TRANSMITTAL LETTER
Final Report
San Francisco Public Utilities Infrastructure Task Force

FROM
Brian Browne
San Francisco Public Utilities Infrastructure Task Force (SFPUITF)

TO
Richard Bodisco, Chair
San Francisco Public Utilities Infrastructure Task Force (SFPUITF)

Date June 13, 2002

Dear Rich,
Please find following my contribution to the Task Force (TF) Final Report.

My Interim Report (IR) comments remain valid (attached). In my IR transmittal letter of September 7, 2001 (below), using bullet points, I summarized problems facing the San Francisco Public Utilities Commission (SFPUC) and proposed remedies.

This report is divided up into the following sections:

1. Table 1 - Comparing Interim Report Recommendations with pursuant action/inaction by SFPUC.

2. A report and recommendations on important events occurring between the Interim Report and today.

3. Interim Report (IR) presented September 7, 2001. I am resubmitting this IR, since that the issues and recommendations contained therein remain current as of writing.

4. Appendix 1 - Delineating debt service and repayment schedules for City (local) and suburban (regional) customers for a $3 billion Regional Water CIP.

I wish to thank Mayor Brown and you for choosing me to serve on this most prestigious TF. I look forward to continuing my involvement.

Sincerely,

Brian Browne

Table 1 - Bullet Points from September 2001 Transmittal Letter (IR) with implementation action - if any - by SFPUC and comments

2001 Interim Report Recommendations	Implementation Action by SFPUC - Comments
• Develop a Long Term Strategic Plan, reflective of an efficient and responsive business model (1)	Not as specified in Interim Report
• Integrate the PUC Long Term Strategic Plan (LTSP) into the overall City LTSP. (2)	Not as specified in Interim Report
• Unbundle (transfer) the traditional PUC planning and engineering functions from financial transactions (3)	Not as specified in Interim Report
• Investigate methods for increasing revenues as a substitute for borrowing. All residential dwellings in San Francisco receive 300 cubic ft. of wastewater/month at a lifeline rate. The lifeline rate criteria should be modified. Dwellings formerly deemed residential and now in commercial, corporate, or hotel type use should be monitored and charged the commercial rate. (4)	Not as specified in Interim Report
• Increase the sale of PUC (HH) public power to the private sector. Do not create a monopoly service area for any single power provider in San Francisco. (5)	Public power made available to private sector as recommended by Task Force.

• Hire people with skills and educational backgrounds that fit the PUC job descriptions. (6)	Special audit of SFPUC hiring practices required quantifying implementation of this recommendation. Review of all senior personnel resumes and job descriptions. Establish matches and mismatches - if any.
• Specify the projected date when revenues will exceed costs and the PUC will be weaned of borrowing (7)	Does not appear to have a deterministic date for self-sufficiency? **Revenues = Costs**
• Focus on running a utility. Unbundle functions relating to major financial market transactions. (8)	Not as specified in Interim Report
• Full cost all technologies. Planners must also calculate the external effects associated with various technologies, especially digester and power plant operations. Plans must consider both explicit (actual dollar value of owning and operating) and implicit (impact on workers and the environment) costs; to wit, a "cheaper" technology with greater negative external effects may prove more costly to the entire community because of adverse environmental impact. Planners must carefully weigh and calculate these effects, as the PUC plans have not, and the community must be reassured.(9)	Requires an in-depth, independent audit to assess degree of implementation in actuality and as incorporated in planning process.

• Do not change the current system of requiring that the SF voters must approve revenue bond issues (10).	This unique San Francisco financial/oversight power appears continually under assault from various political and other interests.
The SFPUC must be treated as one integrated system. The various component parts (enterprises) complement each other in the productive process. Planning, O&M, and capital improvements for the total system must remain centralized and under SF control. The interlocking synergism of this system must override parochial political goals. (11)	This will require a charter Amendment. This integrated approach was acknowledged in recent SFPUC consulting study. Such integration would ensure "surplus funds" were used for overall system integrity and not transferred to non-operational utility City entities. (**Funds must not be transferred out off the total HH system for other City entities)**

Interim Events

State legislation

State legislation such as SB1870 *et al* has made considerable progress in Sacramento. The outcome remains uncertain as to what the legislators may or may not change in regard to the traditional relationship of San Francisco and the Hetch Hetchy system.

SB1870 establishes a Peninsula funding Authority. This Authority will be able to issue revenue bonds without voter approval. Voter approval is specifically denied in the current version of SB1870. The proceeds of these revenue bonds will be given to SFPUC for repairs to the regional system. SFPUC will collect money from wholesale customers and return such to the Authority for debt service and also a special surcharge for administering the Authority.

Currently SFPUC issues the bonds and charges the wholesale customers interest during construction. On project implementation, SFPUC recovers debt service from the wholesale customers through rate revenues. Revenues are apportioned 1/3 San Francisco and 2/3 Regional. (This allocation of costs is quantified in regard to a hypothetical $3 billion regional project in Appendix 1.)

