Finance Committee Meeting

February 29, 2012
9:00 a.m.

Committee Members Present: Larry Dill, *Chair*, Clyde Nakaya, Roy Oyama

Absent/Excused:

Board Members Present: Randall Nishimura

Staff Present: David Craddick, William Eddy, Carol Beardmore, Marites Yano, Dustin Moises, Gregg Fujikawa, Val Reyna, Keith Aoki, Faith Shiramizu

Guest: Andrew Baker, SAIC (formerly R. W. Beck) via telephone

Chair Dill, called the Finance Committee Meeting to order at 9:00 a.m., quorum was achieved.

AGENDA
Mr. Nakaya moved to accept the agenda as circulated; seconded by Chair Dill; motion was carried.

NEW BUSINESS

a. ***FRC Rate Schedule***
BACKGROUND:
Manager Craddick announced that a presentation on the Facility Reserve Charge (FRC) study update was given by Mr. Andrew Baker. The focus of the presentation is on the methodology involved in the calculations, a brief discussion of the existing FRC and the desired outcome of the analysis and some of the considerations for the future.

The FRC for the county was last updated in 2004 and previously in 1993. The update is necessary to direct changes in project costs. The charges continue to be equitable and reflect the cost required for certain new developments.

The Water Plan 2020 effort was completed in 2001 that provided the technical basis for the updated 2004 FRC. The technical groundwork and long-term capital planning continues to be the basis for parts of the update to the FRC with more recent project and cost information used.

Mr. Baker's draft report will cover the Needs Assessment Study and the FRC update. The Needs Assessment Study is the portion which the service standards, additional demands resulting from development, deficiencies in existing facilities, and the projection of capital facility needs are identified. This is part of what Water Plan 2020 laid the groundwork from. This is a prerequisite to the FRC calculations which is required by state statue.

The FRC is a one-time charge for a new connection and referred to as an impact fee or a system development charge. The FRC represents a proportionate share of the cost of providing water service access. The existing charge is $$4,600 for a single-family meter. Most family, hotel or resort connections charge a fee based on the meter size of the connection.

Four major steps in the FRC update analysis include:

1) The first step is the technical basis for the Needs Assessment Study in the Water Plan 2020. The process started with a review of the capital program. SAIC worked with the DOW to incorporate and update the system capacity and cost of identified projects. Out of the Needs Assessment Study, SAIC identified the list of existing system deficiencies, the needs to support projected growth and costs.

2) The second step is an evaluation of the FRC methodology. There are different FRC terms and different methodologies applied depending on specific details of a water system. The American Water Works Association (AWWA) lays out two common approaches and its industry standard in one manual.

First method-system buy-in or equity method is equity in terms of investment. The goal of all of the approaches and the analysis as a whole are to be equitable in assessment of the charges. This method considers the situation from existing customers provided equity in the existing system through their rates and fees. New customers should buy into the system by paying a fee having an equity stake equal to existing customers. According to AWWA, this approach is generally most applicable for systems where there is excess existing capacity. They do not have any immediate development needs.

S*econd method*-incremental cost method considers the situation from new development paying for incremental cost of system capacity needed to serve new development with the intent of mitigating impact of new growth on existing customer's rates. Example, new capacity, developing new sources of water is more expensive on a per-gallon basis than existing sources of water. This is a common concern to address. Generally the most cost effective or cheaper sources have been developed. This method is less applicable when other methods where sufficient capacity is already in the water system to provide for new growth or, alternatively, when the rate of growth is rapid it is difficult to pin down a specific incremental cost because it fluctuates rapidly than updates can address it.

An important consideration in evaluating methodology options is consistency with the state impact fee statue. The AWWA recommended approaches that generally confirm to the statutory requirements. Specific considerations must be included in either analysis, most significant is the inclusion of a credit ensures new customers do not double pay for the capacity required to serve them.

3) Third step is the calculation of the FRC and schedule update. Four components to the FRC are: calculation, source, storage, transmission/distribution (T&D) and credit.

