#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

### AN INVESTIGATION INTO THE DESIGN AND USE ) ADMINISTRATIVE OF SYSTEM DEVELOPMENT CHARGES ) CASE NO. 375

### <u>O R D E R</u>

This proceeding involves an investigation into the design and use of system development charges ("SDCs") for water utilities.<sup>1</sup> On September 25, 2000, this Commission issued proposed "Guidelines for the Development and Administration of SDCs" ("Guidelines") and requested comments from all interested parties. In this Order we review those comments, publish the final version of those Guidelines, and provide notice to the parties hereto of our intention to promulgate an administrative regulation governing the subject matter treated herein.

#### BACKGROUND

SDCs are one-time charges assessed on new customers to finance construction of system improvements necessary to serve those new customers. SDCs are also known as customer contributions, impact fees, and contributions in aid of construction. These charges may assist in keeping water rates low by requiring new customers connecting to a water utility's system to pay a charge to recover the cost of large and costly system expansions. SDCs may keep a utility from withdrawing funds from its depreciation accounts to pay for capacity expansions or other construction.

<sup>&</sup>lt;sup>1</sup> Where the term "utility" is used in this Order, it refers to water utilities only.

In Case No. 96-616,<sup>2</sup> Winchester Municipal Utilities proposed to assess such charges on two public utilities to which it provided wholesale water service. Although the Commission denied the proposed charge for procedural reasons, it found that the concept had merit and should be studied in an administrative proceeding. In December 1998, the Commission initiated this proceeding as the vehicle for such study and directed all public utilities in Kentucky and all municipal utilities that provide wholesale water service to a public utility to provide information on their operations and need for additional sources of funding. Over 130 responses to the Commission's request were received.<sup>3</sup> These responses indicated a need on the part of 113 respondents for additional funding and rate mechanisms to address increased development and customer growth within their systems.

On September 25, 2000, we issued an Order in which we discussed, inter alia, the reasonableness and lawfulness of SDCs generally. Based upon our review of the law, recognized treatises and the parties' comments, we concluded that

SDCs are not unreasonable <u>per</u> <u>se</u>. They provide a mechanism to properly allocate the cost of major system expansions necessary to meet the needs of new development and growth and thus ensure that existing ratepayers are not required to assume an unreasonable share of those expenses through large rate adjustments. When properly crafted, SDCs should balance the needs of both existing and new customers and permit the expansion of utility services at lower cost. When improperly crafted, however, they may act as a hidden tax upon new customers

<sup>&</sup>lt;sup>2</sup> Case No. 96-616, The Application of Winchester Municipal Utilities for Approval of the Collection of System Development Charges (Ky. P.S.C. Oct. 3, 1997).

<sup>&</sup>lt;sup>3</sup> For a summary of these responses, see Memorandum of November 15, 1999 Informal Conference.

and unfairly require new customers to bear the cost of system improvements necessary to serve all customers.

Order at 10. We further concluded that "[b]ecause of the geographic and demographic diversity of the state and its water utilities, the use of rigid and inflexible standards for SDCs is not in the public interest" and that "public and municipal utilities should be afforded sufficient latitude to craft SDCs to meet their unique needs and conditions."<sup>4</sup> To this end, we proposed guidelines for assessing the reasonableness of proposed SDCs and strongly encouraged comments on them.

In response to our Order, North Shelby Water Company ("North Shelby"), U.S. 60 Water District of Shelby and Franklin Counties ("U.S. 60 Water District"),<sup>5</sup> the Kentucky League of Cities ("KLC"), Owensboro Municipal Utilities ("OMU") and the Attorney General ("AG") submitted comments. These comments and our responses are set forth below.

### **COMMENTS**

### North Shelby and U.S. 60 Water District

North Shelby and U.S. 60 Water District urge the Commission to clearly state in the Guidelines that, for purposes of calculating any SDC, that the "cost" or "value" of facilities is based on the current fair market value of assets, or their depreciated costs, not replacement costs. Using replacement cost criteria, they argue, is inappropriate since existing utility facilities are generally not worth their replacement value.

<sup>&</sup>lt;sup>4</sup> Order of September 25, 2000 at 10-11.

<sup>&</sup>lt;sup>5</sup> North Shelby and U.S. 60 Water District filed their comments jointly.

