

4250

district heating

NDHA 59th Annual Meeting

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NEW CENTRAL PLANT FOR HEATING AND COOLING

TEXAS MEDICAL CENTER, INC. IN HOUSTON

W. Leland Anderson, President of Texas Medical Center, Inc. and Robert R. Herring, President of Houston Natural Gas Corporation, have confirmed that Houston Natural will construct, own and operate a central plant to provide climate control for institutions in Houston's Texas Medical Center complex. A formal agreement between the Medical Center and HNG was signed recently.

The plant will go on stream in the summer of 1969 with an initial cooling capacity of 10,000 tons. Projected cooling capacity of the installation, ultimately to become the largest central plant of its kind in the United States, will be 50,000 tons. The completely developed system will be almost eight times as large as the 6,600 ton installation that cools Houston's Astrodome and almost three times as large as the 18,000 ton system at NASA's Manned Spacecraft Center or the 18,000 tons required to cool the exhibits at the New York World's Fair.

Initial cost of the central plant and distribution system will be in excess of \$4 1/2 million, Herring said. Mid-Valley, Inc. of Houston is engineer and contractor.

In the first stages, the plant will serve St. Luke's and Texas Children's Hospitals, new University of Texas facilities, the Houston Speech and Hearing Center, a new Student Residence Hall, March Culmore Hall, and Texas Institute for Rehabilitation and Research.

Gas-fired boilers will provide steam for the distribution system and to drive the refrigeration units. Chilled water and steam for cooling and heating will be delivered from the central plant by an underground distribution system. Steam also will be utilized by the institutions for food preparation, sterilization of equipment, and other processes. Central plant service will be connected to certain new facilities as they are constructed, and can be extended to existing institutions as they require it.

The plant will be located next to Braes Bayou on a 3.2 acre site in the southwest corner of the Medical Center's Fay addition. The Fay addition is across Holcombe Boulevard from the main group of Medical Center buildings and extends south to the bayou between the Prudential Building complex on the west and the Mayfair Apartments and Braeswood Boulevard on the east. The masonry structure will be designed to blend architecturally with nearby facilities in the Medical Center.

Three tunnels, two seven feet in diameter and one six feet in diameter, will be constructed under Holcombe Boulevard for steam and chilled water lines to and from the distribution system in the Medical Center.

Anderson cited several benefits to the Medical Center in the central installation. These include elimination of the compressors, boilers, cooling towers and other equipment normally required in or adjacent to a building to provide refrigeration and heat. Instead, chilled water and steam will be circulated continuously between the central plant and air handling equipment located in the various buildings. Conventional coils, blowers and ductwork necessary to circulate cool or warm air will represent the only capital investment by building owners for year-round climate control.

Anderson added that mechanical room space requirements can be reduced appreciably, making more space available for patient care, research and education, and resulting in greater building design flexibility. Because no cooling towers or boiler stacks are required on the customer's premises, noise from towers and moisture drift also will be eliminated, Anderson said.

The central plant concept is widely used in installations such as La Guardia and Kennedy airports; the University of Houston, Rice University and other campuses; and the Manned Spacecraft Center.

Houston Natural has been a leader in the development of central cooling and heating plants and now serves a variety of customers on a metered basis. Its major Nassau Bay Plant which went on stream in 1964 was only the second of its kind in the world to be utility-owned and operated. The plant provides climate control for the buildings in the Nassau Bay commercial complex opposite the Manned Spacecraft Center. Cooling capacity has been increased to 5,150 tons from the initial 2,100 tons.

In the Houston Natural Gas Building, completed last year in downtown Houston, Houston Natural owns and operates a basement-level "Gas Total Energy" central plant that not only provides chilled and hot water for climate control, but also produces electricity for lighting, air handling equipment, elevator service and all other power needs in the 28-story office tower and adjoining garage. +

You're only one in millions, so why bother to vote, to speak up, to get involved, to commit yourself? German author Hans Habe puts the answer this way: "The world is one per cent good, one per cent bad, and 98% neutral. And this is why what individuals do is important."

Mini Horror Story — A classified newspaper ad appeared recently that should send shivers up and down the wallet of every red-blooded, interest-paying American: "FOR SALE — 1926 Stutz Bearcat. Take over payments."

CONVERSATION PIECES



Busiest airport in the nation is, believe it or not, at Opa-Locka, Fla., a suburb of Miami. Last year it recorded 596,949 take-offs and landings, or more than one per minute. Compare this with New York's Kennedy airport, with 451,533 take-offs and landings.

Does your car have those self-locking doors that lock automatically at eight m.p.h.? Some owners have found that the doors lock up while the car is pulled through a car wash.