A regular meeting of the Carson City Utilities Advisory Committee was scheduled for 5:30 p.m. on Thursday, November 14, 2002 in the Community Center Sierra Room, 851 East William Street, Carson City, Nevada.

PRESENT: Chairperson Ron Knecht

Vice Chairperson Glen Martel

John Degenkolb Larry Osborne James Polito James Riggs Jeffrey Smeath

STAFF: Andrew Burnham, Development Services Director

Larry Werner, City Engineer

Tom Hoffert, Utilities Operations Manager David Heath, Finance Director/Risk Manager

Nick Providenti, Accounting Manager

John Bonow, Consultant

Kathleen King, Recording Secretary

NOTE: A tape recording of these proceedings is on file in the Clerk-Recorder's Office and is available for review and inspection during regular business hours.

- **A. CALL TO ORDER, DETERMINATION OF A QUORUM** (1-0001) Chairperson Knecht called the meeting to order at 5:30 p.m. Roll was called; a quorum was present. Members Langson and Mullet were absent.
- **B.** ACCEPTANCE OF CLERK'S MINUTES OF OCTOBER 4, 2002 (1-0008) Vice Chairperson Martel moved to approve the minutes, as presented. Member Osborne seconded the motion. Motion carried 7-0.
- C. PUBLIC COMMENT (1-0020) None.
- **D. MODIFICATION OF AGENDA** (1-0029) None.
- **E. DISCLOSURES** (1-0032) Vice Chairperson Martel advised of having provided a report to the Builders Association of Western Nevada Board at their regular monthly meeting.

F. PUBLIC MEETING ITEMS:

F-1. PRESENTATION BY CONSULTANT AND DISCUSSION REGARDING COMPUTER RATE MODELS (1-0043) - Mr. Bonow reviewed background information on this item and acknowledged that the alternative scenario using the commodity/demand allocation will be provided at the next meeting "depending upon the outcome of this meeting." He referred to the Water Rate Model Summary included in the agenda materials, and pointed out that many more costs in the near term will have to be absorbed with a pay-as-you-go approach. The City's five-year capital program totals, on an inflated dollar basis, approximately \$28 million for water. Almost half that amount is "front loaded over the next couple years" which is the reason for the need to dramatically increase revenues. Mr. Bonow noted that

much of the capital program is driven by regulatory requirements, such as those imposed by the Environmental Protection Agency.

Mr. Bonow responded to questions regarding the pay-as-you-go approach, and advised that the Utilities Department has not used this approach in the past. Expansion-related costs have generally been debt financed and replacement costs have been paid out of current rates in the current year. If sufficient revenue wasn't generated to cover all current-year costs, fund balances were used. Mr. Bonow advised that this practice was eliminated in the analysis presented in the agenda materials; revenue needed for a given year will be generated in that year. He emphasized that, given existing rates and the resulting revenues generated by the water utility, and the large amount of capital costs in the current five-year projection, there is a substantial need to generate more revenue if debt financing is not used. Mr. Bonow referred to Scenario 1-A and reviewed the "magnitude of capital costs" which were highlighted. Of the \$28 million, nearly \$12 million needs to be funded in the next two years. Given the fact that total revenues presently generated by the system are approximately \$7-8 million, rate increases would need to accommodate "essentially a doubling of costs ... in 2004."