The valuation of existing utility facilities is necessary only when the "Equity Method" is used to calculate an SDC. The use of original value or cost of reproduction<sup>6</sup> to make this determination is clearly at the discretion of the rate-making authority. <u>See</u> American Association of Water Works, <u>Principles of Water Rates</u>, <u>Fees</u>, and <u>Charges</u> 201 (2000) ("For SDC purposes, one measure of the valuation of the system assets is the original value of the total plant less accumulated depreciation. This valuation may be adjusted to recognize the cost of reproducing or replacing assets, depending on the rules and regulations of the applicable regulatory body"). Regardless of the cost methodology used, a utility's asset values "are often expressed net of depreciation to reflect the valuation of the system available to new customers." <u>Id.</u>

The Commission agrees with North Shelby's and U.S. 60 Water District's position. Absent unusual circumstances, original cost methodology should be used in most cases to value system assets. We have historically used such methodology to establish rates for utility service. Clearly any party proposing a different methodology will be required to bear the burden of demonstrating that such methodology is appropriate. Even on those occasions where the replacement cost methodology is considered, we are of the opinion that the depreciation must be deducted from the asset value to produce an accurate valuation of the system. As our proposed Guidelines already reflect this position,<sup>7</sup> we have not revised it in response to this comment.

<sup>&</sup>lt;sup>6</sup> The current production cost estimate is an indication of the cost to duplicate the system at current prices.

<sup>&</sup>lt;sup>7</sup> Order of September 25, 2000, Appendix A at 5.

<sup>-4-</sup>

North Shelby and U.S. 60 Water District state that any "method of calculating system development charges should consider that part of the rate structure to be paid by the new customer will be used to pay debt service on past improvements, improvements of the same type which the system development charge is being assessed for future improvements."<sup>8</sup> Any SDC should be reduced to compensate for this duplication of payment to ensure that new customers do not pay twice for facilities.

The Commission agrees with this position and so stated in the proposed Guidelines:

New development must be assured that it will not be paying twice for the very facilities financed first by the SDC, and later again by higher rates caused by debt financing.<sup>9</sup>

Believing that the proposed Guidelines adequately state this principle, we decline to make any revision on this point.

North Shelby and U.S. 60 Water District next urge the Commission to prohibit municipal utilities from charging to the customers of public utilities who reside outside a city's limits an SDC that differs from that assessed to customers located within the municipal limits. It notes that the lack of any voice in municipal affairs by non-municipal residents may lead to discriminatory and arbitrary rates:

> A political reality of utility rate structures is that cities attempt to use the revenue generated by utility services to subsidize their real estate and occupational tax rates. This in turn is designed to reduce the tax burden upon city residents in order to induce new areas to consent to annexation. This subsidization can be tolerated if the same rates are being charged both inside and outside the city. Since the voters presumably will vote out the elected officials if utility rates become excessive. It cannot be tolerated if the rates are

<sup>&</sup>lt;sup>8</sup> North Shelby-U.S. 60 Water District Comments at 2.

<sup>&</sup>lt;sup>9</sup> Order of September 25, 2000, Appendix A at 7.

different since customers residing outside the city do not vote for city officials and have no ability to control their utility rates.<sup>10</sup>

This proposal would require the Commission in some instances to ignore costbased pricing principles when establishing SDCs for municipal utilities. The Commission's jurisdiction extends only to the rates that a municipal utility charges to a public utility, <u>Simpson County Water District v. City of Franklin</u>, Ky., 872 S.W.2d 460 (1994), not to its retail rates. <u>McClellan v. Louisville Water Company</u>, Ky., 351 S.W.2d 197 (1961). A municipal utility, therefore, is not restricted to cost-based principles when establishing its retail rates and may elect to establish rates that do <u>not</u> reflect the cost of service. If the Commission limits a municipal utility's wholesale SDC to the municipal utility's retail SDC and the retail SDC fails to reflect the cost of service, then the Commentators' proposal requires the Commission to establish a wholesale SDC that also fails to reflect the cost of service.

Rather than base a wholesale SDC on a municipal utility's retail pricing practices, the Commission believes unreasonable and discriminatory wholesale SDCs can be avoided by requiring such charges to be cost-based. To the extent that the Guidelines require an SDC be cost-based, a municipal utility's extra-territorial customers are afforded some protection against arbitrary and unreasonable rates. While the proposed Guidelines will not prevent a municipal utility from discriminating against extra-territorial customers by assessing lower SDCs to municipal residents, it will at least ensure that extra-territorial customers are not subsidizing the delivery of water service to city residents. We have revised the Guidelines to reflect this position.

