

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

ORDER

This proceeding involves an investigation into the design and use of system development charges (“SDCs”) for water utilities.<sup>1</sup> In this Order the Commission finds that: (1) A public utility may be authorized to assess an SDC when such charge has been shown to be fair, just and reasonable; (2) A municipal utility may be authorized to assess an SDC against a public utility under certain circumstances;<sup>2</sup> and (3) SDCs are not unreasonable per se. Finally, we publish for comment proposed guidelines for the development and administration of SDCs.

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

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<sup>1</sup> Where the term “utility” is used in this Order, it refers to water utilities only.

<sup>2</sup> The terms “public utility” and “municipal utility” are used to distinguish between entities that meet the definition of utility as defined in KRS 278.010(3) and cities that own and operate facilities that provide utility service but are generally exempt from Commission regulation.

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.

In Case No. 96-616,<sup>3</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 to address the following issues:

- Does the Commission possess the legal authority to establish SDCs?
- Does a need for such charges exist among Kentucky's public water utilities?
- Are system development charges fair and reasonable?
- How should system development charges be designed?
- How should the Commission, after approving such charges, monitor and review their assessment and administration?
- How should system development charges that are assessed against public utilities by municipal utilities be administered?

The Commission 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>4</sup> These responses indicated a need on the part

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<sup>3</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>4</sup> For a summary of these responses, see Memorandum of the November 15, 1999 Informal Conference.

of 113 respondents for additional funding and rate mechanisms to address increased development and customer growth within their systems.

In November 1999, the Commission convened an informal conference in this case to discuss how its investigation should proceed. The conference participants recommended that the Commission first address the question of its authority to approve SDCs and to authorize the assessment of SDCs upon public utilities receiving wholesale water service from municipal utilities. They further recommended that the Commission convene a workshop to better educate the utilities and affected customers on the issues surrounding SDCs. They also suggested that, after such workshop, parties submit their recommendations for proposed guidelines for the development and administration of SDCs. From these comments, the participants contended, the Commission could then promulgate guiding principles for the assessment and administration of SDCs.

In January 2000, the Commission permitted all parties to brief the issues identified at the informal conference. Thirteen parties submitted briefs on these issues. They include: the Attorney General (“AG”), Berea College Water Utility (“Berea Water”), Bowling Green Municipal Utilities (“BGMU”), Kentucky-American Water Company (“KAWC”), Louisville Water Company (“LWC”), Northern Kentucky Water District (“NKWD”), North Shelby Water Company, U.S. 60 Water District, the Kentucky League of Cities (“KLC”) and the Kentucky Rural Water Association (“KRWA”). KLC and KRWA presented briefs on behalf of their individual members.

## COMMISSION'S AUTHORITY TO ESTABLISH AN SDC

Virtually every party argued that KRS 278.030 permits a public utility to establish SDCs. KRS 278.030, they argued, authorizes a utility to demand and collect reasonable rates for services rendered. It further permits a utility to use suitable reasonable classifications in establishing rates. Such classifications may take into account any "reasonable considerations." The parties argue that this statute grants broad discretion to utilities in developing rates. Noting that the Kentucky courts had affirmed the Commission's approval of an electric utility rate that varied with the market price of aluminum,<sup>5</sup> KRWA concluded SDCs were certainly permissible.

The parties generally agreed that SDCs must be fair, just, and reasonable. The parties further agreed that KRS 278.170 prohibits SDCs from being unreasonably discriminatory. NKWD noted that the SDC is reasonable only if it is cost based and is imposed on the class of customers responsible for the particular expense (i.e., the extraordinary capital costs incurred to provide services). Berea Water and KAWC noted that the SDC could not unduly interfere with a property owner's rights. Excessive SDCs that unduly restrict a property owner's use of his property may violate the Federal Constitution's prohibition against governmental taking of property without compensation.

The Commission agrees that a utility has broad discretion in designing its rates and that the Commission has broad authority in establishing and regulating those rates. KRS Chapter 278 permits the Commission to establish SDCs providing those SDCs are reasonable. Generally, SDCs must reflect accepted cost-of-service principles. They

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<sup>5</sup> National-Southwire Aluminum Co. v. Big Rivers Elec. Corp., Ky. App., 785 S.W.2d 503 (1990).

should reflect the cost of increasing water service to new customers or the quantity of service available to an existing customer. They must be tailored to impose these costs only on the party responsible for causing the costs.

THE COMMISSION'S AUTHORITY TO PERMIT A MUNICIPAL  
UTILITY TO ASSESS AN SDC ON A PUBLIC UTILITY

KLC and several water utilities argued that, as a result of Simpson County Water District v. City of Franklin, Ky., 872 S.W.2d 460 (1994), the Commission has the authority to establish an SDC regardless of the present contract between a municipal utility and a public utility. Simpson County Water District held, they argue, that a municipal utility loses its exemption from Commission jurisdiction when it contracts with a public utility for the provision of water service. To the extent of its dealings with public utilities, it is thus subject to the Commission's rate-making authority in the same manner as any public utility. The Commission has the power to modify existing contracts to ensure that fair, just and reasonable rates are assessed. If a municipal utility can demonstrate that the assessment of an SDC to its wholesale customer is reasonable, KLC argues, the Commission may modify the existing contract to permit the assessment of an SDC.

