## MICHAEL O'SHAUGHNESSY-BIOGRAPHY OF A CHIT CHAT MEMBER

BY

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## MICHAEL O'SHAUGHNESSY

Michael O'Shaughnessy was inducted in 1915 into the Chit Chat Club and hired as the City and County of San Francisco Engineer in 1912. He was affectionately known as "The Chief" who was a giant among engineers. The scope and vision of his work as well as problems with political climates sound like our recent San Francisco political climates. He was a strong man of his times. Born in Limerick, Ireland in 1864, educated at Queen's College and received a Bachelor of Engineering Degree with honors from the Royal University. He came to San Francisco to work with Southern Pacific and then served as the Chief Engineer for the Midwinter Exposition in San Francisco. Our beautiful Conservatory of Flowers was built as part of the Midwinter Exposition. He went to work for the Mountain Copper Company and then went to Hawaii as the Chief Engineer for 20 sugar plantations, and their operations. In 1906, he came back to California where he served as the Chief Engineer of the Southern California Mountain Water Company, and then to San Francisco in 1912. He was consulted by many municipalities throughout the United States: Detroit, Seattle, Portland and San Diego. He designed acqueducts, dams, municipal railways and tunnels. He worked for the Department of Interior on the water levels of Lake Tahoe, and the construction of the Alpine Dam and Aqueduct leading therefrom.

The vast scope of his work, and the foresight in bringing water from the mountains to the City and County of San Francisco through gravity is even in today's standards, monumental. It is important for each of us to take some time to visit the O'Shaughnessey Dam, see the water coming down to the power plant, and trace it to Sunol and Pulgas Water Temple into the Crystal Springs Lakes.

His most impressive undertaking to develop
the water system for the City and County of San
Francisco took twenty years to complete, construction of
a 68 mile railroad for hauling of materials and
equipment, construction of two storage dams, four
hydroelectric power plants, and a complex system
of aqueducts, tunnels and pipelines which brought
water by gravity from the mountains to the City
of San Francisco.

In 1913 President Woodrow Wilson signed a bill authorizing the building of a dam in the Yosemite National Park. John Muir had fought this proposal for a decade and suffered his greatestdefeat. He was no match for the growing population of San Francisco and their need for water. The 100 meter tall O'Shaughnessy Dam provided the city with a reliable, gravity fed supply of mountain water so clean that it needed no filtration. The dam flooded Hetch Hetchy Valley and was surrounded by granite cliffs, numerous waterfalls and beautiful scenery.

Many enviornmentalists after John Muir have dreamed of removing the dam; but no dam this size has ever been removed. Just trucking out 500,000 cubic meters of concrete

and the huge economic cost would be a monumental battle.

In 1987 the Department of the Interior suggested to Mayor Diane Feinstein that Hetch Hetchy, located in a National Park, should not contain a dam. Diane Feinstein persuaded Congress to prohibit the agency from spending any money to further examine the idea. She stated that Hetch Hetchy provided irreplacable water storage for the City of San Francisco, keeps costs down and continues to generate 400 megawatts of green hydropower. San Francisco and the Bay Area rely on this resource.

In 1999 a group founded "Restore Hetch Hetchy". The almost impossible project of removing the dam along with the restoration of the natural habitat in its place, with no roads and wilderness surrounding the dam, makes this experiment not likely to happen anytime soon.

The development of Hetch Hetchy Water System:

The water supply for the City of San Francisco was a monopoly. The City had complained that Spring Valley Water Works responded slowly to the city's growing population. Prices charged caused friction. In 1900 San Francisco adopted a new charter which provided for municipal ownership of public utilities, including the water system. If San Francisco was to have an independent water supply, it would have to construct its own. The Sierra Nevada to the east had an abundant supply of pure water. The Hetch Hetchy Valley in Yosemite National Park was the best source. It had steep granite walls, a narrow outlet, level floor and large storage capacity. It was free from

water rights and held the potential for production of hydroelectric power. Application was made in 1901 and 1903 and denied. When Michael O'Shaughnessy became the City Engineer in 1912, he appeared before Congress several times. Finally in 1913 the Raker Act authorized the City of San Francisco to develop the Hetch Hetchy project. Construction began in 1914.

Michael O'Shaughnessy decided to complete the upper division as a unit, including the power plant at Moccasin Creek. It was completed on schedule in 1925. The power produced at this plant gave San Francisco \$2 million a year revenue and helped to offset project costs long before water was delivered.

The town of Moccasincan be visited today. It has employee housing that looks as if it had been transported from the Sunset District of San Francisco. There are houses with full basements with garages under the main floor of the house. There are front lawns and sidewalks and construction like a Sunstream home.

The O'Shaughnessy Dam at the lower end of the Hetch
Hetchy Valley was constructed from 1919 to 1923 at a cost of
\$6.7 million. It is 226 ft. above the streambed. It has
a foundation that is 118 ft. which makes the structure height
344 ft. There was an 86 ft. extension completed in 1938.

