District Cooling System Rate Adjustment

Jaime Castillo
Chief of Staff/VP of Operations Support & Innovation

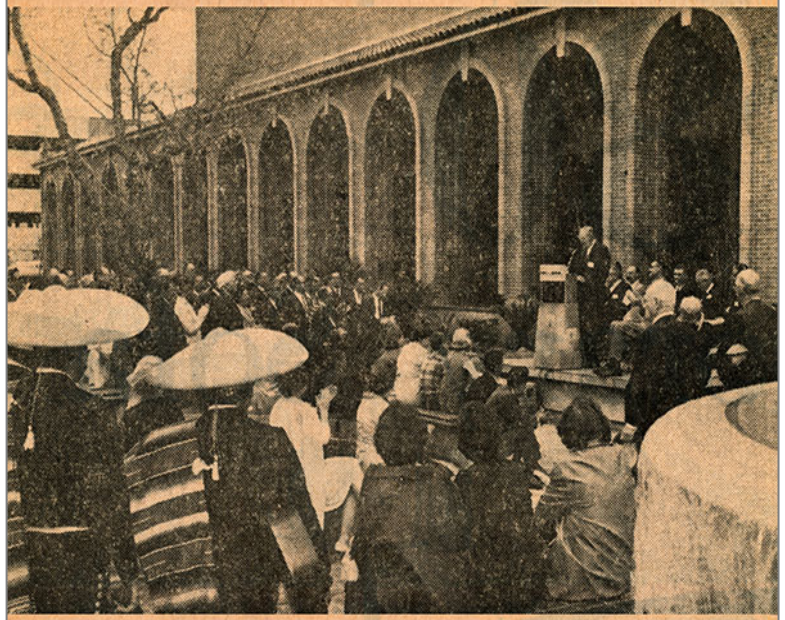
San Antonio Water System

December 2, 2021

MAKING SAN ANTONIO WATERFUL

District Cooling System History in San Antonio

Nation's 1st City-Owned Central Heating-Cooling Plant Opened



CITY WATER BOARD'S NEW HEATING, COOLING PLANT DEDICATED
. . . new service to be available on revenue-producing basis.

Dedication ceremonies for the first municipally owned central heating and cooling plant in the nation were held Thursday afternoon at the plant site, 400 E. Commerce St., adjoining HemisFair.

Van Dyke said that the new utility service will be made available to customers by the City Water Board on a revenue - producing basis. He also estimated that the peak load during HemisFair will be in excess of 9,000 tons

In addition to serving buildings inside the HemisFair grounds, structures adjacent to it and the sector located to the south and east of Alamo and Commerce streets may be served. Two new hotels in the area, the new Chamber of Com-

WATER BOARD MANAGER OPTIMISTIC

S.A.'s Cooling Plant A Red Ink Operation

By JEFF DUFFIELD

The City Water Board's central heating and cooling plant, during its first year of operation, generated $783,416 less of cash profits than anticipated, and utility officials admit they expect to lose money on the facility during 1969.

Despite the red-tinged ledger sheets, water board Gen. Mgr. Robert P. Van Dyke remains optimistic — so optimistic in fact that he is not hesitant to talk about the possibilities of the utility constructing a second such plant sometime in the foreseeable future.

Consideration is being given, Van Dyke said, to a similar facility in the vicinity of the Santa Rosa Medical Center once development of that area into high rise of apartments and medical facilities is accomplished through urban renewal.

The section is within the Urban Renewal Agency's Rosa Verde project which is under way. Already tentative proposals have indicated an expansion of the Santa Rosa, high-rise apartments, doctor office complexes and other large scale ventures.

"If the demand is there from persons constructing these buildings, we very well might construct another cooling plant," an Dyke said.

His exuberence for central heating and cooling plants eixsts despite a less than desiralbe first-year performance of the existing plant, and a forecast deficit of $39,360 from its operation in 1969.

CWB Comptroller John Shields explains the forecast loss this year as "only natural" since the utility expected it would lose money during the period when the former HemisFair area was not being used to its fullest extent. He pointed out the deficit was even contemplated back in 1966 when the feasibility study for the plant was made.

