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MODAL TESTING THE EOLE

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ABSTRACT

This report presents the results of the modal test of the 110-m-tall EOLE wind turbine. Modal testing an immense and flexible wind turbine poses a number of problems. It requires innovative excitation techniques since the modal frequencies of this type of structure are quite low--some below 1.0 Hz. Also, substantial energy must be input to the structure to obtain reasonable levels of response. Step-relaxation and wind were used to excite the structure.

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