

Spare transformer gets new 'lease on life'

by **Melissa Chiechi**

Thanks to four DSW employees, Arizona Public Service now has a transformer to replace one that burned out at its Four Corners Switchyard. But it took a little wheeling and dealing.

When the APS transformer failed in late 1999, the utility found itself in a fix. No spare was available. Moreover, the manufacturer was scheduling deliveries two years out and costs from the failed unit were mounting hourly.

However, Western had a spare 345-kV (230-kV) transformer stored at Pinnacle Peak Substation. Western and APS had been discussing an interconnection at the APS Four Corners Switchyard for 14 years. "The interconnection would upgrade the switchyard to a 345-kV interconnection, making the switchyard more accessible and relieve transmission congestion in the Four Corners area," said DSW Electrical Engineer **Nagi Saber**.

The planned interconnection required a replacement transformer. It also required more than \$740,000 in interconnection fees from Western.

The solution: APS would assume ownership of the transformer. In return, APS agreed to credit Western \$600,000 against the interconnection fees it would have

charged for the interconnection, reducing the costs to a more manageable level and speeding the interconnection agreement.

None of this would have been possible if four Western employees, **John Randall**, **Bill Snowden**, **Jodi Crane** and **Nick Saber**, hadn't spoken up six and a half years ago.

The transformer in question was built in 1963 and was used at Pinnacle Peak Substation from 1965 to 1993. When it was taken out of service, DSW Power Systems Maintenance Specialist Randall and his co-workers pushed to save it. "We tested all its critical parts. Everything worked. We felt it was worth saving," Randall said. The equipment was placed in storage where it remained until this spring.

In mid-March, the 500,000-pound transformer began its ponderous journey from Pinnacle Peak Substation north of Phoenix to the APS Four Corners Switchyard, a distance of more than 300 miles.

"It was quite a sight. It took a 300-foot long truck with 90 wheels to haul it," recalled Randall. "They had to close the northbound lanes of Interstate 17 four times and turn the southbound lanes into a two-lane highway. Fortunately, that took place at night to reduce traffic congestion." Today, the long-awaited interconnection is becoming a reality—thanks, in part, to the foresight of some frugal Western employees. 

A spare transformer from Western's Pinnacle Peak Substation lumbers along on its way to a new home with Arizona Public Service. Western traded the transformer for a \$600,000 credit on interconnection fees with APS.