The facility was designed to serve primarily the HemisFair area and surrounding businesses wtihin a 1,200-feet radius, with future plans for extending the scope of service to a 3,000-feet radius.

What was not anticipated was lower attendance at HemisFair than expected and the failure of the CWB to receive $350,000 of cash from the fair corporation for the amount of chilled air it used.

Had the cash receipts been received, the plant would have generated a $263,584 net profit during its first year, an amount still about $500,000 less than estimates which were based on guaranteed usage by fair officials.

San Antonio Fair, Inc., according to Shields, did turn over $150,000 of bills owed it by exhibitors who used the chilled air but never made their remittances. "We are working now on collecting some of this, so it may not all be a loss," Shields said.

He also pointed out the remaining $200,000 owed by the fair will be offset by the receipt of personal property which had belonged to the corporation. Much of the property can be utilized by the CWB. It consists of furniture, typewriters, adding machines, calculators, etc.

Other property, such as uniforms, HemisFair T-shirts and the like, have been accepted as payment in lieu of cash but will only generate a fraction of their actual worth through re-sale.

Considering strictly the cash on hand the CWB has to show for first year operation of the cooling plant, the facility operated $86,416 in the red. Any past due bills owed by former exhibitors would help defray the deficit, as will consideration of office equipment received from HemisFair which now will not have to be purchased by the CWB out of other funds.

From the standpoint of retiring $6 million of revenue bonds sold for construction of the system, however, only the cash receipts can be considered.

Shields and Van Dyke both expressed little fear that difficulty will be encountered in retiring the bonds. Until 1972 only the interest on the bonds has to be paid, that amounting to about $250,000 annually. Both the experienced 12-month operation and the forecast for 1969 include the payment of the interest.

Van Dyke predicted that by the third and fourth years of plant operation, substantial profit margins will be evidenced but added that development of HemisFair Plaza by the city and private development in the immediate vicinity is necessary to fulfill his predictions.

Shields said the 10,000-ton capacity plant presently is operating at only 5,000 tons. To realize substantial increases in revenue, he pointed out, cutsomers must be found for about 3,000 of the 5,000 surplus tons.

"The area has one of the greatest potentials of any place in the city," Van Dyke said. "It's going to grow, and when it does we will have our extra customers. There's no way the plant can prove to be a losing proposition."

Further indicating his optimism, the general manager pointed out the present plant, which is located near the intersection of Austin and Commerce streets, is designed to be expanded to double its present size.

Meanwhile, the search is under way to sign up enough new customers to absorb 3,000 tons of unused capacity which now is available.

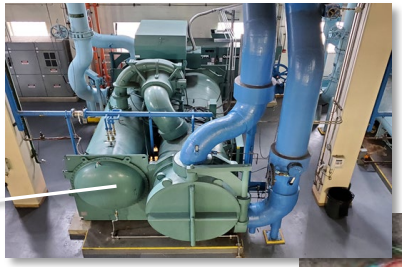
San Antonio EXPRESS/NEWS — Sunday, Feb. 9, 1969 Page 9-H

GENERATED RED INK—City Water Board's centra l heating and cool plant revenue was down in 1969 but officials expect success, see new plant to serve a nother section of city in future years.

San Antonio Water System

What is District Cooling?

District Cooling is a centralized method of producing and delivering chilled water to multiple buildings, for the purpose of air-conditioning, through an underground network of insulated piping.



