



University of Tennessee Department of Civil & Environmental Engineering

Transportation Seminar Series

Chris Kirby, P.E., CDM Smith

The Big Move: Challenges of Transporting a Super-Heavy and Oversized Load

Thursday, February 27, 2014, 3:40 until 5:00 PM

327 John D. Tickle Building



The Big Move was a project to transport the largest electric generator component of Dominion Power's Virginia City Hybrid Energy Center from Knoxville TN to St. Paul VA—a 176-mile, 19-day trip. An intricately specialized 28-dolly rig was chosen to handle the extreme weight and size of the stator. Weighing 1.4 million pounds, the rig with the stator was 265' long, 23' wide, and more than 17' tall; its top speed was 10 mph and it could not back up during the haul. The rig had more than 224 tires, and was powered by as many as six trucks with 600+ horsepower each. Several state police vehicles, utility bucket trucks, support trucks, and escort vehicles accompanied the rig. Key safety, risk management, and operational considerations included roadway geometrics, load/stress limitations on bridges and pavements, clearance envelopes, and traffic control along the route. The project required specialized route control documents and engineering support for innovative techniques for hauling across bridges, as well as intense stakeholder coordination, and a context sensitive approach to communicating with affected communities. The seminar will highlight challenges involved with this unusual and complex transportation situation, and present the innovative and successful strategies adopted to address them.

Chris Kirby is a licensed professional engineer and project manager for CDM Smith in Knoxville. Chris has served in a variety of project engineering and management roles for local government, consulting companies, transportation companies, and research facilities. Chris is a graduate of UT with a BS in Engineering and an MS in Transportation Engineering. He is a past president of the Tennessee Section Institute of Transportation Engineers (TSITE) and helps facilitate TSITE's Leadership Development Program.

For further information, contact Dr. Shashi Nambisan, shashi@utk.edu.

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