The Peninsula "banking" Authority creation does superficially "cloud" the issue in terms of who actually pays. However, in reality, net the result is the same in terms of capitalized-costs under any of the proposed payment plans. Except, as noted, the impact on San Francisco's traditional role in managing Hetch Hetchy may well be significantly eroded by these state legislative actions. Another potential negative externality associated with this proposed Authority is possibility that SFPUC will be able to borrow from it and repay from increased revenues. This latter type potential construct could dilute voter oversight over debt issuance for CIP programs. These attributes require intensive and ongoing audit review and public participation.

The proposed Authority will secure its bonds on the assets of the SFPUC system. The SFPUC system secures its bond on the same system. In present value terms -- without having the final bill to draw specific conclusions from - it appears to be a zero sum game, except under SB1870 et al, it is unclear exactly what managerial/ownership tradeoffs the SFPUC will cede to the wholesale customers. The creation of the Authority appears to do two things: Create a specialized utility banking entity without voter oversight, and ensure the Peninsula has added powers in regard to the running of the Hetch Hetchy system. The second condition -- again unknown until the final legislation is signed by the governor - could also make moot San Francisco voter oversight over regional utility revenue bonds (see above).

These legislative actions have been driven by the fact that much of the SFPUC system is old and crosses many regions of varying seismic instability. San Francisco and Peninsula customers still enjoy high quality water after many substantial earthquakes. SFPUC should develop a full system-inventory of pipes, facilities, and their specific location by age and integrity (hardening), correlated with best available and specific seismic probabilistic forecasts. This "inventory" must be matched with budgetary constraints and societal concurrence as to what resources will be used to defense against what level of projected disasters. Qualitative analysis must be replaced by hard and factual -- best technology available - quantitative facts. Decisions should not be made in an environment of "general fear."

Citizens must be brought into this decision loop at every major point. Defending against all acts of nature is impossible in a world of resource scarcity. There are too many competing wants (hospitals, roads, etc.). A LTSP must address how citizen involvement, education, and feedback will be ensured in this all-important decision making process. Policy makers must be forthright and specific in advising the public of potential system breakdowns. Vague assertions of impending doom may result in the improper use of resources, in addition to creating unnecessary public anxiety.

It is hoped that the TF at future meetings will consider in-depth all state legislation pertaining to the Hetch Hetchy system. The current changes in Sacramento appear to minimize the role of the SFPUC and may secondarily impact the voters of San Franciso in the exercise of their traditional role of utility revenue bond watchdogs. An efficient SFPUC business model, with a viable LTSP, a record of on time and on (under) cost implementation will make these Peninsula sponsored measures unnecessary.

Clarification -- 1997 A&B -- Independent Engineer - In Context
There appears to be some confusion by the SFPUC management regarding a TF recommendation. The TF did not recommend that the SFPUC hire an independent engineer to review their current CIP program. Instead, the Interim Report (see following) of 2001 pointed out that 1997 A&B Water Revenue Bonds ($304 million) required the following steps be sequentially undertaken:

1. Develop a plan for 1997 A&B work
2. Have these plans certified by an independent engineering entity.
3. Issue the bonds.
4. Do the work.

The TF believes these steps were not well followed in implementing 1997 Propositions A&B bonds. The TF particularly queried use of commercial paper and the failure to formulate a plan before project work commencement. (See below A&B)

The non-discretionary language used in presenting 1997 Propositions A&B Water Revenue Bonds was considered a viable, non-discretionary model on how to issue revenue bonds. Little wiggle room for discretionary interpretation. Future revenue bonds must have similar well- defined steps and a built in system for ensuring compliance with the voter mandate. The current CIP numbers are large. They call for SFPUC to execute work at a multiple of 5 times their current effort. In this context, 1997 A&B type language should be incorporated into a smaller initial CIP funding effort ($800,000,000). Future funds would readily flow from voter approved revenue bonds based on the SFPUC performance in meeting implementation goals according to prescribed timelines. Recommended steps are:

1. Develop a viable long-term strategic plan (LTSP) for the entire SFPUC system. Submit this comprehensive plan for public approval.
2. Appoint a new SFPU Commission with representatives from the major utility disciplines, plus a representative of the Peninsula customers. The Peninsula representative having voter rights on Regional issues.
3. Develop a detailed and operational CIP for initial critical projects, not to exceed $800,000,000 and have it developed as a subset and consistent with the overall and comprehensive LTSP. This plan must have specific performance milestones for sequential and correlative work.

A. Have the CIP approved by the Commission and an independent engineer selected in an open and competitive process with full public input and participation.
B. Define and limit the amount of discretionary funds available to management
C. Issue the bonds
D. Do the work using bond revenues
E. Limit the amount of commercial paper to 1 percent of ongoing projects.
F. Have the independent engineer and an independent citizen oversight committee report to the Commission at six-month intervals.

Some of the above steps will be sequential and others will require simultaneous-overlap implementation paths. The end result must be a LTSP and immediate attention to critical projects pursuant to the non-discretionary steps outlined above. Rigorous compliance with the language of the 1997 A&B Water Revenue Bonds would have helped avoid many of the SFPUC's current problems.