<sup>&</sup>lt;sup>10</sup> North Shelby-U.S. 60 Water District Comments at 2.

The Commission notes a practical problem with the Commentators' proposal. Municipal utilities do not directly assess SDCs to the customers of their wholesale customers. The customer of a municipal utility's wholesale customer is <u>not</u> a customer of the municipal utility. While the municipal utility may under certain conditions assess an SDC to a public utility, the municipal utility has no authority to specify how the wholesale customer passes that charge to its customers. Any SDC that a municipal utility assesses to a public utility must be based upon the costs related to the increased demand of the public utility that are not reflected in the wholesale rate and not to the increased demand associated with the addition of one public utility customer.

North Shelby and U.S. 60 Water District next state that, when determining the value of the system assets, the cost of all contributed facilities, regardless of the source of the contribution, should not be included in the value of the system assets.<sup>11</sup> The Commission agrees with this statement and notes that this position is reflected in the Guidelines.<sup>12</sup>

Finally, North Shelby and U.S. 60 Water District urge the Commission to be flexible in its approach to SDCs. They note that while such organizations as the American Water Works Association recognize the Equity Method and the Incremental Method, other methods for developing SDCs exist. They caution the Commission

<sup>&</sup>lt;sup>11</sup> <u>Id.</u>

<sup>&</sup>lt;sup>12</sup> Order of September 25, 2000, Appendix A at 5. When referring to the Equity Method for calculating SDCs, we noted the equity value of the system will be determined using current replacement costs or historical costs and deducting any amounts not locally paid.

against limiting the opportunities for other SDC methodologies.<sup>13</sup> We agree. As we noted in the Guidelines, "[w]ater utilities should be permitted to use other methodologies to develop their SDCs."<sup>14</sup>

### <u>OMU</u>

OMU requests clarification of that portion of the proposed Guidelines that limited the use of SDCs "to fund growth related capital projects such as, but not limited to, water treatment plants, storage facilities, pumps, distribution mains, transmission, storage and treatment."<sup>15</sup> It notes that in many instances a utility may need to "incur costs that will be recovered by SDCs prior to collection of the SDCs" and that in the interim such utility may use existing reserves or borrow to fund the actual development.<sup>16</sup> OMU argues that repayment of such advances should be considered a permissible use of SDC proceeds. The Commission agrees and has revised the Guidelines accordingly.

### <u>KLC</u>

KLC requests that we clarify our position that "[a]n SDC must be based only on a water utility's expected cost of adding capacity."<sup>17</sup> It notes that such a limitation is appropriate only when the Incremental Cost Method is used. The Commission agrees

<sup>&</sup>lt;sup>13</sup> North Shelby-U.S. 60 Water District Comments at 2.

<sup>&</sup>lt;sup>14</sup> Order of September 25, 2000, Appendix A at 6.

<sup>&</sup>lt;sup>15</sup> <u>Id.</u> at 8.

<sup>&</sup>lt;sup>16</sup> Letter of Robert M. Carper, Manager, Owensboro Municipal Utilities, to Public Service Commission (Oct. 25, 2000).

<sup>&</sup>lt;sup>17</sup> Order of September 25, 2000, Appendix A at 2.

with KLC's comment. Since our statement is set forth in the section of the Guidelines that deals exclusively with SDCs based upon the Incremental Cost Methodology, however, the Commission finds that no clarification is necessary.

KLC next urges the Commission not to require any plans or studies for the implementation of an SDC that is based upon the Incremental Cost Method. "A utility should be allowed to rely on industry standard methods or formulas," KLC argues, "without the need for creating potentially expensive Capital Improvement Plans or other planning studies."<sup>18</sup>

The Commission disagrees with this position. A leading authority on SDCs notes that capital improvements plans are a necessary component of the Incremental Cost Methodology. <u>See</u> Arthur C. Nelson, <u>System Development Charges for Water</u>, <u>Wastewater</u>, and Stormwater Facilities 39 (1995) ("SDCs should be calculated based on a capital improvements program and consideration of sources of revenue available to finance the CIP"). <u>See also</u> American Association of Water Works, <u>Principles of Water Rates, Fees, and Charges</u> 202 - 205 (2000).

While utilities should be given "sufficient latitude to craft SDCs to meet their unique needs and conditions,"<sup>19</sup> they must base their SDCs on a specific plan of improvements with a proposed budget. Hypothetical projections and non-specific "industry standards" will not enhance utility flexibility but instead will undermine public confidence in SDCs and lead to unnecessary litigation over the purpose of and need for

<sup>&</sup>lt;sup>18</sup> KLC Comments at 2 - 3.