Chilled water plant

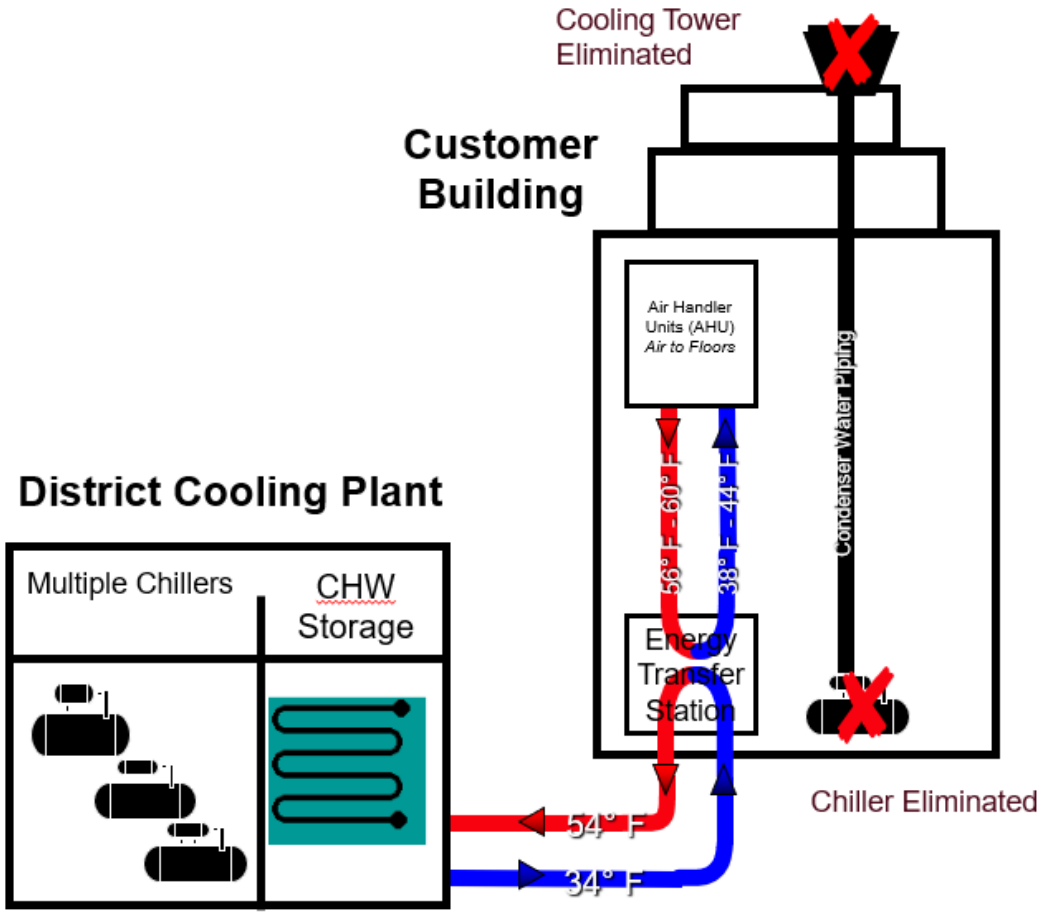
Delivery pipeline

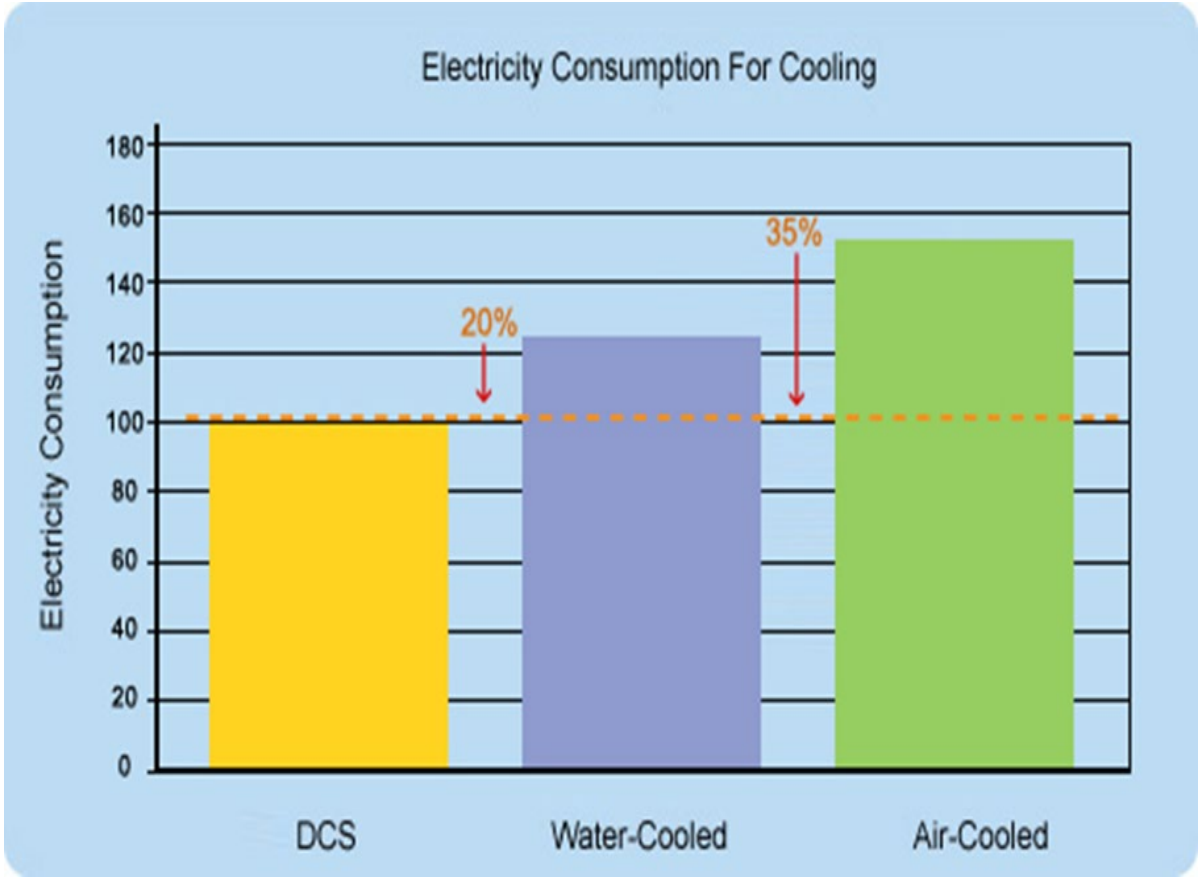
Energy transfer station

District Cooling System

San Antonio Water System

How Does District Cooling Work?





San Antonio Water System

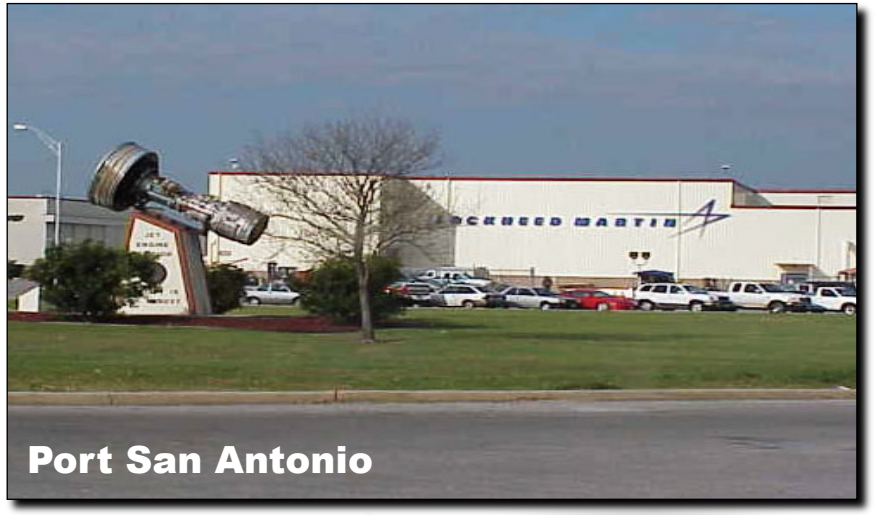
Benefits of District Cooling

- Main Benefits
  - **Improved energy efficiency**
  - **GHG emissions reductions**
- Additional Benefits
  - Avoided capital costs
  - Reduced staffing and maintenance
  - Enhanced reliability
  - Frees up rooftop/building space
  - Reduced lifetime cooling costs