Power

The TF spoke at length about gaming and market manipulation in the newly "deregulated" (AB1890) power markets as a major cause for last summer's outages and shortages. The SFPUC did implement one significant TF recommendation -- making SFPUC public power available to private users. SFPUC must use orthodox economics to evaluate alternative power options as they develop a least-cost portfolio of supply sources to serve all SF interests.

Proposition H

Proposition H gets great press as a restrictive ordinance that has cost SFPUC interest points in negotiating financial transactions - bonds and other debt instruments. Proposition H was approved by the voters in 1998 freezes retail Water Rates and Sewer Charges at their current levels until July 1, 2006, subject to the following exceptions: The freeze does not apply to the fees charged by customers located outside of San Francisco. The freeze could be suspended if the City declared an emergency, as defined by the Charter. Rates could be increased to repay the money borrowed through the issuance of bonds by the City for improvements to the water system approved by the voters in November 1997 (Propositions A and B - see below), but such rate increases cannot exceed a total of 18 percent during the period July 1 1998 and July 1,

2006. The rates could be increased for further improvements to the water and sewer systems approved by voters in the future.

Proposition H is often cited as the "problem." The "escape hatches" built into Proposition H for the City and SFPUC are many and easily activated. Proposition H is basically a "weak" (albeit a convenient "whipping post") proposition, begging for a proactive SFPUC to do something to make it unnecessary. Proponents of H argue that internalizing all utility "surplus" funds for internal system use, developing a streamlined business model for the SFPUC, hiring resumes to fit all positions, and having a viable and "living" LTSP (integrated into an overall City plan) in place would have negated the very reason for H. The debate will continue. A management audit would be a good start to settle this debate.

Transmittal Letter
Interim Findings 2001 - Now Incorporated into Final Report ASIS

From:
Brian Browne
San Francisco Public Utilities Infrastructure Task Force

To:
Richard Bodisco
Chair San Francisco Public Utilities Commission Infrastructure Task Force

Date: September 7, 2001

Dear Rich,
As requested, I enclose here my interim report - emphasis on "interim". The final report for the Task Force will incorporate additional findings and the whole presented in a more systematic fashion, enhanced with greater detail and comments, where appropriate. The aim is to develop a comprehensive review, from my perspective, of the problems facing the PUC and proposed remedies; we can view this as a milestone in its evolution. As a nascent effort, it begs your forbearance.

- Develop a Long Term Strategic Plan, reflective of an efficient and responsive business model
- Integrate the PUC Long Term Strategic Plan (LTSP) into the overall City LTSP.
- Unbundle (transfer) the traditional PUC planning and engineering functions from financial transactions
- Investigate methods for increasing revenues as a substitute for borrowing. All residential dwellings in San Francisco receive 300 cubic ft. of wastewater at a lifeline rate. The lifeline rate criteria should be modified. Dwellings formerly deemed residential and now in commercial, corporate, or hotel type use should be monitored and charged the commercial rate.
- Increase the sale of PUC (HH) public power to the private sector. Do not create a monopoly service area for any single power provider in San Francisco.
- Hire people with skills and educational backgrounds that fit the PUC job descriptions.
- Specify the projected date when revenues will exceed costs and the PUC will be weaned of borrowing
- Focus on running a utility. Unbundle functions relating to major financial market transactions.
- Full cost all technologies. Planners must also calculate the external effects associated with various technologies, especially digester and power plant operations. Plans must consider both explicit (actual dollar value of owning and operating) and implicit (impact on workers and the environment) costs; to wit, a

"cheaper" technology with greater negative external effects may prove more costly to the entire community because of adverse environmental impact. Planners must carefully weigh and calculate these effects, as the PUC plans have not, and the community must be reassured.
- Do not change the current system of requiring that the SF voters must approve revenue bond issues.

- The SFPUC must be treated as one integrated system. The various component parts (enterprises) complement each other in the productive process. Planning, O&M, and capital improvements for the total system must remain centralized and under SF control. The interlocking synergism of this system must override parochial political goals.

Sincerely,

Brian Browne

Interim Findings

This report is loosely divided into three sections.

I --- Long Term Strategic Planning.

II --- Finances - Revenue Bonds Issue and Rate Increases.

III --- Power -- Policy Issues

As noted in the transmittal letter, this is an interim study. It represents an eclectic organization of issues, which have emerged during my tenure on the San Francisco Public Utilities Task Force Infrastructure. A final report will be more comprehensive and fully documented. However, all documents are available in my source files and on the recorded minutes of the Task Force meetings.

I Long Term Strategic Plan (LTSP)

The PUC does not have a viable long-term strategic plan. An LTSP defines the goals and objectives of an enterprise, and dynamic plans for achieving these goals. An LTSP reflects the unique soul of the business model from which it was developed. An LTSP must incorporate the coordinated efforts of every department in the enterprise. The overriding goals of the plan are to ensure a continuation of the entity, while delivering the highest quality, most cost effective products to the public. Risk and asset management decisions must be decided in the context of demographics, economics, budgetary constraints, and the impact on the environment.