In response to a question, Mr. Bonow explained that the interclass subsidy has been eliminated by virtue of using the base/extra capacity cost allocation method; consideration of the relative, average, and peak rate of use within each class is the basis for distributing costs. He suggested there is no existing subsidy of costs; there is a subsidy among revenues generated by each class. It became difficult to preserve a subsidy because of the cost allocation method used; however, another subsidy presented itself within each class. Mr. Bonow explained that residential customers pay \$.40/1,000 gallons for the first 5,000 gallons used. For the same 5,000 gallons, commercial customers pay \$1.05/1,000 gallons. There is a difference, depending on the type of customer, on the amount paid for water used. "High end" users pay approximately the same rate per 1,000 gallons. Mr. Bonow explained that the model was designed to require all customers to pay the same relative amount for each 1,000 gallons used. So, while one subsidy was eliminated by virtue of allocating costs based on the methods agreed to, other subsidies became evident within customer classes as opposed to between customer classes. Member Polito commented that one way to achieve subsidies is to shift costs among cost pools. Various revenues funded from each class would be achieved by shifting costs from residential to commercial cost pools and converting them to a rate. In response to a question regarding the requested bookends, Mr. Bonow advised that there has not yet been a determination made regarding translation of the revenue subsidy to the cost allocation methodology while preserving the same degree of subsidy using the base/extra capacity method for allocating costs and contrasting it to the way revenues were generated prior to this study being undertaken. In response to a further question, Mr. Bonow explained that the model functions, as follows: Once the costs are allocated to each customer class, the rates for each class are adjusted so that a sufficient amount of revenue is generated to cover its allocated costs. Member Polito suggested that, at some point, the rate by class should translate into a rate per unit by dividing by the units of service through the commodity. Mr. Bonow acknowledged that the model will accommodate this, but that the goal is to accurately reflect the current version of subsidy. He explained that determining the original level of subsidy was difficult because it is predicated on the level of costs generated by each class. Subsidy and cost cannot be separated. Because a cost allocation method has not been used among the utilities to date, one has to be engineered to determine whether or not the notion of subsidy is accurate. In response to a question, Mr. Bonow clarified that the difficulty is in determining the accuracy of the results. He acknowledged that the model accurately represents an allocation of costs across classes according to the base/excess capacity method. He explained that the challenge is to be comfortable with the degree of subsidy in the past to contrast it to the lack thereof using the new approach. Additional discussion ensued.

In response to a question, Mr. Bonow explained that, in the past, there was no sense of rates being established based on costs associated with a certain customer class. The rates were established for each tier for each class and revenue fell out from whatever usage occurred within that class. Allocation of costs was a notion pursued in the 1989 study, and subsequently "and almost immediately" abandoned. The rates established subsequent to the 1989 study and over time did not reflect any notion of cost allocation; they simply reflected a perception of which customer should bear which portion of the total costs without an indepth knowledge of the costs by class. Member Smeath suggested that the subsidy is in the base rates the residential and commercial classes have been charged, not the base costs. Discussion took place with regard to the same. In response to a question, Mr. Bonow explained that the rates charged per thousand gallons to each customer class, under the 1993 ordinance, have not been changed. Assuming no rate increase, but allocating costs according to the base/excess capacity method, a determination can be made regarding the total costs and revenues for each class. He referred to the Water Rate Model included in the agenda materials, and advised that since there is a clear deficiency in total revenues versus total costs, every customer's rates should be increased relatively the same. The amount per thousand gallons was not adjusted to be the same within each class, but the existing rates were each increased 48% based on the amount of consumption. 48% was the number that resulted in total revenue equaling total costs. There will then be an over collection of revenue in some classes and an under collection in others which will indicate the notion of subsidy under the current allocation method. In response to a further question, Mr. Bonow advised that the revised model will indicate, with more accuracy, the costs allocated to each customer class and the revenue required to cover all the costs. He reiterated that the consultants and staff are "on the cusp" of being able to quantify the notion of the subsidy based on cost causation and revenues.

Mr. Bonow explained that the Water Rate Model included in the agenda materials was based on a number of figures which have subsequently changed over the last week. He referred to the computer presentation of the Water Rate Model, which was displayed, and explained the reason for dispensing with the rate base concept. He referred to the consensus of the Committee at the last meeting to spread fire protection costs among the system and advised that the allocation of fire protection related costs is now effectively folded into the base. He reviewed the City's budget and discussed the operation and maintenance costs included in the budget worksheet which was then used to project costs. He advised that the 2003 costs are direct from the water utility budget, and each line item has a separate escalation factor. He explained that, prior to the current budget year, salaries and wages were broken out between water maintenance and billing/collecting. In the 2003 budget, the same categories were all included in water maintenance. The implication is that because costs associated with meter reading and billing/collecting are recovered through the meter charge, it will be reduced if fewer costs are taken away. The meter and collection costs were "backed out" of the 2003 figures in order to properly allocate them. Once that was done, the "fulcrum" between base and extra capacity begins with the analysis of the average daily flow and the maximum daily flow. These numbers were input based on feedback from staff; the average daily flow can be calculated going forward based on the way the model works. The maximum daily flow is not a number that is readily evident. Maximum monthly flows are available from the series of records generated by the utility. The fundamental inputs allow a determination of the average to maximum ratio which is just under 60%.