Michael O'Shaughnessy continued to guide the development of the Hetch Hetchy Project while working on other San Francisco public works. He tried to convince the city to purchase the Spring Valley Water Company. The 2/3rds. majority to approve

a bond issue was not obtained until 1927. San Francisco became the last large city in the United States to acquire a municipally owned water system.

In 1932 San Francisco adopted a new city charter that separated public utilities from other city engineering activities. No longer in charge of the Hetch Hetchy project, Mr. O'Shaughnessy became a consulting engineer for the PUC.

The "Chief" as Mr. O'Shaughnessy was known passed away on 10/12/34 only sixteen days before the arrival of the first water from Hetch Hetchy.

Presently there are discussions about building an Irvington Tunnel near Sunol to parallel the Irvington Tunnel built by Michael O'Shaunessey. This parallel facility would allow water to flow through the new tunnel while accomplishing repairs to the old tunnel without interrupting the flow of water from Irvington to the Crystal Springs Lakes. It is presently before the Planning Department and needs an enviornmental study. I do not think this project will be accomplished any time soon. Certainly not as timely or efficiently as in the early 1900's with "The Chief" in charge.

Michael O'Shaughnessy was both popular and powerful. His funeral at St. Vincent de Paul Church on Green Street in San Francisco, was attended by over 1500 mourners. There were battalions of police and fireman standing at attention, a vast throng of people not able to get into the church stood in the street outside. Archbishop

Hanna gave the eulogy, "It is difficult to tell in a few words the great story of a great man. When the City of St. Francis cried out for a man with genius to help it to its feet after the crisis of 1906, Mr. O'Shaughnessy answered the call. More glory is due him for the rebuilding of San Francisco, than to anyone else. It is to his genius, power, patience and character that we lay a testimonial at his bier."

Mayor Angelo Rossi ordered all city flags fly half staff in honor of Michael O'Shaughnessy.

One of his daughters, Mary O'Shaughnessy stated,
"he died of a broken heart, because of the terrible, terrible
treatment he received from San Francisco." Several times
during his tenure, he was the target of ouster proceedings,
until he was displaced by the city charter. and reinstated
as a consulting engineer.

I have placed some interesting newspaper clippings on the table. Please pass them around. They describe the political pressures of the day, not too much different than San Francisco in 2009.

Also please look at the book written by M.M. O'Shaughnessy entitled, "Hetch Hetchy: Its Origin and History, that was given to me by his daughter, Beth O'Shaughnessy and personally enscribed on the inside cover.

Michael O'Shaughnessy earned \$30,000 a year before taking a reduction to \$15,000 a year as Chief Engineer of the City of San Francisco, because he was dedicated to the task as the biggest challenge of his life, and for the benefit of the people of San Francisco. Not only was he a visionary; but an accomplished master engineer of the Hetch Hetchy Project, estimated in 1914 to cost \$45 million dollars and six years to complete. It actually cost over \$100 million dollars to complete in twenty years. Michael O'Shaughnessy, nicknamed "The Chief" died of a heart attack at age 70. Coincidentally he died 16 days before the water from Hetch Hetchy poured into San Francisco on October 28, 1934.

Mayor Angelo Rossi considered the "Chief" a rival of power and eminence that caused him to create a five man commission to dismiss him as a City employee; but retained him in a consulting capacity. The mayor's jealously believed that the "Chief" had unlimited authority for years. He also criticized him for the long delay in bringing water to the city. The mayor also resented O'Shaughnessy's attitude and attempts to dictate policies to elected city officials, especially when O'Shaughnessy discredited Mayor Rossi's emergency plan to bring Hetch Hetchy water to the city earlier than practical.

O'Shaughnessy sent an unauthorized letter to the auditor "freezing" \$700,000 in bond premium, making it impossible to use the money for the Mayor's unemployment relief.

It was planned by the Mayor to lower O'Shaughnessy's salary to less than \$10,000 a year, and to apply the ax to his engineering department of an admitted expensive \$540,000 a year in salaries. This explains why the "Chief\*s family and particularly his last living daughter, Elizabeth, felt so sad about her esteemed father's treatment by the city before his death.

Long live the City's great builder of not only
the City water system, sewers, Twin Peak's tunnel,
Municipal Railway, Stockton tunnel and the esplanade waterfront
of cement barricade from Seacliff to the Zoo, about a
mile along the ocean, and other projects too many to compare.

Growing up in San Francisco, Mayor Rossi was a familiar and loved public servant. It is sad to hear about this rivalry with such a fine engineering genius. We knew Mayor Rossi's sister, and her sons; one of whom was in my high school class. San Francisco was a very closely knit community.

F. Theodore Kitt

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"Hetch Hetchy" "Its Origin and History" by M.M. O'Shaughnessy.

Presented to Mr. and Mrs. Kitt from Beth O'Shaughnessy,

daughter of the late M.M. O'Shaughnessy.

Signed and enscribed with the following notes:

"He (Michael O'Shaughnessy) and Mayor Rolph worked together and rebuilt the damage caused by the 1906 Earthquake. Water was the most important for a City -- above all."

Sincerely, Beth O'Shaughnessy

Presented to the Chit Chat Club on Monday, September 14, 2009

F. Theodore Kitt, Presenter