A LTSP for an *in perpetuity* enterprise such as the PUC cannot be limited to a 10-year reconstruction cycle and an ad infinitum horizon of debt financing. Planners must develop a scenario, which forecasts a crossover point when the enterprise will be self-sustaining. The TF does not believe that that the Mayor, Board of Supervisors, and taxpayers of San Francisco intend for the PUC to continually shift the debt of prior decision makers forward to their grandchildren.

Since the inception of the TF, three "plans" have been given to the members. These plans have all been for a ten-year capital improvement program (CIP), requiring upwards of 30 years of rate increase to fund bond indebtedness. The CIP approach is flawed and incomplete. It should be part of a PUC-LTSP. Expenditures of the magnitude suggested by the PUC in the 10-year CIP of $5.2 billion cannot be considered in isolation from San Francisco's other financial resource requirements. A debt of one billion dollars at the proposed interest payment of 6.5 percent over a 30-year period requires an increase in annual revenues of approximately $77,000,000. Funding the complete CIP of $5.2 billion will mean an increase in revenue requirements through rate hikes of approximately $400,000,000. This $400,000,000 almost doubles the current revenue requirements through rate hikes.

The PUC Infrastructure Task Force (TF), from its inception, has asked the PUC to present a viable LTSP that shows:

- Where it has been
- Where it is today
- Where it plans to go
  -- Why?
  -- How?

All requests have been met with another version of the original 10-year CIP, albeit sometimes the name (e.g. co-appearance of Task Force member and representative of the SFPUC on May 22, 2001) has been changed to say long-term strategic plan. However, the documents presented to this point have been for 10-year work/expenditure cycles with considerably longer periods (30 years) of correlative debt being internalized by the ratepayers. As stated previously, there is no benchmarking or economic forecasting and no quantifying the trade-off between risk and cost. Further, there is no crossover point when revenues will exceed costs and the PUC will become independent from borrowing against future generations.

TF members have reviewed the various plans, financing, and costs estimates. The process has proved difficult and frustrating. Staff is not uniformly cooperative. Some staff members were open and forthright, while others acted as if the TF did not exist. The latter approach made the process of discovery tedious and the path often littered with obstacles. If the PUC had a viable LTSP with a clear and concise executive summary, aimed at the non-technical stakeholder, then the TF would have been able to comprehend their past, current and proposed business model and how it plans to execute its LTSP. Failure to create such a document, often requested by the TF, has bogged the entire process down.

Questions posed by PUC staff suggest that it doesn't know what a LTSP should be. This is a sad commentary. It is not the function of the TF to provide micro details on how to develop such a plan. However, the TF recommended that staff define a business model and correlative LTSP for the PUC incorporating many of the following elements. The PUC must make this plan dynamic and flexible so that overall strategic goals can be achieved through shorter-term tactical dynamics, long-term asset management and eventually self-sustainability.

Process --

The PUC might consider forming a LTSP committee. This committee should comprise Commission and staff members, legislators, City officials (finance, other departments), disaster relief specialists, stakeholders, environmentalist, the public and other concerned citizens (etc.) and meet annually. A LTSP should be developed with established goals and milestones. To ensure that these goals remain in sight, the PUC should establish a shot-term working committee that meets on a monthly basis to evaluate progress. There should be a strong link between the committees, the overall

City planners, and the plan implementers. Special emphasis should be placed on disaster response. This approach should be well integrated into the PUC business model.

Elements to Consider for a Business model - clarify purpose and function of the PUC

- The PUC business model must explain and make a case why taxpayers should lend the PUC $5.2 billion. The agency has to demonstrate how it will be held accountable. There has to be a system in place at the PUC to ensure a nexus between decision-makers and economic outcomes? In private enterprise bad outcomes are internalized by the decision-maker. This outcome should be more significant than merely rearranging the deck chairs on the Titanic (dismissal). The PUC has to explain how it inculcates and monitor this accountability ethic. The PUC should describe how it perceives its role in the overall San Francisco and Bay Area region. It's important to know how it assesses the impact of its huge expenditure project into the overall economic environment. Mission and goals must be stated such that stakeholders can hold the Commission accountable. Attach resumes of key players and make them available to the public. Stress how academic and career experiences correlate with the specific job descriptions required to operate this vast multi-utility. The business plan should be a confidence builder -- or reveal weakness -- wherein the stakeholder understands the PUC way of doing business.

Elements to Consider and Discussion Points for a Long Term Strategic Plan (LTSP) --

- Executive summary. Make sure, in clear non-jargon that the citizen-reader, the Mayor and the Board of Supervisors understand where the PUC has been, where it is now, and where it's going. It must encapsulate everything that is presented in the plan. All assumptions must be clearly stated.

The PUC is the creation of the federal, state, and City of San Francisco governments. The federal government under the Raker Act of 1913 endowed San Francisco with the Hetch Hetchy water and power resources. The City combined power, water, and wastewater into multi-utility now known as the PUC. Currently the PUC is divided into three enterprises - Hetch Hetchy, water and cleanwater (sewerage). The Hetch Hetchy power division produces, aggregates (buys electric power in bulk), transports and distributes power to governmental agencies and some private sector customers. The water division distributes water to governmental agencies, the City of San Francisco, and Bay Area water districts. The cleanwater division collects and treats wastewater for San Francisco.

