

Control Number: 32182



Item Number: 85

Addendum StartPage: 0

में हे देखका मुख्ये हैं है है कि मान्स के कि मार्ग के मुख्य के मुख्य मान्स के के मार्ग के 2005 JUL 17 MI 9: 32 

## Comments to Texas Public Utility Commission Project 32182 7/12/2006

The organizations representing the treated-wood utility pole industry would like to provide comments on the proposed recommendations contained in Project 32182 presently being prepared by the staff of the Texas Public Utility Commission (PUC). These comments were prepared by Martin Rollins, P.E., with H. M. Rollins Company, Inc., of Gulfport, Mississippi (228-832-1738), on behalf of the North American Wood Pole Council (NAWPC), the Southern Pressure Treaters Association (SPTA), the Western Wood Preservers Institute (WWPI), and the Treated Wood Council (TWC). These organizations serve more than 300 separate entities associated with the production of treated wood, including over 98% of the utility poles treated in the U.S., and include several utility pole producers in the State of Texas. Martin Rollins, and H. M. Rollins Company, Inc., provide technical assistance to these organizations on various code and standards issues such as the American National Standards Institute Committee for Wood Poles, the National Electrical Safety Code, and the American Society of Civil Engineers.

These organizations are concerned about one of the staff recommendations contained in the Section VII Conclusions as Item 5, which are to be considered for adoption by the Texas Public Utility Commission on July 20, 2006. Included in these Conclusions as Item 5 is: "The Staff initiate a rulemaking requiring that after January 1, 2007, all permanent, new and replacement transmission structures within 50 miles of the Texas coastline be pre-constructed of pre-stressed concrete, steel, or other engineered products that are more resistant to high wind and deterioration than wood. Also, after January 1, 2007, that all designs for permanent new and replacement transmission structures within 10 miles of the Texas coastline assume a maximum wind speed of 140 miles-per-hour."

Mr. Rollins discussed Project 32182 with Mr. Mike Lee of the PUC staff, and Mr. Lee indicated that comments on the July 3, 2006, Staff Draft Executive Summary would be considered before the Staff Report on this project was submitted to the Commission on July 20, 2006. Many of the issues and recommendations found in the July 3, 2006, draft are similar to those recently considered by the Staff of the Florida Public Service Commission (PSC), which was undertaking a similar activity in an attempt to improve the performance of the electrical system in extreme weather events such as hurricanes. The Wood Pole Industry was an active participant in that process and believes that that process produced a reasonable approach to the issues identified.

Originally, the Florida Public Service Commission Staff had a similar provision requiring that all wood transmission lines would be replaced with steel or prestressed concrete. This was largely because the utilities had indicated that their intent was to use steel or prestressed concrete for all new and replacement transmission work. Comments made by many Texas utilities on Project 32182 indicate a similar approach. Therefore, the Texas PUC Staff, like the Florida PSC Staff, may not see this language as controversial.

However, the decision by a utility to choose one product over another is clearly different than the PUC making a formal determination to require the use of one product over a structurally equivalent product. Obviously, the adoption of a provision essentially "banning" the use of wood transmission structures would have serious free market implications, not only within the State of Texas, but nationwide, and the organizations presenting these comments believe that such an action would be technically unsupportable, unnecessary to accomplish the goal of the Commission, and potentially detrimental to the rapid restoration of power in future storms. The Florida PSC agreed and removed this language from their proposed rule changes.

After becoming aware of this proposed action, wood pole industry representatives contacted various PUC staff personnel to discuss this issue, and reviewed the docket materials on Project 32182. It would appear that the real goal of this provision is to force utilities to evaluate old transmission lines, designed under pre-1977 NESC design standards, and, if these lines do not meet the present design criteria, to develop costs and timetables for their replacement with lines meeting the present NESC standards. Although most old transmission lines are constructed of wood, it is likely that there are lines constructed of other materials that were designed to the same "pre-1977" standards.