Opposing this position, KRWA argues that the Commission cannot authorize a municipal utility to perform an act that a municipal utility could not otherwise perform. A municipal utility's authority to assess an SDC, KRWA argues, is based upon its police powers. These powers are limited by the city's boundaries and cannot be exercised outside those boundaries. Hence, a municipal utility cannot assess an SDC for growth that occurs outside its municipal utility's service area.

This argument ignores the effects of Simpson County Water District. Having lost their exemption from Commission regulation as a result of Simpson County Water District, municipal utilities have the same powers as public utilities. As noted above, KRS 278.030 confers upon public utilities the authority to assess SDCs. Moreover, when setting utility rates, the Commission may disregard the terms of utility service contracts. See Board of Education of Jefferson County v. Dohrman, Ky. App., 620 S.W.2d 328 (1981) (“The Commission had the right and duty to regulate rates and services, no matter what a contract provided”). Whether a municipal utility has the authority to assess an SDC as a municipal utility is therefore irrelevant.

KRWA, anticipating this argument, argues for a narrow interpretation of Simpson County Water District. It asserts that Simpson County Water District does not render a municipal utility a public utility when it provides utility service to the public utility. Simpson County Water District, KRWA argues, merely gives the Commission the authority to act as an arbitrator to resolve contractual disputes over rates and service. If Simpson County Water District confers utility status on municipal utilities, KRWA argues, then the Commission has greater jurisdiction over municipal utilities than it is currently exercising. For example, if municipal utilities are public utilities, then the Commission should be requiring them to apply for Certificates of Public Convenience and Necessity when they construct new facilities and should be assessing them for the maintenance of the Commission. The Commission, KRWA contends, is currently doing neither. Finally, KRWA argues that the Commission’s power to modify rates does not include the power to add new rates.

Several water utilities, most notably NKWD, take the position that a municipal utility's power to assess an SDC stems from the wholesale contract. Even where the contract is silent on SDCs, the contract may permit the assessment of such charges. For example, if the existing rate provisions of a contract do not permit the recovery of sufficient revenues to cover the cost of service, the Commission could permit the assessment of an SDC to produce sufficient revenues to recover the cost of service. If a wholesale contract permits a municipal utility to adjust its rates periodically, an SDC could be considered part of that periodic rate adjustment. If a wholesale customer is taking the maximum volume allowed under the contract and wishes to take additional volumes, then the municipal utility could assess an SDC to recover the cost associated with the additional volumes.

Based upon our review of existing legal precedent, the Commission is of the opinion that Simpson County Water District supports the proposition that a municipal utility may assess an SDC if such fee is authorized by the Commission. If a municipal utility's sales to public utilities are subject to Commission regulation in the same manner as those of a public utility, then it possesses the same rights as a public utility. The Commission may therefore permit a municipal utility's assessment of an SDC even where its existing contract with a public utility is silent upon the issue.

The municipal utility, however, must demonstrate that the proposed SDC is reasonable under the circumstances. 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, an SDC will not be authorized absent compelling circumstances.

### REASONABLENESS OF SDCs IN GENERAL

Having determined that we have the legal authority to establish SDCs for public and municipal utilities, the Commission next addresses whether SDCs are reasonable as a general matter of law.

#### Arguments Against SDCs

Opponents of SDCs argue that such charges are unreasonable and unneeded. Over the long term, they argue, growth pays its own way. While new growth may not immediately generate the revenues needed to meet the initial cost of expanding facilities or constructing new facilities, customer growth over time will eventually raise a utility's revenue base so that revenues from customer growth are at least covering the cost of serving that new growth. As more customers connect to the system, the customer base rises and more revenues are collected. This trend enables the utility to spread the cost of service over a larger customer base and keeps every customer's rates lower.

Opponents contend that in many cases SDCs represent an attempt to extract revenue from new customers or developers to cover the cost of system improvements that benefit existing and new customers alike and whose need is unrelated to new growth. In many instances, they are used merely to camouflage utility management's failure to charge adequate rates to maintain and upgrade a utility's infrastructure.

Existing customers desire the benefits of improved infrastructure, but do not want to pay the true costs for those benefits. Instead of making the responsible but unpopular decision to increase rates to cover these costs, utility management is merely shifting those costs to newcomers.

Opponents of SDCs also contend that SDCs are complicated, confusing, difficult to administer, and often set unfairly high. They tend to stifle economic growth by reducing an area's attractiveness to prospective industry. Further, they increase housing prices, imposing an "entry fee" on new homebuyers that earlier generations never had to pay.

#### Arguments In Support of SDCs

Proponents of SDCs contend that such charges are reasonable and necessary. Growth, they argue, does not pay its own way. While growth increases a utility's revenues, it also increases demand for utility services and requires the construction of additional facilities to meet that demand. Studies have shown that utility growth has never been adequate to fund the total cost of servicing that growth. The cost of expansion and construction is usually met in the following ways: the assessment of an SDC on new customers; an increase in general rates for all customers; or the diversion of resources from maintenance or depreciation funds with an eventual decline in the level of service.

