Big steam and PTC

Adding the new technology to steam power will be a difficult and expensive task





Volunteers work in Santa Fe 4-8-4 No. 2926's cab in March to prepare the engine for testing. PTC will test the ingenuity of mainline steam operators. ${\tt TRAINS:\ Jim\ Wrinn}$

>> Daylight's Columbia Gorge movie runs



Southern Pacific 4-8-4 No. 4449 ran several times between Vancouver, Wash., and Wishram, Wash., along the Columbia River Gorge the week of April 9 for the filming of a new IMAX movie by Stephen Low about the workings of a mainline railroad, focusing on BNSF. Look for the film in 2019. Low previously made the IMAX movie "Rocky Mountain Express" featuring Canadian Pacific 4-6-4 No. 2816. Steven J. Brown

Even before Amtrak said this spring it would no longer operate special trains, America's handful of mainline steam locomotives were already facing a big challenge: How to install positive train control in early 20th-century engines that still venture out onto main lines.

For most operators, that means waiting to see if the Dec. 31 deadline holds up and secondly taking cues from the Class I railroads as to the types of PTC systems they will accept.

At least three scenarios are under consideration by the various groups involved: One calls for a computer brain that would be housed in the locomotive cab and shared among a pool of operators who chose to collaborate. Another calls for the remote use of PTC gear in the helper diesel that almost always accompanies steam power on the main line. The third is to seek a waiver from the requirement by the Federal Railroad Administration.

Dr. Mike Hartshorne of the Santa Fe 2926 organization in Albuquerque, N.M., says the 4-8-4, near the end of its restoration, will utilize remote tethering of the steam locomotive to PTC in the trailing diesel. The John Emery Trust awarded the group \$20,000 in April toward the cost.

The San Bernardino Railroad Historical Society, which is in the midst of a 1,472-day inspection of Los Angeles-based Santa Fe 4-8-4 No. 3751, is "researching how to comply with PTC in the most cost-effective manner and talking with other mainline steam operators as we evaluate options," President Warren Peterson says. "We have not decided on a specific course of action at this point."

Before its June excursion was cancelled, Milwaukee Road No. 261 billed its Minneapolis-Duluth, Minn., trip as a PTC fundraiser, saying that it will cost \$100,000 to \$150,000 to equip the popular 4-8-4. The Emery Trust also awarded \$30,000 each in late April to No. 261 and to Nickel Plate Road 2-8-4 No. 765 for PTC.

During a Trains visit to the steam shop in Cheyenne, Wyo., in March, Union Pacific declined to discuss PTC on 4-8-4 No. 844, which will run in July, and Big Boy No. 4014, set to debut in 2019 — after the PTC requirement is in place.

While much about PTC and mainline steam remains uncertain, one thing is clear: Any system combining these old and new technologies will be complicated and expensive.