



● **Board of Directors**  
***Legal and Claims Committee***

4/10/2018 Board Meeting

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**8-3**

**Subject**

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Adopt CEQA determination and authorize amendments to the Administrative Code regarding water service policies to expand the operating flow range for service connections and clarify responsibilities for future meter replacement costs

**Executive Summary**

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The current Administrative Code section 4504(b) sets the minimum flow rate for service connection meters at 10 percent of the meter maximum design capacity or requested flow rate. This minimum flow rate, in conjunction with the service connection's maximum design flow rate, sets the operating range for a Metropolitan service connection. Over the past several years there have been increasing requests from member agencies to expand this operating range to allow for lower flows, where possible, to meet changing operational conditions and satisfy the required accuracy of no more than a 2 percent error when measuring flows.

Metropolitan conducted several workshops in collaboration with the member agencies to discuss and evaluate options for expanding the operational range of service connection meters and developed new processes to manage these options. This action would authorize Administrative Code amendments to enable these new processes as long as the required meter accuracy at service connections is maintained. The amendments also address future replacement costs resulting from the use of newer meter technology and places responsibility for additional meter costs to implement the expanded flow range on the requesting member agency at Administrative Code section 4700(f).

**Details**

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**Background**

Metropolitan has over 350 active service connections that meter water to the member agencies. Most of these connections have been in operation for decades. Over the past several years there has been an interest by member agencies in exploring low flow options to meet changing operational conditions throughout the service area. These changing conditions have driven a need to develop cost effective solutions that meet the needs of Metropolitan and its member agencies.

In March 2017, Metropolitan invited member agencies to participate in several workshops to discuss these issues and to develop solutions to address these changing operational needs. A consultant with extensive meter experience facilitated the workshop discussions and assisted with the development of a technical report. Over the course of seven workshops, participants developed three processes for evaluating options for Metropolitan and the member agencies to consider. The new processes would provide greater flexibility for meeting member agency needs for an expanded range of meter operability than currently permitted in the Administrative Code. These three new processes are summarized as follows:

Option #1: Existing Service Connection - Shifted Operational Flow Range

Agencies may request that Metropolitan conduct an evaluation of an existing service connection to determine if it can operate at a lower or higher flow rate than the service connection's current rating while maintaining meter accuracy requirements. If Metropolitan determines the new requested flow rate can be

accommodated, the service connection agreement is amended and the meter operating range is shifted to include the new flow rate. For example, a member agency may utilize this option if it seeks to re-span an existing service connection meter from its originally established range of 4-40 cfs to a lower range of 3-30 cfs. The new minimum flow rate for the service connection shall be 10 percent of the requested maximum design capacity of the meter.

Option #2: Existing Service Connection - Increased Operational Flow Range

Agencies may request that Metropolitan conduct a more extensive evaluation of an existing service connection to determine if it can operate over a greater range than the service connection's current operating flow range, while maintaining required accuracy requirements. Metropolitan may use a combination of computerized analysis and flow testing of the service connection design at an independent lab to determine if it can accurately operate at a new, wider operating range that includes the agency's requested flow. For example, a member agency may utilize this option if it seeks to expand the operating range for an existing service connection meter from its originally established range of 4-40 cfs to a wider range of 2-40 cfs. This option cannot be used for existing classical venturi meters, which have a limited operational flow range.

Option #3: New or Modified Service Connection - Increased Operational Flow Range

For new service connections or connections that require a redesign, if requested by the member agency, Metropolitan may develop a service connection design with an expanded operating range, while maintaining required accuracy requirements. Metropolitan may use a combination of computerized analysis and independent lab testing to determine if the proposed design can accurately operate at the wider operating range requested. A member agency may utilize this option if it seeks to replace an existing meter with a new meter that has an expanded operating range. For example, a member agency may request a new service connection meter and connection piping to expand the service connection operating range from 4-40 cfs to a wider range of 2-40 cfs.