Source and storage components are similar and are calculated on the review of methodologies using the incremental cost method. It is appropriate and is a consistent approach with the realities of the DOW system. They are based on the Department's incremental cost to develop new source capacity or new storage capacity.

The draft table shown, Table C-1, is in the Board packet. The DOW staff will finalize the numbers which will show how the calculation steps are done but are not the final numbers. The table lists capital projects identified as new capacity. It lists estimated costs, amount of new capacity they provide and whether all or a portion of what new capacity will be addressing existing system deficiencies. The numbers are in total of all the source projects identified. Table C-2 shows storage projects separately. An adjustment is made to account for increase costs of debts in a portion of these projects. Total cost per growth is used to calculate a unit cost of growth, a related source capacity. The same calculation is made for storage.

The T&D component recognizes there are existing facilities to serve new development, but additional facilities are needed because the elements of both the system buy-in and incremental cost methods are employed to determine the T&D component of the FRC. This calculation is to determine the present value or the total system that will be required to serve demand at the end of the study period in 2030. The first calculation, the total cost of new T&D projects have been identified as necessary to serve projected new demand in Table C-3. The same adjustment for the portion being bonds is included.

Table C-4 works through the calculation steps to determine present value of the portion of the system will still be in service in 2030. Step eight, shows the present value of the whole system which is 38 million on Table C-3, new projects. The next number, 192M, is the estimated value of the portion of the system that would not have been replaced. The sum is the present value of the total system needed to serve projected demand which is at the end of the study period. Dividing that number by the projected demand, results in half the unit cost for T&D capacity, the same way if calculating unit cost for source and storage.

The FRC credit, a statutory requirement, is designed to account for new customers who will pay rates for projects which eliminate existing deficiencies, storage, repair and replacement projects, and debt service on existing facilities. Through the previous three components that were calculated, a fee will cover all costs of new capacity required to serve the new customers. Because it is not feasible to have the new customers not pay the portion of the rates that goes to existing deficiencies, the approach is instead to apply credit against the fee to account for future rate payments. Per the statute, this credit is the present value of that difference over a 20-year horizon.

4) Calculation is the last step in Table C-6. This step puts all of these components together using unit costs calculated in the previous steps and the level of service standards identified in the Needs Assessment Study to determine the charge per equivalent residential unit or single-family.

Mr. Baker explained the issues of the phase-in period. The question is approached from a policy standpoint that an analytical one is difficult to project the impact. Example, a 50% increase in the fee does not necessarily translate directly to a 50% revenue increase. Timeframe over which updated fees are phased-in will have a direct impact on the amount of revenues collected. A current schedule to phase-in is over a four year period.

Mr. Baker added one potential concern with a protracted phase-in period will make it difficult to project revenue collection for future years. The relationship with the recent rate package is another consideration. One rate option considered at a more conservative level is FRC revenues and one more optimistic which increases the level. This gave the impression of a direct link between the rates and the FRC. While the level of rate increases is dependent on the revenues collected, as shown from the

calculations, the calculation of the FRC is not dependent on the rate increase itself, but it is influenced only by the actual cost of providing the new capacity is. Based on Mr. Baker's judgment, an appropriate course of action would be to recognize a relationship between the rates, but it is a one-directional relationship, once the phase-in period for any revised FRC fees are completed, re-evaluate the rates. After seeing what the new level of revenue is, this could potentially reduce the need for rate increases in later years. A more condensed phase-in period may be preferred.

The last consideration is the concern of a rush of individuals paying for FRC's on projects that may be in the pipeline so they can get in before there is an increase to the fee. This is a significant issue for the Department because by accepting the payment for an FRC, the Department is committing to provide a system that can support the new required capacity. If a large number of people pay for FRC's now to get the lower rate but do not actually install a meter for a number of years, the Department will still be obligated to build the capacity for them and will be required to maintain the capacity. If no meter gets installed, the customer would not begin paying a service charge. A service charge is designed to pay for the cost of maintaining the baseline system capacity. There would not be any rate revenue to pay for the cost of maintaining that system. If nobody has started using the capacity, there is still a cost.