Mr. Bonow advised that the total operation and maintenance costs are \$4.7 million which needs to be allocated between base, extra capacity, and customer costs (metering and collection). This is done based on the same methods reviewed at the last meeting which is to allocate certain amounts to the base and other amounts being percentages. At the request of Member Polito, Mr. Bonow reviewed several examples of the method for allocating costs to the base. He explained that extra capacity costs are allocated similarly and, for most line items, are the remainder of costs not allocated to the base. Maximum day is the balance of costs not allocated to the base except for customer-related costs which become another allocation. Mr.

Bonow reiterated that operation and maintenance is allocated based on the relative average to maximum use of the system. He acknowledged that the model is fully automated and that staff will be able to review and update rates each year.

Mr. Bonow displayed and provided an overview of actual customer data for 2001. He advised that the data was summarized and the totals indicate the amount of use for each particular type of meter and customer. Average and maximum use data is then derived and costs are allocated among customer classes. Mr. Bonow reviewed the method for analyzing how customers use the system. He explained that the amount each customer class uses for each tier is important because revenues are generated from the different rates for each tier, and the amount of consumption on average and an aggregate is important because it represents the relative base and extra capacity allocations. He advised that different test years can be used in the model.

Mr. Bonow pointed out that connection fees are usually not considered for debt service coverage because they are not operating revenue and cannot be relied upon. He reviewed the method by which connection fees are allocated in the model. He reviewed the input table of replacement and expansion-related capital costs which allows for cost allocation according to the nature of a project and for decisions regarding funding methods. Mr. Bonow responded to questions regarding the method by which he provided for adding replacement and expansion projects to the model. He explained how the model accommodates inflation and, in response to a question, advised that, if necessary, it will also accommodate deflation. He explained that inflated capital costs are summarized by allocation; replacement and expansion costs are allocated according to the base, the extra capacity, etc. and then totaled. Cost allocation and funding method percentages can also be derived.

Mr. Bonow reviewed the method for allocating existing debt and the method by which the model accounts capacity factors, units of service, and unit costs of service. He advised that the model will allow for building cash either by funding depreciation or by making deposits to reserves. He reviewed the base and extra capacity allocations. [Chairperson Knecht recessed the meeting at 6:53 p.m. and reconvened at 7:20 p.m.]

Mr. Bonow explained that each of the base, extra capacity, meters and services, and billing and collection cost allocations provided a total unit cost of service. Those respective units are then incorporated into the cost distribution to customer classes portion of the model, and Mr. Bonow reviewed the specific figures and calculations for base and extra capacity. He responded to questions regarding fire protection costs and current year rates. In response to a further question, he advised that the model will allow for an annual adjustment of rates. "The hope is that we analyze rates every year and adjust as necessary." Mr. Bonow advised that the allocations result in "just under \$2 a bill." In 2003, 160,000 individual bills are projected to be sent to residential customers and 21,000 to commercial customers. Mr. Bonow then reviewed the total cost allocations by customer class and the associated percentages. He worked through an example of cost allocation for a major project, using the model, and responded to questions regarding the same.

Mr. Bonow reviewed the existing rates and charges as established by the 1993 ordinance for each of the six customer classes. He referred to the residential customer class under the Rates and Charges portion of the model, and advised there are two types of rates - meter and consumption charges. He provided an example of the importance of the method for allocating costs. He reviewed consumption charge revenue requirements for the residential customer class in 2003, and noted that connection fees are a result of growth within customer classes. Using the model, he demonstrated how to sufficiently increase rates so that the total amount of revenue from any customer class covers costs from that customer class. Extensive

discussion took place with regard to the same. Mr. Bonow reviewed connection fee calculations using the computer model, and responded to questions regarding the same.

Mr. Hoffert distributed the Summary of Initial Rate Analyses for the Water Rate Model. Mr. Bonow advised that, in all cases and consistent with past practice, replacement capital costs are funded by pay-as-you-go methods. Expansion-related capital costs are funded by either pay-as-you-go methods or debt financing. Scenarios 1 and 2 differ by whether or not the block rates remain the same. Mr. Bonow reviewed the overall summary (page 1), and responded to questions regarding actual implementation of the averages and calculation of rates. He referred to the summaries of each of the four scenarios and provided an overview of the same. He reviewed coverage information for the pay-as-you-go and debt financing scenarios, and discussion followed. Chairperson Knecht commended Mr. Bonow on his presentation of the water rate model.

