UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Post-Effective Amendment No. 1 То Form S-8 **REGISTRATION STATEMENT UNDER**

THE SECURITIES ACT OF 1933

ALLISON TRANSMISSION HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

26-0414014 (I.R.S. Employer Identification Number)

One Allison Way Indianapolis, IN 46222 (317) 242-5000 (Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

> Allison Transmission Holdings, Inc. 2011 Equity Incentive Award Plan Equity Incentive Plan of Allison Transmission Holdings, Inc. (Full title of plans)

Eric C. Scroggins Vice President — General Counsel and Secretary Allison Transmission Holdings, Inc. **One Allison Way** Indianapolis, IN 46222 (317) 242-5000 (Address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Rachel W. Sheridan, Esq. Jason M. Licht, Esq. Latham & Watkins LLP 555 11th Street NW Washington, DC 20004 (202) 637-2200

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer \times

Non-accelerated filer □ (Do not check if a smaller reporting company)

Accelerated filer Smaller reporting company

EXPLANATORY NOTE

Allison Transmission Holdings, Inc. (the "Registrant") is filing this Post-Effective Amendment No. 1 to deregister shares of the Registrant's common stock, par value \$0.01 per share (the "Common Stock"), originally registered pursuant to its Registration Statement on Form S-8 (File No. 333-180285) filed with the Securities and Exchange Commission on March 22, 2012 (the "Prior Registrant Statement") for offer or sale pursuant to the Allison Transmission Holdings, Inc. 2011 Equity Incentive Award Plan (the "2011 Plan"). Pursuant to the Prior Registration Statement, the Registrant registered up to 30,167,057 shares of Common Stock for issuance under the 2011 Plan.

On March 26, 2015, the Board of Directors of the Registrant adopted the Allison Transmission Holdings, Inc. 2015 Equity Incentive Award Plan (the "2015 Plan") and on May 14, 2015, stockholders voted to approve the 2015 Plan, which, among other things, authorized the issuance of a total of 15,359,157 shares of Common Stock consisting of 2,600,000 shares being registered for the first time pursuant to the 2015 Plan (the "New Shares") and 12,759,157 shares (the "Carryover Shares") that were previously registered for offer or sale pursuant to the 2011 Plan and are not subject to outstanding awards. Note that the total amount of Carryover Shares includes 242,828 shares added to the 2011 Plan from forfeited awards under the Equity Incentive Plan of Allison Transmission Holdings, Inc. (the "2007 Plan" and together with the 2011 Plan, the "Prior Plans"). Such Carryover Shares have been carried over to the 2015 Plan and have become available for issuance thereunder. The Carryover Shares are hereby deregistered under the Prior Registration Statement.

Contemporaneously with the filing of this Post-Effect Amendment No. 1, the Registrant is filing a new Registration Statement on Form S-8 (the "New Registration Statement") to register the New Shares and the Carryover Shares available for issuance under the 2015 Plan. The registration fee paid for the Carryover Shares under the Prior Registration Statement is carried over to the New Registration Statement.

The Registrant may, from time to time, file additional post-effective amendments to the Prior Registration Statement to deregister additional shares that are currently subject to outstanding awards under the Prior Plans but that subsequently become available for new awards under the 2015 Plan, and may register such additional shares pursuant to subsequent registration statements.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Indianapolis, State of Indiana, on May 15, 2015.

Allison Transmission Holdings, Inc.

By: /s/ Lawrence E. Dewey

Lawrence E. Dewey Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints David Graziosi and Eric Scroggins, or either of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to file and sign any and all amendments, including post-effective amendments and any registration statement for the same offering that is to be effective under Rule 462 of the Securities Act, to this registration statement, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ Lawrence E. Dewey Lawrence E. Dewey	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)	May 15, 2015
/s/ David S. Graziosi David S. Graziosi	Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	May 15, 2015
/s/ David Denison David Denison	Director	May 15, 2015
/s/ David Everitt David Everitt	Director	May 15, 2015
/s/ Gregory S. Ledford Gregory S. Ledford	Director	May 15, 2015
/s/ Thomas W. Rabaut Thomas W. Rabaut	Director	May 15, 2015
/s/ Francis Raborn Francis Raborn	Director	May 15, 2015
/s/ Richard V. Reynolds Richard V. Reynolds	Director	May 15, 2015