<sup>&</sup>lt;sup>19</sup> Order of September 25, 2000 at 11.

the SDC. We therefore decline to revise the proposed Guidelines to include KLC's proposal.

KLC also takes exception to the Guidelines' apparent limitation on the use of the equity method. The initial version of the Guidelines states that the "equity method is useful only when the system has been substantially built out, no major capacity or territorial expansions are envisioned, and depreciation is financed substantially from rates."<sup>20</sup> KLC asserts that this position "is more rigid than necessary and should be modified or eliminated from the Guidelines."<sup>21</sup> It recommends greater flexibility on the Commission's part.

Having reviewed the generally accepted treatises on this issue,<sup>22</sup> the Commission has accepted KLC's recommendation and modified the Guidelines to allow for greater flexibility in the use of the equity method. While the equity method is most appropriate when the system has been substantially built out, no major capacity or territorial expansions are envisioned, and depreciation is financed substantially from rates, we acknowledge that the methodology may result in a fair and reasonable SDC in other instances. The Commission, however, cautions KLC and its members that in those instances the party proposing the SDC must demonstrate the appropriateness of basing its proposed charge upon the equity method.

<sup>&</sup>lt;sup>20</sup> Order of September 25, 2000, Appendix A at 4.

<sup>&</sup>lt;sup>21</sup> KLC Comments at 3.

<sup>&</sup>lt;sup>22</sup> <u>See generally Principles of Water Rates, Fees, and Charges</u> at 201.

<u>AG</u><sup>23</sup>

The AG questions the lawfulness of the use of the equity method. He contends that an SDC based upon this methodology imposes a charge upon a prospective customer solely because that customer is a "new entrant to an existing system" and as such establishes "an unreasonable distinction between the customers for a like and contemporaneous service under the same or substantially the same conditions."<sup>24</sup> The AG contends that an SDC based upon the equity method is therefore contrary to KRS 278.170(1)<sup>25</sup> and that any use of the methodology requires specific legislative action.

The Commission finds no merit to the AG's contention. The AG has failed to provide any legal authority for the proposition that the assessment of SDCs based upon the equity method results in unreasonable discrimination <u>per se</u>. To the contrary, courts and the regulatory agencies generally accept the methodology. While use of the equity method may <u>in some instances</u> result in an unreasonable rate, it is the applicant's circumstances and the specific details of its proposal, not the methodology, that

<sup>&</sup>lt;sup>23</sup> In his response, the AG addresses a wide range of issues. We have limited our review to his comments on the proposed Guidelines. <u>See</u> AG's Comments at 11-12.

<sup>&</sup>lt;sup>24</sup> <u>Id.</u> at 6.

<sup>25</sup> 

No utility shall, as to rates or service, give any unreasonable preference or advantage to any person or subject any person to any unreasonable prejudice or disadvantage, or establish or maintain any unreasonable difference between localities or between classes of service for doing a like and contemporaneous service under the same or substantially the same conditions.

produces the unreasonable rate. The appropriateness of using the equity method, therefore, must be addressed in each proceeding in which an applicant proposes an SDC based upon that method. Finally, given that the General Assembly has vested the Commission with broad authority to set rates, the absence of any express statutory references to SDCs does not prevent the Commission from authorizing such charges when they result in fair, just, and reasonable rates.

In his comments on the Guidelines, the AG notes that the "proposed guidelines for the development and implementation of SDCs are not a substitute for the administrative regulation process."<sup>26</sup> He argues that a necessary precondition to a valid exercise of "authority to impose or deploy a system development charge" is compliance with KRS Chapter 13A.<sup>27</sup>

The Commission acknowledges that KRS Chapter 13A imposes certain requirements upon our efforts to establish guidelines on SDCs. Concurrent with the issuance of this Order, we have issued a notice of intent to promulgate administrative regulations to govern the establishment and assessment of SDCs. We intend that the policies set forth in the Guidelines will constitute a significant portion of those regulations. Until such regulations are promulgated and become effective, however, the Commission will consider applications for SDCs on a case-by-case basis and will use the Guidelines, as well as all other relevant materials, in reviewing those applications.

<sup>&</sup>lt;sup>26</sup> AG's Comments at 12.