DISCUSSION:
Chair Dill referred to Table 8-C and Mr. Baker confirmed all the calculation results in establishing the FRC for a 5/8-inch water meter with the rate of $13,500. Pro rations are used to determine appropriate FRC for larger water meters. Standard formulas are available, industry standard for the amount of consumptions that is expected from different meters, but there is a wealth of data for the DOW's system.

Mr. Baker explained that the smaller meter sizes with numerous customers, SAIC used the average metered water use and did a ratio from the average for a 5/8-inch meter to the larger meter size. Meter sizes 5/8-inch through 2 inches was the basis for the calculation. On those meter sizes, it is based on actual average metered consumption, not meter size. Chair Dill requested to see a new column in Table 8-C indicating number of data points used to generate the average. For large meter sizes, there were not enough customers or not enough data point to get an average. For the larger meter sizes they used the AWWA flow factor based on the cross-sectional area and the flow capacity that meters can support.

Mr. Nishimura commented that the 3-inch to 8-inch meter sizes are based on cross-sectional area and asked if this was based on comparing it against a 5/8-inch meter or against the 2-inch meter? Mr. Baker explained that the 3-inch and 8-inch sizes were compared based on cross-sectional areas against the 2-inch size. The ratios for the 3-inch, 4-inch, 6-inch, and 8-inch sizes are indexed to the 2-inch size.

Chair Dill mentioned the ¾-inch and 1-inch meters average were skewed by outliners and adjusted the ratio to compensate. Mr. Baker stated this was the last two years of data. Some the numbers in the data was received in the fill-frequency analysis from the Honolulu Board of Water Supply (the data did not make sense). The result was that the ¾-inch average was coming up dramatically high relative to both the 5/8-inch and the 1-inch. The outliers were deleted in the calculation. The average was adjusted by deleting those outliers, not the straight average.

Mr. Baker noted that the gallons per-day column is the actual straight average number. Mr. Dill noticed the ¾-inch adjustment was down, but the 1-inch was adjusted up. Mr. Baker explained that their engineering judgment was to delete certain outliers. They could show the revised number in the gallons per day column. Mr. Baker could include the gallons per day and show whether it was adjusted or not. He would confirm the period of time they were taking this average water use which may have been a three or four-year period. Chair Dill requested to have the period of time shown on the final report.

Chair Dill mentioned the 8-inch water meter size data appears to be off assuming the DOW has a very small data group. Manager Craddick clarified that the 8-inch is for two meters for the airport and the harbors. Fire flow goes through their larger meters. Mr. Baker will add a note that clarifies the reason the data is off. For the larger size meters, while their metered consumption may be lower than what they could be consuming, a system needs to be provided that can support the capacity that they have paid for. The larger meter size tends to be a variance between what the meter consumption is and what the capacity they could be consuming. This is the reason they deferred to using the AWWA factors, because it represents the amount of capacity they could demand and the system has to be built for it.

Manager Craddick indicated the airport wants to increase their capacity with their current meter size. The DOW has an agreement with the airport to limit their meter capacity. If they want more capacity, they have to pay for it using the unit numbers for source, storage and transmission and multiply it times the additional capacity they need and come up with a special fee. Mr. Baker agreed to account not just for their average, but also for the peak that they would put on the system. For source and storage it factors for the peak which includes the 1.5 for the max daily demand. By calculating the max, the same formula is used. For source and storage, calculate for the peak and not the average.

Mr. Nishimura inquired if the 3-inch through 8-inch FRC charges are based on potential flow and if it should not have already been accounted for? Why is the DOW charging additional FRC? Manager Craddick explained it is not accounted for because the airport was given a larger meter size than what they needed because of their fire flow requirement. Mr. Fujikawa will check the files if the airport paid FRC for the bigger meter. Mr. Nishimura questioned if the DOW paid for the FRC and it is a one-time charge, why is the DOW looking at charging another FRC? Are they requiring more capacity? Mr. Baker explained there is an existing agreement that limits their capacity. They may have had an agreement to pay a reduced FRC at the time and records should be verified.