Regardless of the method used to finance them, SDC proponents assert, the costs associated with new development are unavoidable and must be paid. SDCs reduce these costs by reducing the amount of debt that must be secured to finance new construction. Therefore, debt service costs and the rates necessary to finance those

costs are lowered. While general rates may increase, they increase more slowly and consumer rate shock is avoided.

SDC proponents further assert that SDCs are more equitable because they place the cost of growth upon the persons responsible for such growth. Current customers should not be forced to pay for expenses caused by new development. Moreover, SDCs may facilitate new development to occur in areas where it would not otherwise be feasible for a utility to serve by providing a means of funding the expansion of utility service into those areas.

### CONCLUSIONS

The Commission is of the opinion that SDCs are not unreasonable per se. 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 and unfairly require new customers to bear the cost of system improvements necessary to serve all customers.

SDC proposals must be closely reviewed to ensure that costs are reasonably and fairly allocated. Because 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. The Commission is of the opinion that public and municipal utilities

should be afforded sufficient latitude to craft SDCs to meet their unique needs and conditions. These needs and conditions must be considered when reviewing the SDC. To assess the reasonableness of an SDC, the Commission proposes the guidelines that are appended to this Order. These guidelines attempt to address the major features of any SDC. Recognizing that the development and calculation of an SDC depends upon the circumstances of the individual water utility, these guidelines serve only as a starting point for reviewing the water utility's proposal. The Commission strongly encourages all parties to submit comments on these guidelines.

IT IS THEREFORE ORDERED that all parties of record may, within 30 days of the date of this Order, submit written comments upon the proposed guidelines appended to this Order.

Done at Frankfort, Kentucky, this 25<sup>th</sup> day of September, 2000.

By the Commission

ATTEST:

  
Executive Director

## APPENDIX A

### APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION IN ADMINISTRATIVE CASE NO. 375 DATED SEPTEMBER 25, 2000

- **SYSTEM DEVELOPMENT CHARGES MUST MEET THE RATIONAL NEXUS TEST.**

The implementation of an SDC by a water 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 water 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 water utility should be responsible for paying the expense. An SDC should recover only 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 increased costs due to growth.

- **A WATER 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 5 years for slow to moderate growth areas, and an extended period for those areas with rapid growth. It should project the amount of and characteristics 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:

- The cost of existing facilities. A water utility must adequately demonstrate the value of its current system, including the value of present excess capacity.
- The means by which existing facilities have been financed. 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, state or county grants. Any applicant for an SDC must demonstrate how its existing facilities were financed.
- The extent to which new development has already contributed to the cost of providing existing excess capacity.
- The extent to which existing development will, in the future, contribute to the cost of providing existing facilities used in the future.
- The extent to which new development should receive credit for providing at its cost facilities the system has provided in the past without charge to other development in the service area. 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.
- Extraordinary costs in serving new development. For example, because of terrain, service to some developments may be more expensive and require higher fee assessments.
- The present value of contributions already made or to be made by new development must be credited against SDCs.

- **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          |
| <b>Less</b> 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.<br>Average investment per equivalent 5/8 inch connection<br>(\$1,143,000 x 1,100 / 1,000,000) = \$1,257. <b>SDC = \$1,257.</b> |  |                                  |                    |

Source: AWWA Manual M26, Chapter 3.

The Equity Buy-in (or Vintage Capital) Method. 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. 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. The approach should also consider the financing costs incurred by existing ratepayers to provide excess capacity available for new demand.

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

| Plant   | Original Cost,<br>\$1,000 | Accumulated<br>Depreciation<br>\$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           |
| <b>Less</b> Net Cost of Distribution Mains  |                           |  | (3,800)          |
| Services, Meters, and Hydrants  |                           |  | (4,800)          |
| Net Investment in Plant   |                           |  | 18,400           |
| <b>Less</b> 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.<br>Average net equity investment per equivalent 5/8 inch meter (\$14,400,000 / 20,000) = \$720. SDC = <b>\$720</b> |                           |  |                  |

Source: AWWA Manual M26, Chapter 3.

Use of other methodologies. 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 water 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 water 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 a 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 or number of fixture units 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 SDC. For example, debt service payments included in the user rate analysis are partially offset by the projected receipts from 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, a 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.

- **A SYSTEM DEVELOPMENT CHARGE SHOULD CONTAIN DETAILED PROCEDURES FOR ITS 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 PROPERLY ACCOUNTED FOR.**

Collections from an SDC must be accounted for separately. 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.

The following references were used in the preparation of these guidelines:

American Water Works Association, Water Rates and Related Charges, Manual M26, First Edition, 1986.

Nelson, Arthur C., System Development Charges for Water, Wastewater, and Stormwater Facilities, 1995.

Raftelis, George A., Water and Wastewater Finance and Pricing, Second Edition, 1993.