SAWS District Cooling System Overview

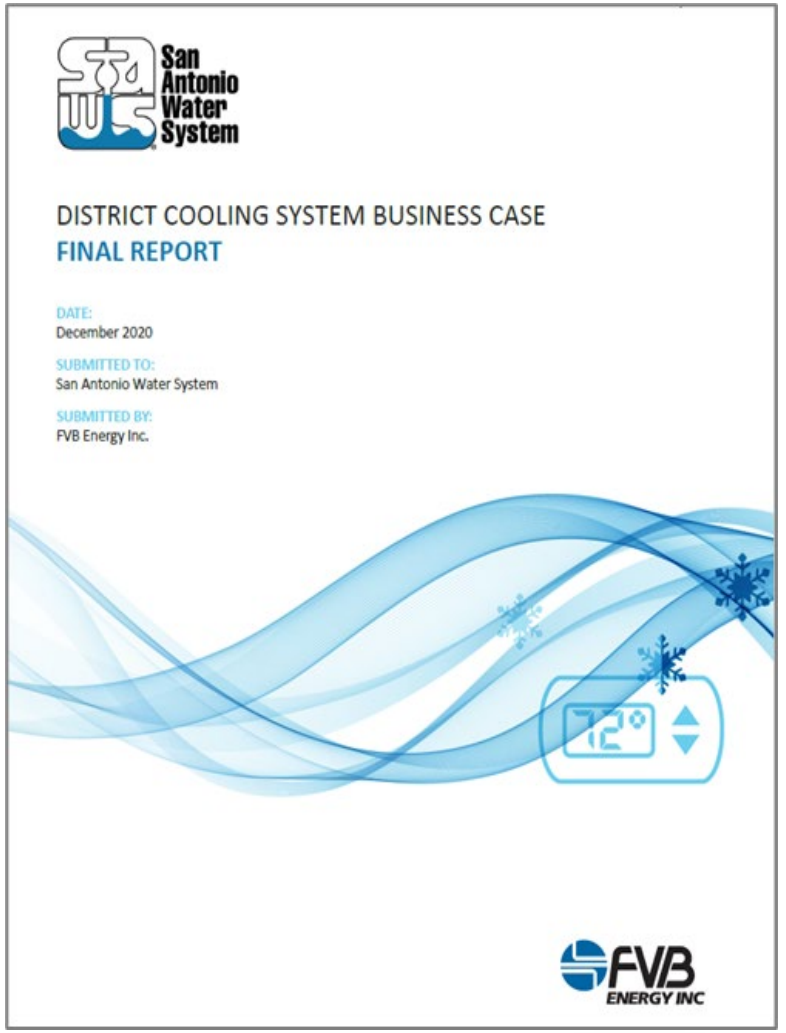
- **Downtown (Central and Cherry plants)**
  - 21 total customers
    - COSA: 8
    - Hotels: 7
    - Government: 3
    - Other: 3
  - 70% of customer base is COSA
- **Port of San Antonio (two plants)**
  - Boeing
  - Standard Aero
  - Chromalloy
  - Port San Antonio
  - United States Air Force
  - 75% of PSA customer base is privately owned


Central Plant


Port San Antonio

DCS Business Case – Highlights and Recommendation

- **Key Highlights**
  - High Customer Satisfaction
  - Superior System reliability
  - Concerning financial performances/aging infrastructure
- **The SAWS or Other Public Ownership/Management with Growth Scenario** presents the *best* option for San Antonio.
  - Cost Effective
  - Energy Efficient/Reduced GHG Emissions
  - Reliability
- **12 Step Action Plan** to effectively finance, operate, maintain and grow reliable cost-effective district cooling system