Chair Dill and Manager Craddick agreed that the Rules Committee is currently reviewing all the DOW FRC application of fees. Chair Dill recommended the Rules Committee should adopt the rules before the DOW adopts these new charges.

Manager Craddick commented that the phase-in is working and there is a problem where the DOW is required to pay the development fee plus put the improvements in or bond them which is awkward. He feels the longer the delay, the more likely the DOW is going to collect the money. The fees need to be paid. It is easy to divide 100% by four 6-months' period and move it down to two years. Six months is ample time to put in a lateral. If several people came in wanting to put laterals in all at once, outside help would be utilized instead of staff.

Chair Dill acknowledged that the tables had different totals in Appendix D, the Grove Farm project. He asked how was the Grove Farm project treated that had an affect on this? Mr. Baker explained the

Grove Farm project was not included in the Appendix tables because they were prepared separately from the analysis related to the Grove Farm project. The calculation on Table C-1 was done the same way as for any other project. Costs were looked at, the amount of new capacity that it would provide and what percent of capacity was for new growth versus the existing system needs. The note was to clarify there was a consistency difference with other Appendix tables.

Manager Craddick commented that once the fee is set, the DOW would replace capacity taken from existing development agreements that the DOW has with Kukuiula and Grove Farm. By opening a valve, the DOW can take a lot more water and bring it into the system and give water out to people. The DOW is not going to have the new fee in place, have excess water that Grove Farm is not using and not give it out if it can be replaced. The DOW would start planning for building a new treatment plant and give the water out and make sure when Grove Farm needs the water, it is there. The DOW has an agreement which goes to their projects. If they do not build out 100% on the first day, then the capacity is there. The DOW can use it provided it is replaced and it is there when Grove Farm needs it.

This also affects Kukuiula which has many wells that are not being used near capacity. Kukuiula will not build out for many years. The DOW would use the wells up and as they approach a limit, then the DOW would have the money coming into this fee where the DOW could add additional wells. Manager Craddick indicated Kukuiula has given the DOW those facilities without an agreement. An agreement will have to be completed with Kukuiula. This is the understanding that they gave the DOW for their build-out. When the DOW accepted the facilities from Kukuiula, those facilities were given with the understanding it will serve their capacity when they need it.

Mr. Baker explained Table C-6, lines 25, 26 and 27. State statues requires an analysis be done which identifies what portion of the rates a new customer will be paying and going to source and storage, repair and replacement projects, existing deficiencies and debt service on existing facilities. The calculation of the present value is the rate payments over a 20-year horizon. The calculation of the present value of the unit costs is great revenue for R&R, existing deficiencies and existing debt, which is calculated on a per GPD basis in line 24. The remainder of the 20-year period is a six-year average. Take the average of those of what it is over the six-year period, then take the present value of those dollars per GPD metered consumption which is 488, is the 20-year present value at a nominal discount rate of 6%. Manager Craddick has an Excel sheet which calculates the net present value of a series of values. Take the period of 20 years of these values calculates what the net present value is.

Manager Craddick commented on the phase-in if people pay a fee and do not take the meter, they are not helping to pay down this debt service that this credit is given from. They are getting a credit and yet they never put the meter in and never use water. The quicker the DOW phase those out and make them pay the higher fee, the more likely the DOW will make it with a lower number.

Mr. Baker acknowledged that these calculations all work on the assumption that a developer pays the fee, puts the meter in within a nominal time frame but this is not happening according to Manager Craddick. Mr. Baker added there are issues on the finances of the Department if there is a very large lag, and some people have paid the FRC 10 years ago and have not installed the meter. The Department is obligated to build a system once they accept that FRC payment to support—to provide that capacity even if somebody does not put the meter in. They are not paying the service charge, which is support to cover that system capacity, and the O&M on that system's capacity. This is not a

revenue positive situation for the Department to get the FRC and then not have to ever provide the capacity.