Poles constructed of steel or concrete are not structurally superior to those of wood. The Texas PUC Staff conclusion that steel, pre-stressed concrete, or other engineered products are more wind resistant than wood has no technical basis, and there is some recent empirical data to the contrary, in that reportedly during Hurricane Ivan on the Alabama coast in 2004 the pre-stressed concrete poles in a 69 kV line failed while a section of the same line constructed of wood survived without damage. Lines can be designed with equal strength and reliability using any of the materials presently found in the National Electrical Safety Code (NESC), which controls the safety of overhead utility line construction. These materials are wood, steel, concrete and fiber-reinforced composites. Of these, wood is the dominant material of choice by utilities, although steel and concrete have a large share of transmission line construction. Some utility engineers prefer steel or concrete for transmission lines because they can be manufactured to a specific design capacity, rather than the design having to be developed to utilize an available wood pole capacity. Utilities have the prerogative to choose line design parameters and pole materials based on their own set of criteria, so long as the end product meets the

requirements of the NESC. Some utilities standardize on steel or concrete, while others prefer wood. Although each material has its own positive attributes, one is not superior to the other from an engineering perspective, and the Texas Public Utility Commission should not prohibit the use of wood transmission structures when there is no technical basis for the prohibition and future conditions such as material shortages or severe price escalation may cause utilities to reevaluate pole material determinations.

A prohibition on wood transmission poles in not necessary, and it does not accomplish the underlying goal, which is to upgrade all older transmission lines in order to improve their performance in future storms. The stated goal can be better accomplished by changing the recommendation in Item 5 to: "5. The Staff initiate a rulemaking requiring that after January 1, 2007, all permanent, new and replacement transmission structures within 10 miles of the Texas coastline assume a maximum wind speed of 140 miles-per-hour, and all transmission lines in other areas of the State follow the extreme wind loading criteria found in the 2002 NESC." This would accomplish the objective without limiting future alternatives or damaging free market relationships.

It has been reported that not only wood poles failed in Hurricanes Katrina, Rita, and Wilma, and that, in fact, some key transmission lines failed that were constructed of steel or concrete. One of the negatives of these materials is that it takes a long time to manufacture a large number of poles, which can result in an extended time period to restore power. This is one of the advantages of wood poles. Large inventories of wood poles are maintained at manufacturing plants across the country. In the aftermath of Hurricane Katrina almost 100,000 wood distribution and transmission poles were provided to the affected utilities within a period of a few weeks. In the recent past, Bonneville Power, the governmental power authority in the west, lost a 345 kV line constructed of steel or concrete to an extreme weather event. Due to the long lead times for replacement poles the line was reconstructed using wood poles, which were readily available in the sizes needed to support a 345 kV line. It is possible that consideration of a wood alternative may have offered opportunities to reduce the length of the outage after last year's storms. A Commission restriction on the use of wood transmission poles would eliminate this viable option in the future.

Natural disasters have the ability to damage or destroy a variety of critical infrastructure systems, including the electrical power distribution network. While it may take months, or even years, to repair bridges and highways destroyed in hurricanes, the public expects water, sewer, communication, and power to be restored quickly. The treated-wood pole industry has a unique capability to respond in times of natural disaster to aid utilities in restoring power to the public. Manufacturers of alternate material poles simply do not have the ability to respond with very large quantities of poles in a period of a few days.

In summary, the NAWPC, the SPTA, the WWPI, the TWC, and the manufacturers of wood poles in the State of Texas ask that you not adopt the Staff Conclusion 5 as written, and that you modify the language in this recommendation to more clearly accomplish the stated goal. These organizations would request that Conclusion 5 be changed to the previously suggested, or similar, wording.

The treated-wood pole industry is very proud of the role that it plays in providing the U.S. with the most cost-effective, reliable, and universally available electrical power system in the world. The industry is supportive of efforts to improve system reliability in extreme weather events and appreciates the opportunity to provide input into this important process.

Sincerely,

North American Wood Pole Council Dennis Hayward, Executive Vice President 7017 NE Highway 99, Suite 108 Vancouver, WA 98665 360-693-9958

Southern Pressure Treaters Association Carl Johnson, Executive Director P. O. Box 3219 Pineville, LA 71360 318-619-8589

Western Wood Preservers Institute Todd Brown, Utility Pole Committee Chairman 7017 NE Highway 99, Suite 108 Vancouver, WA 98665 360-693-9958

Treated Wood Council Jeff Miller, Executive Director 1111 19<sup>th</sup> Street, NW, Suite 800 Washington, DC 20036 202-463-2045