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AGRICULTURE AND NATURAL RESOURCES COMMITTEE

Witness Form

Today's Date: 09/23/2019

Name: Kevin C. Garrity
Address: <u>6261 Muirloch Court South, Dublin, Ohio 43017</u>
Telephone: <u>614-832-3896</u>
Organization Representing: NACE International
Testifying on Bill Number: <u>H.B. No. 189</u>
Testimony:VerbalWritten <u>X</u> Both
Testifying As: <u>X</u> ProponentOpponentInterested Party
Are you a Registered Lobbyist?Yes <u>X</u> No
Special Requests: <u>Overall support of the Bill, with recommendation of slight modification</u>
to the language.

Written testimony is a public record and may be posted on the Ohio Senate's website

9-23-19 Statement of Kevin C. Garrity, FNACE Before Senate Agriculture and Natural Resources Committee Regarding House Bill - Sub. H. B. No. 189

My name is Kevin C. Garrity. I am a practicing engineer residing at 6261 Muirloch Court South, Dublin, Ohio 43017. I was first registered as a professional engineer in 1982. I hold a Bachelors in Electrical Engineering from NYU. I have been practicing corrosion and materials engineering since 1975. My practice is in specialty areas of asset integrity management, corrosion and materials forensic analysis and failure investigations, including Root Cause analysis. I am the Executive Vice President of Mears Group, Inc., a worldwide service provider in integrity solutions and integrity management.

I have been an active member of NACE International (NACE), a worldwide technical association dedicated to education, training, certification and standards development to provide industry with the tools necessary to protect the world's infrastructure and assets against the destructive forces of corrosion and materials degradation. NACE currently has over 40,000 members and has developed standards incorporated by reference in US and international regulations. I served as President of NACE in 2012-2013 and currently serve as President of the NACE Institute, a body of over 50,000 certificated professionals dedicated to corrosion prevention and materials and asset integrity. I want to thank the Senate and House committees for all of the work that they have put into crafting what is a very strong approach to addressing this critical safety issue. I am pleased to offer this statement in consideration of H.B. No 189 on Amusement Ride Operation and Safety.

Engineered materials are the fabric of all structures, facilities and systems and all engineered materials have an estimated design life that is based on the expectation that over the life of the material component or system, critical maintenance and detailed inspection activities will ensure the fitness for service of the materials involved. Examples may include bridge inspections involving repairs, cleaning and painting and inspection of the nation's 2.5 million miles of pipelines carrying gas and liquid petroleum products. These structures are critical to assure safe public transportation and reliability of assets necessary to ensure our nation's energy independence.

Most often, a failure to afford routine inspection and maintenance of critical engineered structures can lead to unintended events, sometimes associated with tragic consequences. In the case of amusement rides (unless at a stationary amusement park), they are often exposed to changing environmental conditions and always exposed to operating stress associated with mechanical operations and very often subjected to nonuniform loading resulting from varying passenger/rider payload. These conditions coupled with varying degrees of maintenance create a highly dynamic matrix of operating and exposure conditions that present challenges for safe reliable service ("fitness-for-service"). These factors necessitate a structured approach to inspection and maintenance of amusement rides and their associated electrical and mechanical components to enhance safety and prevent failures that may lead to tragic consequences. Inspections of this nature and maintenance activities in other industries are routinely carried out by trained and certificated individuals such as those trained and certified by NACE.

NACE also maintains a large body of consensus standards that offer guidance on material selection for new construction, inspection and testing of existing structures and surface preparation and coating standards for both new and existing metallic structures. The education, certification and standards program resources available through NACE would prove to be a valuable asset to the amusement ride industry and would serve to improve and enhance safety.

As a practicing engineer who has dedicated over 45 years to safety, reliability and the prevention of catastrophic accidents, I strongly encourage the committee to consider the benefits of incorporating NACE International as a resource reference in the proposed Bill.

Respectfully, Kevin C. Garrity