Chair Dill asked if the Rules Committee establishes rules where people who pay an FRC and sit on the meter? Does the Department decide to refund the FRC if no meter is installed in 12 months? Would that address the concern and would this affect the way the calculation is done? Mr. Baker said it would not affect the calculation because the calculation does not assume that is going on right now. There is another way that it could be addressed. This would be a policy question rather than a finance question. Put the clause in the rules stating "once the developer does elect to install the meter, they would be required to pay the difference in whatever they originally paid and the current FRC." If they sat on the FRC charge for five years, the Department could have them pay the difference in between what they previously paid if they have not installed the meter after 12 or 18 months. If they take longer to pay, and if rates increase, charge the difference at the time of the meter installation.

Manager Craddick wanted clarification during an audit on whether after this work is done, if the Department needs an auditor. Mr. Baker confirmed his contract is only with the Board.

Mr. Baker stated on Table 6, line 15 there was less projected FRC revenue. The projection period though 2016 was taken from the water rate analysis. There were no new revenue projections.

Mr. Nishimura requested Mr. Baker to explain lines 23 and 24 on how those numbers were derived. Mr. Baker stated the lines should be lines 21 and 22 and the dollars per kilo gallon is taking line 21 rate revenue calculation divided by the system wide water sales. It gives a unit basis for rate revenue for these deficiencies per kilo gallon. The dollars per gallon per day is done by dividing, based on version two, taking the gallons divided by days.

Mr. Nishimura mentioned from a budgetary standpoint, the Department should be using those numbers for primarily the DOW's replacement, source, storage or transmission, and lock up or setting it aside specifically for purpose as opposed to allowing operations to access that money. Mr. Baker stated this is a characterization of what goes on an average basis. In some years there may be a lot of necessary repair and replacement. Mr. Nishimura wanted to know from an operations standpoint, should the deficiencies monies be separated from operations use?

Manager Craddick explained the money the DOW identifies is going to the FRC charge. These deficiencies are rate generated monies. The Department gave capacity to people that did not have capacity for and currently everybody pays for it. The FRC fee is reduced below what is needed in order to provide those facilities. If the money is put over to the FRC fund and the facilities are built which the deficits were intended, then the individual is getting the full FRC charge and not charging the new expanded rate that was allowed for people to get on the system without having adequate capacity. Mr. Baker clarified it is expenses for repair and replacement, projects for existing deficiencies and existing outstanding indebtedness. The intent of the calculation is a new customer pays a fee. They should be paying the full cost of their capacity, but they are joining into a system that has existing outstanding debt.

Manager Craddick commented that none of the debt is for source, transmission or storage. The only debt that they are paying for is line replacement. This is one problem the DOW has had when given the credit, because they are not paying the debt which is going to the FRC. The reserve is partially

funded from the FRC also. Whatever is expansion related will come out of the FRC. Mr. Nishimura stated the bulk of the reserve is coming out of the rate structure. Manager Craddick stated ¾ or 2/3 of the BAB is for system replacement, not for expansion. This issue needs to be cleared up.

Manager Craddick added that the expansion related BAB debt and principal will be added. The projects are listed and the debt and interest payments need to be included. Twenty million dollars of the debt would be adjusted. The Department now has the BAB, the SRF that is expansion related and 10% of the rest of the projects are supposed to be shown as being debt financed and out of the FRC fund, not out of the rate payers. The SRF was used for expansion which was reviewed by the auditor and the state. Since they are expansion related for the Department, the state does not consider them expansion related as long as they get paid.

The stable tank built in Waimea is definitely for expansion. This is how the DOW was able to cancel the restrictions out in Waimea and the FRC is paying for it. This was the adjustment that was done on the audit two years ago, paying into the water rates from the FRC fund that the rates had paid for from the time the loans were issued. The FRC has already reimbursed the water rate payer for all that back debt service they paid. This is the process they have used and subject to getting the projects correct partly paying for the debt service and the methodology process is accepted as it was done. Chair Dill added there is a lot more to review with all the numbers presented.

Mr. Nakaya moved to receive the data which was presented by Mr. Baker and deferred to a committee meeting for more discussion; seconded by Mr. Oyama; motion was carried.

Adjournment

Mr. Nakaya moved to adjourn the meeting at 10:08 a.m.; seconded by Mr. Oyama; motion carried.

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