The PUC has monopoly service area rights in the sale, distribution, and collection of water and wastewater in San Francisco. Hetch Hetchy provides power, when possible, to governmental agencies, Turlock and Modesto Irrigation Districts (TID/MID) and certain non-governmental entities, mainly those that are tenants of City owned facilities.

Municipalities in California with monopoly service areas are self-regulating with regard to rates and service conditions. The California Public Utilities Commission (CPUC) regulates investor owned utilities (IOUs) that have exclusive service areas as to ratemaking and conditions of service. CPUC hearings are quasi-judicial and open. The PUC as a municipality is a self-regulating utility.

- The PUC regulatory system. Let people know how the PUC regulates its levels of service (environmental considerations) and ratemaking. The PUC, excluding power, has a monopoly service area and is self-regulating. Define enterprise goals now and in the future (rates, quality, conditions of service). The reader must understand this. It should be stated how rates are being assessed and used and what is expected in return for these rates Ratepayers are the customers.
- Benchmark. How do the PUC compare with other public and private utility systems in California and other parts of the US? Historical, present and projected benchmarking is required. Projected benchmarking can be used as an evaluative tool in holding the PUC accountable. Benchmarking is not the answer per se in evaluating performance, but in conjunction with other engineering, financial, social, and economic indicators produces a solid basis for assessing relative efficiencies over a broad range of industry standards.
- Past, present and projected finance requirements need to be stated in clear language.
- Decision models for evaluating competing wants in a budget-constrained environment must be explained in quantitative as well as qualitative terms.
- Forecasting and sensitivity testing. Use standard orthodox forecasting techniques to assess future macro and micro economic, financial, technological and social variables, which will determine a specific market. Clearly state all assumptions.
  - Deterministic models - Financial models, econometric forecasting - identifying relationships between factors. This type modeling underscores the need for a centralized and relational database. Handles uncertainty by sensitivity testing (What if?)
  - Probabilistic models - Handle uncertainty by allowing the planner to enter a probability distribution for one or more variables - not used in the projected +/- cost estimates in the various CIP versions.
  - Delphi technique -- public outreach/testing the public opinion pulse by direct questions
  - Linkage with major macrosectoral econometric models to subsume market and demographic trends. The seamless integration of in-house and external databases will enhance the reporting and planning processes
  - Though the established process (see above) ensure that public comment is always highly visible

II - Finances -- Revenue Bonds Issue and Rate Increases

San Francisco has a unique relationship between its government and citizenry. The citizens must approve revenue bonds (excluding SFO). Revenue bonds are bonds which will be paid back from revenues collected. This is a unique system of checks and balances. The bond requester must state what the bond funds will be used for and how the bonds will be repaid. This might be perceived as a contract between the entity issuing the bonds and the stakeholders. Many of the TF members view the execution of the contract as it is written as pivotal to the PUC in sustaining a line of credit with the voters. With the PUC proposing a CIP requiring additional expenditures of $5.2 billion this "credit-line confidence" factor becomes critical.

- The PUC is as mentioned a self-regulating utility entrusted under statute with a monopoly service area. The PUC rates are set to cover its revenue requirements. Revenues must cover operation & maintenance expenses, debt-service payments, and capital expenditures not financed by debt. The PUC does not have a funded depreciation or capital replacement account. PUC uses cash needs approach for funding capital expenditures by debt service and direct capital expenditure components out from revenues.

Debt service is created when the PUC causes bonds to be issued on its behalf. The PUC issues both serial and term bonds. In developing forecasts the PUC assumes these bonds will be amortized in a manner similar to a mortgage payment. Planners take the present value of the bonds and apply a level annualized factor that is calculated using interest and repayment period. This approach generates an annual dollar repayment amount which is allocated as rates over the customer base on a $/hundred cubic ft. (CCF) basis. The customers, through the increased rates, are in effect paying off both the interest and principle component of the IOU. Ultimately, the debt is passed through to PUC customers.

If the above process happens, as explained above, rate changes pursuant to a bond issue would be unchanged. However, the Commission has financial advisors who advise on their perception of optimal timing and structure of issues. This market participation, according to staff, can course a divergence between forecast and actual rates as a function of the prevailing bond market. The Commission advises that financial intermediaries be chosen in a competitive process.

To make the payments associated with the bond issuance the PUC has established two accounts with a fiscal agent:

- Interest fund --- Revenues are transferred into this account sufficient to cover twice a year interest payments on the bond debt
- Principle fund -- Revenues are transferred into this account sufficient to cover a once a year payment on debt principle

These two funds do not exceed the total required to cover both interest and principal requirements on a yearly basis. Surpluses are transferred back into the CIP. These funds cover interest charges and pay to retire bonds expiring during the year.