### **Service Connection Agreements**

The delivery of water through a service connection is governed by a service connection agreement and Metropolitan's Administrative Code requirements. Each of the proposed options would require a revised service connection agreement prior to implementing an operational flow range change or placing a new or redesigned service connection into service.

Expanding the operating range of a service connection may be possible when utilizing newer meters. Newer technology meters, however, often have a shorter life expectancy than Metropolitan's existing classical venturi type meters. Over one-third of Metropolitan's existing classical venturi meters are over 60 years old and continue to operate satisfactorily. Under current Administrative Code Section 4700(f), Metropolitan is responsible for any subsequent maintenance, alteration, or reconstruction of a service connection once it is put into service. In order to offset the increasing meter replacement costs due to use of newer technology meters with shorter lifespans, Administrative Code language is being proposed to assign additional replacement cost responsibilities to the member agencies requesting that an existing classical venturi meter be replaced by a different meter type with a lifespan of less than 60 years.

Authorization of these new processes requires amendments to add new language to two sections of Division IV, Chapters 5 and 7 of the Administrative Code. The proposed amendments are set forth in **Attachment 1**, with the added language underscored. **Attachment 2** sets forth the two sections as they would appear in the Administrative Code if the amendments were approved, as proposed.

## Summary of Proposed Revisions to Administrative Code, Division IV, Water Service Policies

### Changes to Chapter 5: Water Service Regulations- General

1. Amend Section 4504(b) (Rates of Flow) to allow the General Manager to waive the ten (10) percent of the requested or actual maximum design capacity of the meter requirements of Section 4504(b) under the following conditions:
  - a. When, at the member public agency's request, the District has evaluated and approved meter flows at less than ten (10) percent of the requested or actual maximum design capacity of the meter, whichever is less. All of the following shall occur for this exception to be allowed:
    - i. Analysis and testing validates the accurate operation of the service connection at the requested flow range as determined by the General Manager;
    - ii. The revised operational range of the service connection complies with all other Administrative Code requirements, including, but not limited to, Section 4506 (Metering of Water) requiring that service connection meters have no more than a two (2) percent error when measuring flows;
    - iii. The service connection is using a meter type that is not a classical venturi meter;
    - iv. The member public agency is responsible for all costs in evaluating, testing, and adjusting the meter; and
    - v. When flow through the service connection is reduced below the revised operational range of the meter, the member public agency will be charged as though a flow equaling the revised minimum flow is being delivered, as memorialized in an amended service connection agreement.

### Changes to Chapter 7: Service Connections

2. Amend Section 4700(f) (General Authorization) to revise responsibility for future meter replacement costs for meters that have an actual life expectancy of less than sixty (60) years.

Upon completion of the service connection, the District shall be responsible for any subsequent maintenance, alteration, reconstruction, or relocation of such service connection except changes which are requested by a member public agency, which changes shall be handled as a new service connection. However, the cost for replacement of a classical venturi meter shall be the member agency's responsibility, when the following occurs: 1) the member public agency requests a meter type other than a classical venturi meter, and 2) the actual lifespan of the new meter is less than 60 years from the date of commissioning. The member agency shall be responsible for each subsequent meter replacement, including all temporary or interim costs incurred during the replacement process, up to 60 years from the time the original classical venturi meter was replaced.

## **Policy**

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Metropolitan Water District Administrative Code Section 4504(b) (Rates of Flow)

Metropolitan Water District Administrative Code Section 4700(f) (General Authorization)

## **California Environmental Quality Act (CEQA)**

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### **CEQA determination for Option #1:**

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). In addition, where it can be seen with certainty that there is no possibility that the proposed action in question may have a significant effect on

the environment, the proposed action is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action is not defined as a project and is not subject to CEQA pursuant to Sections 15378(b)(2), 15378(b)(4), and 15061(b)(3) of the State CEQA Guidelines.

**CEQA determination for Option #2:**

None required

**Board Options**

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**Option #1**

Adopt the CEQA determination that the proposed action is not defined as a project and is not subject to CEQA, and

Approve amendments to the Administrative Code to allow an expanded operating range for service connection metering and revise responsibilities for future meter replacement costs, while maintaining meter accuracy requirements.