#### SUMMARY

Having considered the comments submitted in response to the Commission's Order of September 25, 2000 and all other evidence of record, the Commission HEREBY ORDERS that:

1. The Guidelines appended hereto will form the basis of a new administrative regulation the Commission will promulgate pursuant to KRS Chapter 13A.

2. This proceeding is closed and shall be removed from the Commission's docket.

Done at Frankfort, Kentucky, this 15<sup>th</sup> day of May, 2001.

By the Commission

ATTEST:

Executive Director

### APPENDIX A AN APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN ADMINISTRATIVE CASE NO. 375 DATED MAY 15, 2001

## GUIDELINES ON THE DEVELOPMENT AND ADMINISTRATION OF SYSTEM DEVELOPMENT CHARGES

# • SYSTEM DEVELOPMENT CHARGES MUST MEET THE RATIONAL NEXUS TEST.

The implementation of an SDC by a utility is not a substitute for a general rate increase for all customers. An SDC can only be used to offset an increase in costs to fund system expansion to accommodate new growth and demand. While an SDC may not be suitable for every utility, it is another financial option that should be available for a utility's use to remain financially viable while charging rates that are fair, just, and reasonable.

In considering whether to assess an SDC, it must be determined if the utility would incur this expense if no growth occurs. If the answer is no, then the expense can probably be included in an SDC. If the answer is yes, then the entire customer base of the utility should be responsible for paying the expense. An SDC should only recover those portions of the cost of system improvements that are reasonably related to the new demand. It should not be collected in areas where infrastructure is in place to provide service and no improvements are required. Applicants seeking the imposition of an SDC must clearly show that the charge is directed to increase costs due to growth.

### • A UTILITY PROPOSING A SYSTEM DEVELOPMENT CHARGE USING THE INCREMENTAL COST METHOD SHOULD PRESENT A DETAILED CAPITAL IMPROVEMENT PLAN THAT CLEARLY DEMONSTRATES ITS EXPECTED COST OF ADDING CAPACITY.

An SDC must be based only on a water utility's expected cost of adding capacity. This cost is determined through a capital improvement plan. The plan should cover a minimum of five years for slow to moderate growth areas, and an extended period for those areas with rapid growth. It should project the amount of and characteristic of future growth along with the needs that growth will place on the system. The plan should include the amount of growth for different types of customers, such as residential, commercial, and industrial. It should establish the level of service that will be provided, then determine the cost of the upgrades and new facilities needed to provide that level of service. Finally, the plan should also determine when and where the upgrades and new facilities would be needed within the utility's system.

The capital improvement plan should also include a deficiency analysis of the current utility system. An SDC should not be assessed to correct existing deficiencies. Items to be considered include the level of service of the existing facilities and improvements needed to provide adequate service to existing customers. If improvements are needed, the portion of improvements that will serve existing customers must be determined along with a calculation of how much of the remainder of costs can be funded through an SDC.

• A SYSTEM DEVELOPMENT CHARGE SHOULD NOT EXCEED THE NEW DEVELOPMENT'S PROPORTIONAL SHARE OF THE COST OF FACILITIES NEEDED TO SERVE THAT DEVELOPMENT, AFTER CREDITING IT FOR OTHER CONTRIBUTIONS THAT IT HAS ALREADY MADE OR WILL MAKE TOWARD THAT COST.

An SDC cannot require new customers to bear more than their equitable share of the capital costs of system facilities in just proportion to the benefits conferred by those facilities. To determine the proportionate share of costs to be borne through the SDC, the following factors should be used:

- <u>The cost of existing facilities.</u> A water utility must adequately demonstrate the value of its current system, including the value of present excess capacity.
- <u>The means by which existing facilities have been financed.</u> New development should not pay for facilities that were not funded by existing customers. For example, new growth should not be required to pay for facilities financed through federal or state or county grants. Any applicant for an SDC must demonstrate how its existing facilities were financed.
- <u>The extent to which new development has already contributed to the cost of providing existing excess capacity.</u>
- <u>The extent to which existing development will, in the future, contribute to the cost of providing existing facilities used in the future.</u>
- <u>The extent to which new development should receive credit for providing at its</u> cost facilities the system has provided in the past without charge to other <u>development in the service area.</u> For example, where customers are required to dedicate land for water line rights-of-way, construct an elevated tank, pump, add treatment capacity, or extension beyond their development site, they should be credited for the value of these actions.
- <u>Extraordinary costs in serving new development.</u> For example, because of terrain, service to some developments may be more expensive and require higher fee assessments.
- <u>The present value of contributions already made or to be made by new</u> <u>development must be credited against SDCs.</u>