As an additional security for bondholders a Bond Reserve Account (BRA) is created. This is equal to one year of principle and interest payments. For the proposed CIP this will be approximately $345,000,000. This is an interest bearing account. If the BRA exceeds the pre-ordained level, the funds are returned to the CIP. When the debt is finally being retired and this reserve is not needed, it is used to offset the remaining amount outstanding.

The Commission might consider a business model, which focuses on planning, ratemaking, service conditions and ensuring a reliable supply of power, water and wastewater and unbundle its market activities. These are all specialized functions. The PUC has a long history of supplying power, water, and wastewater services and hence have developed specialized skills in these fields. However, in the new market dynamic, a number of TF members, especially after the A&B Bond situation, as discussed below, question the efficacy of internalizing very specialized market transaction functions within the Commission. This City might best be served by moving this function to a centralized/specialized entity within the City governance.

Example - 1997 A&B Bonds and Proposition H

In 1997 voters of San Francisco passed A&B bonds allowing the SFPUC to issue $304 million in bonds to finance reliability and seismic safety improvements and safe drinking water improvements.

In 1998 voters of San Francisco passed Proposition H, which froze water and wastewater rates at the level in effect on January 1, 1998 until July 1, 2006. There were limited exceptions such as to cover the debt service for the 1997 Revenue Bonds approved by the voters.

In Text of Ordinance Authorizing Bond Election - Proposition A. (p33) it is stated:

> "Prior to the issuance of the Bonds an independent consultant or engineering firm must deliver to the Public Utilities Commission a certificate to the effect that the proposed improvements to be financed with the bonds constitutes 'reliability and seismic safety improvements' as defined herein. "

In Text of Ordinance Authorizing Bond Election - Proposition B. (p41) it is stated:

> "Prior to the issuance of the Bonds an independent consultant or engineering firm must deliver to the Public Utilities Commission a certificate to the effect that the proposed improvements to be financed with the bonds constitutes 'safe drinking water improvements' as defined herein. "

The text authorizing both A & B also called for any "substitute work" to be performed only after it went through the same rigorous independent certification process as dictated at the ballot box.

Many members of the Task Force interpreted the text of the ordinances authorizing the Bond election to mean that the PUC should have followed specific steps; namely,

1. Have work-scope developed for initiatives certified by independent engineering entity. The TF members interpreted "independent" to mean as in the Declaration of Independence and not consultants working for the PUC.

2. Issue revenue bonds

3. Sequence debt service payment with rate increases

4. Perform certified work using funds generated from bond issuance.

The PUC followed a different approach. The Commission used commercial paper to fund A&B work. The first 1997 Bonds were not issued until July 25, 2001.

On February 28, 2001 the PUC produced a document entitled: "San Francisco Public Utilities Commission -- Capital Improvement Program - Long-Range Financial Plan. This document was presented to the public on May 22, 2001 as the SFPUC LTSP. In this document, the PUC described 1997 A&B Revenue Bond and their commercial paper program

> "San Francisco voters approved $157 million of 1997 Series A Water System Reliability and Seismic Bonds and $147 million of 1997 Series B Safe Drinking Water Revenue Bonds. The SFPUC has approved the sale of $140 million of these bonds and expects to sell these bonds in July 2001. The remaining $164 million of A&B Bonds would be sold in the second half of 2002.
>
> Commercial Paper Program. During 1999, the SFPUC began issuing commercial paper. Up to $250 million is authorized to fund construction costs and $49 million is outstanding as of February 28, 2001. A and B Revenue Bonds will take out outstanding commercial paper plus accrued interest. The PUC intends to continue issuing commercial paper that will be secured by future bond authorizations. "

The history of this commercial paper/Bond Issuance (incomplete as of writing) program is summarized in the following steps.

1. During the spring of 1999 the PUC requested and had passed by the Board of Supervisors an ordinance allowing for commercial payment to be used prior to actual bond issuance.

2. In July 1999 the PUC commenced issuing commercial paper, thereby, as noted by the TF, necessitating a two versus one step approach to funding A&B work. The first step was not presented to the voters as an option.

3. On May 22, 2001 SFPUC representative, Dr. Phil Arnold, announced that A&B work had been certified and confirmed to that the Alliance had issued the certification. Task Force members question the PUC as to what was specifically was certified and whether The Alliance could be considered independent.

4. July 1, 2001 water rate increase of 8.69%, announced by PUC. This increase overrode Proposition H freeze in that PUC stated it was required for debt service pursuant to issuing A&B bonds.

5. On August 27, 01 staff of PUC responded to a TF request for additional clarification regarding work-scope certification:

> "I have obtained a copy of the certificate prepared by the Water Alliance and reviewed it. In the certificate John Kluesener (Alliance) attests he has read Section A and Section 1 of Proposition B and caused an examination or investigation to be such that he can express an informed opinion on whether the PUC (SFPUC) has complied with the provisions of Section 1 for each proposition; the projects funded from the sale of bonds include reliability and seismic safety projects and safe drinking water projects; and it is his opinion that Commission has complied with the conditions contained in Section 1 of each proposition. The certificate includes two exhibits -- one a list of reliability and seismic safety projects, the other a list of safe drinking water projects. The certificate is dated May 22, 2001." Staff offered to send the TF a copy via messenger. This will be requested at a later date.