F-2. DISCUSSION AND ACTION TO APPROVE ALTERNATIVE RATE SCHEDULES-BASED ON MODELS - AND FORWARD TO BOARD OF SUPERVISORS (1-3521) - Mr. Burnham acknowledged that this item will not be agendized for the November 21st Board of Supervisors meeting. He advised that the City Manager has requested the Committee or staff to conduct public hearings on the rate schedules. He suggested deferring action on the rate model to the December 12th meeting, and making a decision at that time regarding public hearings. He further suggested that January is a more appropriate time than December to hold public hearings. In response to a question, Mr. Burnham advised that staff will provide an explanation to the City Manager regarding the delay in presenting the water rate model.

In response to a question, Mr. Bonow advised that the model is "not far away" from being completed. Calculating total consumption and total costs is rather straightforward and won't take much time. He will coordinate with staff to review the various "artful portions" of the model, namely the cost allocations and funding decisions for the capital, which may take some time given the magnitude of some of the capital projects. He advised that the data presented at this meeting could be provided to staff tomorrow, and that a schedule can be coordinated from there. He anticipated being able to have the modeling information available within a week.

In response to a question, Mr. Hoffert advised that the City has a bill in Congress requesting federal funding assistance. There is no anticipation of securing the funding, however, and the only other funding source is the state revolving loan fund which rates fluctuate above some of the City's bonding rate capacities. Mr. Bonow advised that the water model can accommodate state loans distinct from a regular bond issue.

Member Polito reviewed the work schedule for the December 12th meeting. Chairperson Knecht inquired as to the need to explain to the Board of Supervisors the delay in presenting the rate schedules. Mr. Burnham reiterated his suggestion to finalize the rate schedules at the December 12th meeting, and indicated that this will fall within the Committee's work schedule. The public hearing prior to presentation of the rate models to the Board of Supervisors is proposed to take place in early January. Discussion took place regarding how to generate public interest. In response to a question, Mr. Burnham advised that the public hearing portion of the work schedule is being revised. He suggested that the Committee and staff could provide a status report to the Board of Supervisors at their December 5th meeting. Member Osborne indicated he was not comfortable with providing an interim report. In considering the Committee's work schedule, he suggested that the Committee will be prepared by the January 17th Board of Supervisors meeting to present the final report. He suggested arranging the public hearings similar to those conducted by NDOT on the freeway bypass. Mr. Bonow advised that his understanding of the City Manager's comments indicated a need to receive feedback from the public prior to presenting the rate schedules to the

Board of Supervisors, rather than pointing out a delay in the Committee's work schedule. He cautioned the Committee members that the percentage increases on an average basis, as presented in the summary, are consumption charge increases. He noted that total customer bills may not necessarily increase by the percentages indicated in the summary. Following discussion, he clarified that certain customer classes, "given the current cost allocation methodology" will most likely have "their attention piqued."

Chairperson Knecht requested staff and the City Manager to report to the Board of Supervisors the suggested schedule of a December 12th Committee meeting, an early January public hearing, and a late January or early February report to the Board of Supervisors following the public hearing. He proposed that, during the December 12th meeting, in addition to the various tier and non-tier structures, the consultant present a commodity/demand allocation. In addition, he requested a rate-making proposal that uses the average figures rather than the year-by-year figures, and that takes into account the compounding and financing problem, as well as incorporates the full range of rates - monthly customer charge, commodity charges, connection charges - and uses the monthly customer charge to mitigate the swings in the commodity-based rates. Mr. Bonow agreed to attempt to develop something along those lines. He pointed out that various funding mechanisms or accumulated reserves could be relied upon to smooth out consumption-related rate increases, but that he would be going outside of the cost allocation approach to try to offset consumption-based rates with the meter charge. He explained that costs would have to be artificially redirected to make that happen. He suggested that it may be ultimately more efficient to focus on one of the first two approaches. Chairperson Knecht requested a total bill impact analysis at various typical levels of consumption for residential and commercial customers. He suggested three typical residential bills and three typical commercial bills showing the annual percentage total bill impact. Mr. Bonow acknowledged that this could be done. Member Polito expressed an interest in the percentage that would be applied equally over time rather than adjusting the average over time. No formal action was taken.

G. ADJOURNMENT (2-0152) - Vice Chairperson Martel moved to adjourn the meeting at 9:12 p.m. Member Smeath seconded the motion. Motion carried 7-0.

The Minutes of the November 14, 2002 meeting of the Carson City Utilities Advisory Committee are so accepted this 12th day of December, 2002.

RON KNECHT, Chair