# • A SYSTEM DEVELOPMENT CHARGE SHOULD BE BASED UPON A METHOD THAT PROVIDES EQUITY TO EXISTING AND FUTURE CUSTOMERS.

The American Water Works Association (AWWA) recognizes two SDC methodologies as providing equitable treatment to existing and future customers:

Incremental (or Marginal) Cost Approach. The incremental cost method is based on the concept of new development paying for the incremental cost of system capacity needed to serve new demand. Sometimes called the marginal cost approach, this method proposes to mitigate the impact of new growth on customer user rates. The goal is to charge a fee for new customers sufficient to allow customer user rates to be revenue neutral with respect to growth of the system. However, in systems undergoing rapid and expensive growth, this may be difficult to achieve.

This method is used most commonly where SDCs are used to finance capital expansion as well as to recoup investments creating excess capacity for new demand. It is based on the full replacement of the system with no adjustment for depreciation, or the cost of expanding the system to serve new demand, which is consistent with the theory of this method. This method is most appropriate for situations in which capacity and territory expansions are common and where debt is the primary means of financing expansion and rehabilitation. Adjustments for non-local contributions to the system are made only if such revenues are expected to help finance new facilities or future rehabilitation. This method is most appropriate when a significant portion of the capacity required to serve new customers must be provided by the construction of new facilities.

The following table illustrates the determination of a system development charge using the incremental cost method.

Plant	5-Year Capital Improvement Plan (\$1,000)	Maximum-Day Design Capacity (Mgd)	Unit Cost (\$/mgd)	
Source of Supply	7,500	25	300,000	
Treatment and Pumping	8,000	15	533,000	
Transmission System	3,000	10	300,000	
Distribution Mains	2,000	N/A	N/A	
Services, Meters, and Hydrants	1,800	N/A	N/A	
General Structures	500	50	10,000	
Subtotal	22,800		1,143,000	
Less Net Cost of Distribution Mains	(2,000)	N/A	N/A	
Services, Meters, and Hydrants	(1,800)	N/A	N/A	
Net Investment in Plant	19,000		1,143,000	
Maximum-day demand for average equivalent 5/8 inch connection = 1,100 gpd. Average investment per equivalent 5/8 inch connection (\$1,143,000 x 1,100 /1,000,000) =				

Source: AWWA Manual M26, Chapter 3.

<u>The Equity Buy-in (or Vintage Capital) Method.</u> The equity buy-in method is based on the principle of achieving capital equity between new and existing customers. Sometimes referred to as the vintage capital method, this approach attempts to assess new customers a fee to approximate the equity or debt-free investment position of current customers. The financial goal is to achieve a level of equity from new customers by collecting an SDC representative of the average equity attributable to existing customers.

Under this method, the new user becomes an investor in the system and the investment fee is the proportionate share of equity in the system. The equity value of the system is essentially the current replacement cost less any amounts not locally paid, such as federal grants, and less accrued depreciation. Since it is an obligation of all users, accrued depreciation must be paid from rates or debt. In this approach, however, depreciation recovery in the form of rehabilitation is usually financed from capital reserve accounts financed by rates. Use of the equity method is most appropriate when the system has been substantially built out, no major capacity or territorial expansions are envisioned, and depreciation is financed substantially from rates. The approach should also consider the financing costs incurred by existing rate payers to provide excess capacity available for new development.

Plant	Original Cost (\$1,000)	Accumulated Depreciation (\$1,000)	Net Cost (\$1,000)	
Source of Supply	4,000	(1,000)	3,000	
Treatment and Pumping	7,200	(1,200)	6,000	
Transmission and Distribution	9,300	(1,300)	8,000	
Distribution Mains	4,300	(500)	3,800	
Services, Meters, and Hydrants	5,600	(800)	4,800	
General Structures	1,600	(200)	1,400	
Subtotal	32,000	(5,000)	27,000	
Less Net Cost of Distribution Mains			(3,800)	
Services, Meters, and Hydrants			(4,800)	
Net Investment in Plant			18,400	
Less Outstanding Bonds Allocable to SDC Facilities			(4,000)	
Total Equity Investment			14,400	
Number of equivalent 5/8 inch meter the system is capable of serving = 20,000. Average net equity investment per equivalent 5/8 inch meter (\$14,400,000/20,000) = \$720. SDC = <b>\$720</b>				

The following chart illustrates the determination of a system development charge using the equity method.