Business Strategy and Proposed 2022 Rate Increase

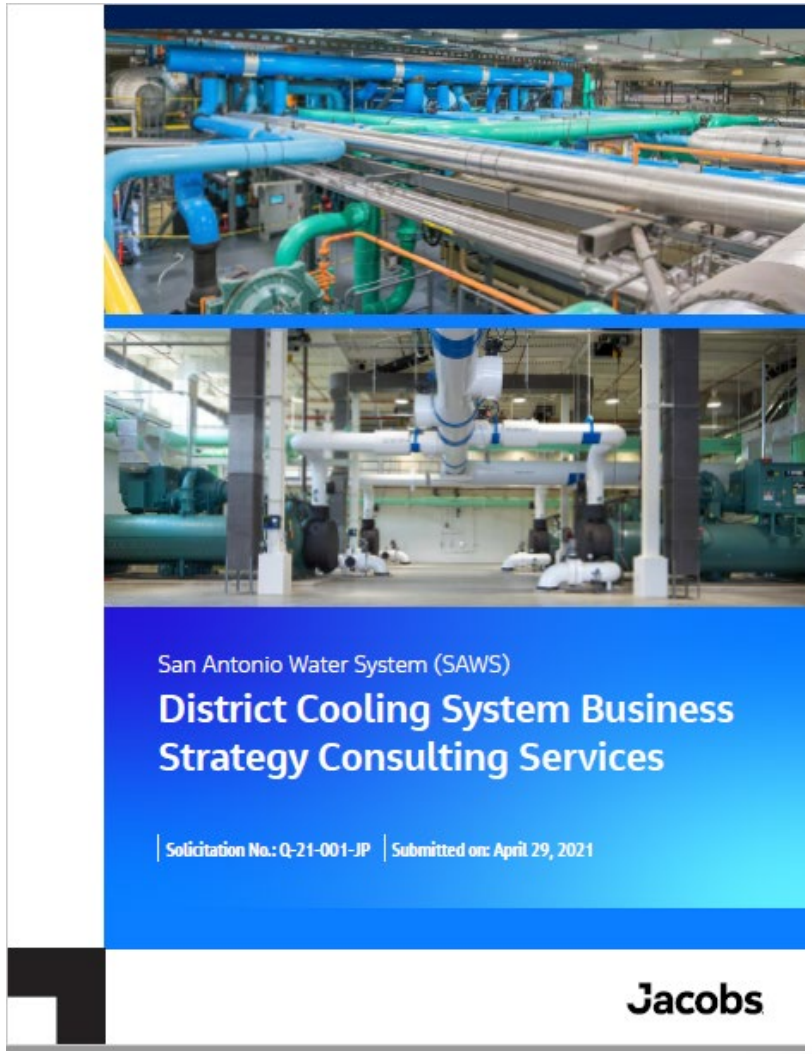
- **Business Strategy Scope**
  - Financial Planning
  - Engineering and Operations
  - Customer Contracts
  - Marketing/System Growth
- **Proposed Rate Increase = 10%**
- **Increased Revenue = $559,377**
  - Downtown = $445,442 (COSA = $317,290)
  - Port SA = $113,935

Customer	$ Increase Monthly	% Increase Monthly
Fairmount	$ 220	4%
Grand Hyatt	$ 3,550	4%
Alteza	$ 940	4%
US Court	$ 600	4%
Federal Bldg.	$ 1,150	6%
Civil Service Trn. Ctr.	$ 60	5%
Marriot Riverwalk	$ 1,290	4%
Chamber of Commerce	$ 110	5%
Hotel Contessa	$ 550	3%
Mexican Cultural Inst.	$ 100	6.5%
Landry's	$ 425	2.5%
Marriot Plaza SA	$ 560	4.5%
Hilton Palacio Del Rio	$ 1,130	2.5%
COSA (8 locations)	$ 26,440	6.0%
DT TOTAL	*$ 37,125*	*4.4%*
Port SA	$ 450	4.5%
US Air Force	$ 2,080	4.5%
Boeing	$ 1,575	4.0%
Standard Aero	$ 3,850	4.5%
Chromalloy	$ 1,530	4.5%
Port SA Total	*$ 9,485*	*4.4%*

San Antonio Water System

Customer Meetings and Feedback

- **Discussion Points:**
  - Background/Financial performance
  - Business Case and Strategy projects
  - Billing structure and rate increase/impacts
- **Feedback Summary:**
  - Positive
  - Support rate increase and business strategy



Ordinance Language Changes

- **Chilled Water Rate Adjustment**
  - 10% increase on demand rate
  - Both DT and PSA
- **Capital Cost Recovery Fee**
  - To recover capital costs associated with main extensions and heat exchangers to serve new customers
  - 20-year max amortization schedule
- **Repeal of Obsolete Rates**
  - Steam terminated in 2014
  - GKDA (now Port San Antonio) obsolete fee payment

District Cooling System Rate Adjustment

Jaime Castillo
Chief of Staff/VP of Operations Support & Innovation

San Antonio Water System

December 2, 2021

MAKING SAN ANTONIO WATERFUL