6 July 25, Bonds issued for $140,000,000.

7. As of August 15, 2001 - TF advised that as of now $226 million dollars have been appropriated or spent and that the remaining $78 million has been "identified." The $226 million is divided into three categories by the PUC

- $28 million spent
- $66 million encumbered -- contracted for but not paid
- $82 million Available for specific projects

TF members believe that Propositions A&B did not permit a commercial paper program and that certification was done after the fact and possibly not by an independent engineering entity. The TF believes that A&B work should have been completed. These type of factors raise concerns as to accountability and confidence in future revenue bond request.

Examples - Revenue from Customers v Debt Financing

Lifeline Rates and Revenue Requirements

The TF has requested that the PUC consider equating like customers with equal rates. Commercial and hotel customers do not receive any lifeline wastewater rates. Commercial and industrial customer rates are higher than the lifeline rate. These rates also include discharge costs.

Residential customers in San Francisco receive 300 cubic ft. of wastewater each month at a discount ($1.8623 per 100 cubic feet of water consumption). This rate is known as a lifeline rate. All wastewater use in excess of 300 cubic feet per residential dwelling per month is charged $4.8334 per 100 cubic feet. TF members asked if a building went from residential use to a hotel/corporate type use, should the lifeline rates still be applicable? The PUC stated that the administrative costs associated with redefining use would be too high to merit such a change. TF members suggested that these administrative costs would be less than the increased revenues and asked the PUC to investigate this matter further.

III - Power -- Policy Issues

AB1890 the power deregulation legislation was market-perverse. It created an environment whereby producers could act in an opportunistic manner toward consumers. At the time AB1890 was passed PUC (Hetch Hetchy) was producing, aggregating, transmitting, and selling power to both public and private sector customers. TF members believed that with a LTSP it would have been obvious to PUC management that a more dynamic approach should have been adopted. Some suggestions made during the course of meetings with the PUC are shown below:

- Creeping municipalization - PUC should have offered all residents a chance to sign up for PUC power. This type of approach is permitted under the San Francisco charter and was encouraged under AB1890.
- PUC should have used its low marginal cost of hydropower (Hetch Hetchy) to sell into high California Independent System Operator (CAISO) auctions to offset lower contractual irrigation district contractual prices. Sold high and bought low philosophy.
- PUC should have revisited the Turlock and Modesto irrigation district contracts immediately. These contracts were priced well below the market clearing price of power and the clause allowing right of first refusal over base load was a constraint on increasing Hetch Hetchy power generating capacity.
- PUC while providing public power to citizens of San Francisco should not increase its debt to buy PG&E intra-city wires, but rather negotiate favorable wheeling contracts.
- PUC should work with the state in acquiring low cost contractual power which is being purchased and sold by the DWR. The current 24/7/5-year contract with Calpine to purchase 50 MWH power with an average price of $86.90 over the 5-year contract period beginning July 1, 2001-- exceeds the current market rate. Mention was not made of this contract by the PUC on May 22, 01, when they presented the LTSP and announced certification of 1997- A&B Bonds or at any TF meeting or to any TF member working with staff on power issues.

- Hetch Hetchy revenues must be internalized for the entire system. For example during the period 1992-2000, SFPUC transferred $339,150,972 from Hetch Hetchy to the general fund. The present (appreciated) value of these funds, if available in a depreciation account (asset management) today, would approximate $1 billion. A systems approach to maintaining the entire system will ensure intra-utility synergism. Engineering and economic criteria must override any parochial attempts to dilute by political fiat the way the various functions of the current system complement each other. The current SFPUC business model may require overhauling and streamlining, but the conceptual approach of an integrated system controlled by San Francisco must not be changed.

One advantage of having San Francisco as a player in the energy markets is that it will restrain "gaming" (withholding power to spike prices) by producers. San Francisco as a strong political entity will lend additional policing powers into a market that has been perversely redesigned (AB1890) by fiat to favor rather than dissuade cartel type behavior by power producers. This weakness in the law is gradually being addressed.

The TF members, while strongly supporting public power participation by the PUC in the overall San Francisco electric marketplace, do not believe any single power supplier should be granted sole monopoly rights to sell power in San Francisco. The public must have choices and a leading option must be the PUC. Acquisition of PG&E's aging intra-city wires is not encouraged. This would generate an additional debt burden on the City and straddle the City with a high learning curve in operating, maintaining, and running a "wires" (PG&E distribution lines) business. The PG& E wires acquisition could increase the proposed $5.2 billion debt issuance to possibly over $7 billion.