Source: AWWA Manual M26, Chapter 3.

<u>Use of other methodologies.</u> Water utilities should be permitted to use other methodologies to develop their SDCs. However, where such methodologies are used, or where combinations of the two methodologies set forth above are used, the utility must clearly demonstrate the need for using the different methodology and that the methodology's use will achieve a more reasonable result.

## • A SYSTEM DEVELOPMENT CHARGE SHOULD NOT BE ARBITRARY OR DISCRIMINATORY IN ITS APPLICATION TO INDIVIDUALS OR CUSTOMER CLASSES AND SHOULD BE BASED ON METER EQUIVALENTS OR RESIDENTIAL EQUIVALENTS.

To ensure that larger users pay a fair share of the extra capacity needed to serve them, all SDCs should be based upon a meter or residential equivalent. All new users should be assessed the SDC including those previously served by wells. No one should be excluded from paying the charge. A utility may make different payment arrangements (e.g., lump sum payment, an annual payment, or a monthly surcharge) available, but must demonstrate that these options operate in a nondiscriminatory manner.

## • THE UTILITY SEEKING TO IMPOSE A SYSTEM DEVELOPMENT CHARGE SHOULD CLEARLY STATE WHEN THE PROPOSED CHARGE WILL BE ASSESSED AND EXPLAIN WHY THE CHOSEN TIME FOR ASSESSMENT IS REASONABLE.

The most popular method of collection appears to be at the time the building permit is issued for the new development. This point in time is closer to the time of service, and a better estimate of the new development's impact can be made. The disadvantages of this approach are that the exact impact is not known, the utility must invest in facilities on a speculative basis, and the funds may not be available to the utility in time to construct the necessary facilities.

Some utilities assess and collect SDCs at the time of platting a new development. This approach allows the utility to collect the charges earlier in the project. The disadvantage of this approach is that, often, it is difficult to determine the number of service units the development will demand. Because of the number of estimates that must be made if the SDC is paid early in the development process, the computation is less accurate and more difficult to defend. In addition, the utility is required to make a significant investment in facilities on a somewhat speculative basis.

Other utilities assess and collect SDCs at the time service is requested. Usually, this is when the certificate of occupancy is issued or when an application is made for a meter or for service. Utilities receive funds later with this approach, but the service units are easier to determine and explain to the customer. Most builders and developers favor payment at the time of service because delayed payment lessens their carrying costs during the project. This approach may, in fact, result in homeowners directly paying the SDC.

The timing of collection involves two conflicting issues. First, an SDC must be collected early enough to make funds available for system improvements. Second, an accurate assessment of the SDC can be made only later in the development process when the actual meter size is known.

Timing differences exist between user rates and SDCs. Many major projects related to system expansion require substantial funds for design and construction before sufficient funds are available from SDC receipts. Therefore, usually some funding from user rates is needed to pay for the facilities, generally in the form of paying for debt service on bonds to finance facilities. This may result in double cost recovery if user rate funding of debt service on SDC-related facilities is not taken into account in establishing the level of an SDC. For example, debt service payments included in the user rate analysis are partially offset by the projected receipts from the SDC.

Utilities may request to recover advances or borrowings that are recoverable through an SDC but were incurred prior to the collection of the SDC.

Utilities should explain in their applications how they have considered these problems in determining the appropriate time for assessment and what protections have been placed within the proposed rate and within their planning processes to prevent these problems.

# • THE SYSTEM DEVELOPMENT CHARGE SHOULD PROVIDE FOR CREDITS, REIMBURSEMENTS AND REFUNDS.

Utilities frequently require developers to construct facilities that provide service beyond the requirements of the new development. When this occurs, developers should be reimbursed for the facilities constructed in excess of their own requirements. New development must be assured that it will not be paying twice for the very facilities financed first by the SDC, and later again by higher rates caused by debt financing. Developers should be credited for contributions that have been made toward the new facilities such as the construction of lines or additional capacity. This may be in the form of a reduction in the SDC for the new development. Because the purpose of the SDC is to pay for system expansion, the utility must also consider contributions to system expansion in the form of physical improvements and additions. Payments of SDCs, together with other system contributions for the same facilities, could result in a double contribution to the system. Many utilities remedy this potential double contribution by implementing credit or development agreements.

