

Decision Matrix
 Arrowhead - Weston Transmission Line Project
 Docket 05-CE-113
 November 26, 2003

ISSUE	TRANSCRIPT REFERENCE	STATUTES	POSITIONS OF THE PARTIES
<p>I. APPLICANTS' PETITION REGARDING INCREASED ESTIMATED COST OF THE ARROWHEAD-WESTON TRANSMISSION LINE PROJECT (COST PETITION).</p> <p>See Commission staff's March 25, 2003, memo for the Commission agenda, and the Commission's April 24, 2003, Order Concerning Reopened Proceedings.)</p>			
<p>A. What is the current estimated cost of the Arrowhead-Weston line, including the proposed fiber optics and substation improvements? As part of this issue, the record shall also address the environmental impacts of the substation improvements now being proposed.</p>			
<p>1. Is fiber optic technology an appropriate technology for controlling the operation of new EHV transmission lines?</p>	<p>Ex. 385 Tr. 9919 Tr. 9923-25 Tr. 9926 Br. 47-8</p>		<p>Applicants: The Commission should approve applicants' request to install a 12-strand fiber optic ground wire (OPGW), for the sole purpose of monitoring, operating, and protecting the transmission grid. The OPGW is the most capable and reliable technology for controlling and monitoring transmission facilities.</p>

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	e.g. Tr. 11177		<p>Members of the Public: The King-Weston alternative is less costly than the Arrowhead-Weston project.</p> <p>Alternative One: Current estimated cost of the King-Weston South and the King-Weston North alternatives, as described in the 1999 WRAO Report, is \$391.5 million and \$413.2 million, respectively.</p> <p>Alternative Two: Current estimated cost of the King-Weston South and the King-Weston North alternatives is \$78.6 and \$46.3 million less than the Arrowhead-Weston alternative, respectively.</p>
3. What is the current estimated cost of the Prairie Island-Columbia EHV transmission line alternative?	Ex. 402 Br. 50 Br. 3 Tr. 10850-1 Ex. 475 Br. 35-6		<p>Applicants: The current estimated cost of the Prairie Island-Columbia alternative, as described in option 2E of the 1999 WRAO Report, is \$557.5 million.</p> <p>ELCW: Agrees with applicants' estimated costs for the Prairie Island-Columbia alternative.</p> <p>SOUL: The Prairie Island-Columbia alternative would eliminate the need for the 345 kV line from the Madison area to the Iowa border identified in the ATC Ten-Year Assessment, saving construction costs of approximately \$150 million.</p>

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	Tr. 10073 Br. 4, 6 Br. 1		<p>Hillside Dairy: Added generation of 2,691 MW could be added by 2008 and this is different from the WRAO report assumptions. The applicants' witness Burmester's conclusion, that the current transmission projects do not "significantly impact the WRAO alternatives," has not been reviewed independently.</p> <p>NAWO: Cheaper transmission options would perform better with less environmental impacts. The Arrowhead-Weston project would diminish stability because it connects to lower voltage lines at each end.</p>
	Tr. 10839-10841 Tr. 10848 Br. 11-13, 28, 44 Br. 1-2		<p>SOUL: Opposes the Arrowhead-Weston project because of changes since the WRAO report including more generation and no Chisago 230 kV line. WRAO studies were limited to single contingencies and did not consider "possible but improbable" (PBI) contingencies. Also, the WRAO studies only peak loads with high imports. There is time to plan and construct either a Prairie Island-La Crosse-Columbia line, which is technically superior to the Arrowhead-Weston project, or the King-Weston alternative.</p> <p>WIEG: Endorses the positions and arguments of ELCW.</p>

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	Tr. 10308-13 Tr. 10303 Tr. 10325-36 Br. 3 Br. 3-4		<p>WPPI: Supports the Arrowhead-Weston project. The events in 1997 and 1998 reveal the vulnerability of the grid and the current situation is similar. No additional firm transmission service is available into Wisconsin from any direction. All network transmission is used for existing generation and power purchases.</p> <p>WOLF: The Arrowhead-Weston project loses on reliability because so much generation has been built in WUMS and MAIN for local load service. The project is not reliable in a system security sense because the one long line is vulnerable to natural storms and "political storms." The line is not needed because of the glut of merchant generation and there is no market need.</p>
	e.g. Tr. 12296		<p>Members of the Public: Significant new generation construction in eastern Wisconsin was not recognized in the 1999 WRAO Report. The generation additions assure that Wisconsin would not be dependent on imports to meet its growing electrical demand.</p> <p>Alternate One: The generation and transmission changes since the Commission's October 30, 2001, Final Decision in this docket have not changed the need for a new EHV interface between MAPP and WUMS.</p>