Endnotes
August 27, 01 email to Rich Bodisco ---- SFPUC (lack of) Planning Process
Rich the Briefing Paper "An Earthquake Vulnerable, Aging System Could Leave 2.4 Million Bay Area Customers With Little or No Water for Up to 60 Days" highlights an old and well known problem associated with living in an area of geological instability. Three things come to mind: (1) Why were these assets allowed to degrade to a point supposedly requiring billions now? (2) Haste makes waste (going ahead without a LTSP), and (3) Don't shoot the messenger (Task Force). Since sunk costs are sunk costs (irrelevant), we must seek an answer to question 1, while moving forward with the real task at hand -- ensuring our infrastructure be restored and enhanced and that this type crisis situation never again arises. This can be done by a disciplined and planned approach to asset management. As noted below, this "crisis" needs to be properly quantified - the cost, timing, and risk calculations have yet to pass consensus TF scrutiny.

For over 15 months we have failed in our entreaties to the PUC to have them generate a viable long term strategic plan (LTSP) that will guarantee the public will have complete confidence in granting PUC a line of credit (revenue bonds), apparently in the billions. This credit line cannot be considered in isolation from SF's other present and future financial goals. Our ability to issue paper is NOT infinite. We must live within overall budgetary constraints. This plan must tell us why we are at this perceived crisis point now and how we can avoid this situation in the future. It must look beyond 10 years - this must not be the planning horizon for an in perpetuity conurbation such as the bay Area. It must involve the public, especially in risk (risk reduction is not a free good) and financial management. The trade-off with the environment cannot be ignored. In this regard, both explicit (actual) and implicit (internalizing externalities) must be considered. Brian Browne
EOM--------------------------------
****
Benchmarking -- Questions requested by Member Browne - from an XLS sheet ---- This report should be benchmarked against other similar systems to compare operating statistics. (July 01)

Item	CITY, DISTRICT OR COMPANY DATA REQUEST	San Francisco Public Utilities Commission
	Date	4.26.01
	Name of Organization	SFPUC
	Type of Organization	PUC
	Street Address	1155 Market Street
	City	San Francisco
	State	California

	Zip	94103
	Contact Name	Kingsley Okereke
	Contact Telephone	
	Contact Email.	mailto:kokereke@puc.sf.ca.us
1	Number of potable water connections (customers)	169,485
2	Number of recycled water connections (customers)	0
3	Total population served	2,412,266
4	Total number of employees	612
5	Number of employees (FTEs) assigned to	
	5.1 Billing /meter reading / customer service (multi-tasked)	42
	5.2 Customer service only	100
	5.3 Operations & maintenance	569
6	Miles of pipe (main) in system	1,433
7	Acre feet of water served annually (1 AF = 325,851 gallons)	284,468
8	Acre feet of water purchased annually	0
9	Acre feet of water produced from wells annually	0
10	Do you operate a water treatment plant?	Operates 2 plants
11	If yes, what is its size (MGD)?	Sunol Valley 160 mgd and Harry Tracy 140 mgd
12	Number of annual customer service requests	15,000
13	Average annual number of "turn-offs"	600
14	Billing system	
	14.1 Billing cycle - monthly or bi-monthly	both monthly (4,353)and bimonthly (165,133)
	14.2 Number of bills issued annually	1,055,034
15	Water Rate Structure	see attachment
	(please attach a copy of your rate schedule or tariff sheet, and provide any explanations at end of this survey under Additional Comments, Information and Data)	
	15.1 Increasing Block Rate? (Y)es/(N)o	
	15.2 Uniform Rate?	yes
	15.3 Lot Size Rate?	
	15.4 Seasonal Rates?	
	15.5 Fire Service Rates?	
	15.6. Lifeline Rate?	
	15.7 Fixed or Meter Charge?	yes
	15.8 Allowance in Fixed Charge?	
	15.9 If allowance, what is the quantity (HCF)?	
	15.10 Capital/Other Rate Surcharge?	
16	Asset Valuation	
	16.1 Gross plant (un-depreciated asset)	701,511,337
	16.2 Replacement cost, if available	

17	Gross annual revenue	154,367,858
18	Annual percent of billed revenues that are uncorrectable	1.50%
19	Total annual expenses	
20	Annual Expenses	
	20.1 Annual O&M expenses	111,439,255
	20.2 Annual capital expenses	42,092,178
21	Annual Dollar Contribution to City General Fund	
21.1	Public Water Agencies	
	21.1.a In-Lieu Fees	
	21.1.b City Rate of Return	
	21.1.c Allocated Costs	
	21.1.d City Administrative Charges	
	21.1.e Direct Charges	
	21.1.f Indirect Charges	
	21.1.g Other – please define	
21.2	Private Water Companies	
	21.2.a Franchise Fees	
	21.2.b Taxes	
	21.2.c Other – please define	
22	Do you have a formal ratemaking policy?	
23	If yes, does this policy include an automatic pass-through of water and power costs?	
24	How often do you use this automatic pass-through policy?	
25	How often are your formal rate policy hearings?	
	Additional Comments, Information and Data	
	(Please add additional pages as needed)	
		Note 1 Population served at retail = 776,733; Population served at wholesale 1,635,533. Total population served 2,412,266Note 2 on Acre feet served: Retail Acre Ft 90,094 Wholesale acre feet 194,468 - Total 284,468
	Benchmarking Statistics	
1A	Customers Per Employee	

APPENDIX 1
Final Report

See XLS SHEET