER OF ATTORNEY

Exhibit 24

Power of Attorney

Know all by these presents, that the undersigned hereby constitutes and appoints each of Marie A. Angelini, Jonathan S. Meindersma and Daniel T. Noreck, signing singly, the undersigned's true and lawful attorney-in-fact to:

1. execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Providence and Worcester Railroad Company (the "Company"), Form ID - Uniform Application for Access Codes to file on Edgar, Forms 3, 4 and 5 and any other forms required to be filed in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder (a "Form");
2. do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form, complete and execute any amendment or amendments thereto, and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
3. take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing

attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file any Forms pursuant to Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder, with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact. This Power of Attorney has been executed and delivered in substitution of the Power of Attorney dated January 11, 2010 executed by the undersigned in connection with the filing of Forms.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 28th day of September, 2010.

/s/ Richard W. Anderson

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