

Unique Overload Capacity of Wood Utility Poles

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Utility lines are designed to specified weather loads, but the likelihood that actual loads will exceed those design loads in an extreme weather event is high due to loads imposed by secondary damage effects. Under these conditions, wood poles have a much lower probability of failure than poles constructed of alternate materials. This paper explains the reason why wood poles have higher reliability in overload situations.

About Martin

Martin Rollins is the principal engineer of H. M. Rollins Company, Inc., a consulting engineering firm in Gulfport, Miss. His firm has provided engineering services to a variety of wood product and other industrial clients across the U.S. for more than 35 years.

Martin received his Bachelor of Science degree in Mechanical Engineering from Texas A&M University in 1968 and a Master of Science degree in Business Administration from the University of South Alabama in 1976.

He is a Registered Professional Engineer in several states. He serves as a member of ASC O5, the committee responsible for the standards for wood products used in the utility industry, including ANSI O5.1, the national standard for wood poles, and is also a member of subcommittee 5 of the NESC, which is responsible for the strength and loadings sections of the NESC.

In addition to his industrial work, Martin provides technical assistance to the wood pole industry on behalf of the North American Wood Pole Council.