DWARFED BY DUCTS for the scrubber, that will control emissions from the Great Western Sugar Co.'s coal-burning furnace is Glenn Troudt, factory manager. The scrubber itself is at right. The furnace and scrubber replace a natural gas power system. (More photos inside today's Times.)

(TIMES PHOTO)

Continued on following Page
$1.6 Million GW Conversion Ready To Go

By JOHN LA PORTE
As controversy over a coal-fired power plant near Brush continues, the Great Western Sugar Co. has quietly and with a lack of opposition prepared to convert its Fort Morgan factory from natural gas to coal — a conversion that is ready to go when the sugar beet harvest campaign starts Monday.

The conversion cost $1.6 million.

Glen Troutt, factory manager, has reported that the entire coal conversion has been tested and checks out okay. Although Great Western, having an established plant as opposed to the Pawnee power plant being a new facility and the Great Western plant being at the edge of Fort Morgan and Pawnee going into agricultural lands would probably account for much of the difference in public response, the main reason is probably the "wet scrubber" system that Great Western has installed. It is, Troutt said, the same system that state agencies have suggested for Pawnee.

The scrubber has been a point of contention for Pawnee because the Public Service Co. says the coal it would burn is low enough in sulfur content that a scrubber system is not needed.

The flue gas scrubber at Great Western will, as the name implies, "scrub" combustion gases with water before their entry into the atmosphere.

Company officials feel the use of the scrubber will adequately protect the environment and comply with state air quality control regulations.

The scrubber system will be tested during the campaign to ensure its compliance with applicable regulations, as required by the Colorado Health Department's Air Quality Control Division, which issued an "authority to construct" permit after checking the system. After the test a final permit is given if the system meets standards. If it does not, corrective action will be needed.

The scrubbers direct gases through two fans, around a duct system, through the scrubber itself and out, idling a stack formerly used for coal gases. A turbine drives the fans, and a venturi near the scrubber sprays in water to clean the gases — hence the term "wet scrubber."

The conversion, due to energy considerations, is actually a reconversion to coal. The plant burned coal until a conversion to natural gas in 1959 (the 1958 campaign was the last one in which coal was used for power).

The coal will be brought in along the company's railroad spur with unloading facilities near the stokers. From the stoker the coal is dropped down into a huge furnace with a crusher crushing it for burning.

In earlier days the plant used 4½ to five carloads of coal a day, but officials say how much will be used now depends on how efficiently the coal burns with the scrubber system.

The coal will come from Northwest Colorado with Pittsburg and Midway Coal Co. the supplier.

The conversion is the company's first from natural to coal and will make the Morgan plant one of seven using coal. All of the other six coal-burning facilities have scrubbers similar to the one at Morgan.

The supply of natural gas fell behind the demand, and the company saw a need to convert some gas-burning facilities to coal to assure a supply, officials said. The natural gas industry, considering homes higher priority than industries, and the latter are termed "interruptible."

The conversion, officials said, will allow more homes to be heated.

The conversion should free some 11 million cubic feet of gas for use on peak days, according to Colorado Interstate Gas Co. Public Service Co., which obtains gas from CIG, can thus add another 4,000 gas-heated homes to its 1977 priority list.

Locally the Fort Morgan City Council eased a long moratorium on natural gas hookups Aug. 31 with a decision to allow 50 new hookups.

The construction, handled by Great Western, started in March, 1975, and spanned two "inter-campaign" periods when the beet campaign was not in progress.

First, engineering estimates on structural changes, designing and ordering of equipment took place. In the second inter-campaign period gas burners were removed and coal-burning equipment installed.

During that period the company's environmental affairs department was working with the engineering department on the scrubbers.

The final result lies in wait for Monday's campaign opening.
POLLUTION CONTROL ... This "wet scrubber" will remove particulate matter and reduce sulfur dioxide emissions from the new Great Western coal-burning system. A system of ducts and fans drives emissions into the scrubber, and a venturi at left sends water sprays into the scrubber to remove emissions.

(TIMES PHOTO)

COAL TOWER ... Coal for Great Western's new furnace is unloaded from railroad cars and placed in the tower in the center of the photograph. From there, it is lowered into the furnace. Emission control equipment idles the stack behind and to the left of the tower formerly used for coal-burning before the plant converted from coal to natural gas in 1959. Diminishing natural gas supplies triggered the change back to coal.

(TIMES PHOTO)

Continued on following page
COAL BURNER... The furnace at left will burn coal to power the Great Western Sugar Co.'s Fort Morgan plant when the beet campaign starts Monday. Stokers, visible at the top of the photo, drop the coal down, and the coal is crushed for burning before it enters the furnace.

(TIMES PHOTO)