Credits are reductions or offsets for all or part of SDCs. The credits may be allowed for any contributed infrastructure or may be limited to specific types of contributions. Credits should not exceed the total amount of SDCs due. Some examples include credits for:

• System improvements specified in the utility's capital improvements program.

- Like improvements (i.e., water improvements are considered for credits only against water SDCs).
- The portion or percentage of system improvements that the SDC funds.
- System improvements that are jointly used.
- Over-collection through over-estimation of costs.
- Previous contributions of facilities or funds.
- The portions of the costs of existing facilities funded by federal or state grants.

The utility should refund SDCs when (1) service is not provided in a reasonable period of time after the charges have been paid and/or (2) when collected charges are not spent on system expansion within a reasonable time period. A development agreement is another method for contribution of utility infrastructure. The developer contractually agrees to make contributions in place of all or a part of the SDCs. It should be noted that policy objectives regarding credits would affect the range of SDC values.

Reimbursement contracts are often used by utilities for infrastructure contributions. These contracts typically provide for reimbursement of some contributed facility costs from SDCs collected from future customers who will use the contributed facility. Limitations on the amount of and the time period for reimbursement are included in the contract.

If a developer elects to construct a facility needed to provide it service, the SDC may be waived if the amount paid for the construction is not less than the SDC. If the amount is greater, then a credit can be given for more than one dwelling.

# • A SYSTEM DEVELOPMENT CHARGE MAY BE ASSESSED ON A GEOGRAPHICAL BASIS WHERE THE APPLICANT HAS CLEARLY DEMONSTRATED A COMPELLING BASIS FOR SUCH ASSESSMENT.

Generally, an SDC should be applied systemwide, not on a geographical basis. Because (1) many siting and design decisions are discretionary, (2) systems are often designed with redundant facilities for system reliability, and (3) some facilities have no geographic-specific service area, most utilities operate as a complete, integrated system. Any member who receives service from the system may be considered to be receiving sufficient benefit from the payment of an SDC. Because of the topography of some areas or other factors affecting the provision of service, the construction of new facilities may benefit customers within a limited geographical area. In such instances, the use of an SDC to fund the cost of these facilities may be appropriate. The assessment of a geographically specific SDC, however, should not be based on discretionary engineering decisions that make service to an area more costly but only upon significant differences in the cost of providing service. A utility seeking such charge must clearly demonstrate these differences and their severity.

## • ALL SYSTEM DEVELOPMENT CHARGES SHOULD CONTAIN A DETAILED SET OF PROCEDURES FOR CALCULATION, OPERATION AND ADMINISTRATION.

Any assessment of an SDC must be accompanied by the development of internal procedures for recurring questions and problems. Without such procedures to ensure consistent treatment for all applicants, the utility cannot ensure that the SDC assessments are being applied in a reasonable and nondiscriminatory manner. These procedures should be developed at the time an application for approval of an SDC is submitted to the Commission. Should the Commission approve the assessment of the SDC, these procedures should become part of the utility's filed rate schedules.

# • A SYSTEM DEVELOPMENT CHARGE SHOULD BE PLACED IN A SEPARATE ACCOUNT AND RECEIVE PROPER ACCOUNTING TREATMENT.

Collections from an SDC must receive separate accounting treatment. All SDCs collected should be placed in an interest-bearing account. Interest income earned on SDC accounts must remain in said accounts. This will help to offset inflationary cost increases for system expansion projects. Records should be maintained in a manner that will show that money received is used solely for the projects for which the fee was collected. Funds from the account are to be used exclusively to fund growth-related capital projects such as, but not limited to, water treatment plants, storage facilities, pumps, distribution mains, transmission, storage and treatment. Reimbursement or repayment of advancements or withdrawals from other funding accounts to pay for such growth-related capital projects is an appropriate use of SDC funds.

# • MUNICIPAL UTILITIES.

A municipal water utility may assess a public water utility an SDC upon Commission approval. When determining if a municipal utility's proposed SDC is reasonable, the Commission will examine, inter alia, the municipal utility's existing contract with the public utility, the past relationship between the parties, and future demand that the public utility is projected to place upon the municipal utility. In those instances where the evidence shows that the parties have agreed that a municipal utility has committed or reserved a portion of its capacity for a public utility customer and that customer has not exceeded that capacity level, an SDC should not be authorized absent compelling circumstances. Any approved SDC may only be assessed to the wholesale customer and may not be directly assessed by the municipal water utility to the public utility's customers. The SDC must be cost-based.

# **References:**

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