**Fiscal Impact:** None

**Business Analysis:** These amendments help address the increasing number of requests from member agencies for low flow options at service connections and revise responsibilities for future meter replacement costs.

**Option #2**

Do not approve amendments to the Administrative Code to allow an expanded operating range for service connection metering and revise responsibilities for future meter replacement costs, while maintaining meter accuracy requirements.

**Fiscal Impact:** None

**Business Analysis:** This option will limit the opportunities for member agencies to expand the operating range of new and existing service connections to address low flow metering.

**Staff Recommendation**

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Option 1

  
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Marcia Scully  
General Counsel

3/28/2018  
Date

  
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Jeffrey Kightlinger  
General Manager

3/28/2018  
Date

**Attachment 1 – The Administrative Code of the Metropolitan Water District of Southern California (with changes marked)**

**Attachment 2 – The Administrative Code of the Metropolitan Water District of Southern California (clean version)**

**§ 4504. Rates of Flow.**

(a) Within any 24-hour period, changes in rate of flow through any service connection serving a member public agency will be limited to ten (10) percent above and below the previous 24-hour average rate of flow except when a specific request for a change in rate that would exceed such limitations has been made to the District; such requests (1) shall be made at least 6 hours in advance of the time such change is to be made; (2) shall be approved by the General Manager only if in his judgment the change would not adversely affect the District's ability to apportion available water equitably. The General Manager is hereby authorized to reduce the maximum obtainable rate of flow at any service connection where this regulation is being violated and in the event the capacity of the distribution system is insufficient to accommodate the above mentioned daily fluctuations in delivery rate, the General Manager shall regulate the rates of flow at any or all service connections so as to assure equitable service to all agencies. However, the District will endeavor to meet all reasonable demands for service so long as comparable service can be provided to all member public agencies being served from a related section of the District's distribution system.

(b) When flow through a service connection serving a member public agency is reduced below ten (10) percent of the requested or actual maximum design capacity of the meter, whichever is less, at that connection during a period when the service connection turnout valve is in the open position, the member public agency will be charged as though a flow equaling ten (10) percent of the capacity of such meter were being delivered, as determined by the General Manager, unless the District has been advised by the member public agency that no deliveries are required at that connection for a specified period. This Section 4504(b) shall not apply to those service connections which are not connected to pressure pipelines of the District or to those service connections being operated intermittently in a manner determined by the General Manager to be of benefit to the District under conditions such that when flow does occur at these service connections it exceeds ten (10) percent of the meter capacity. The General Manager shall have the power to waive the requirements of this Section 4504(b), with respect to any meter under either of the following conditions:

- 1) Where the member public agency served by the meter is doing everything within its capability, as determined by the General Manager, to adjust its facilities and operations to take delivery at rates of flow not less than ten (10) percent of the requested or actual maximum design capacity of the meter, whichever is less, at that connection during a period when the service connection turnout valve is in the open position, or
- 2) When, at the member public agency's request, the District has evaluated and approved meter flows at less than ten (10) percent of the requested or actual maximum design capacity of the meter, whichever is less. All of the following shall occur for this exception to be allowed:
  - a. Analysis and testing validates the accurate operation of the service connection at the requested flow range, as determined by the General Manager;

- b. The revised operational range of the service connection complies with all other Administrative Code requirements, including, but not limited to, Section 4506 (Metering of Water) requiring that service connection meters have no more than a two (2) percent error when measuring flows;
- c. The service connection is using a meter type that is not a classical venturi meter;
- d. The member public agency is responsible for all costs in evaluating, testing, and adjusting the meter; and
- e. When flow through the service connection is reduced below the revised operational range of the meter, the member public agency will be charged as though a flow equaling the revised minimum flow is being delivered, as memorialized in an amended service connection agreement.

(c) When flow through a service connection serving a member public agency is increased above the actual maximum design capacity of the meter, the member public agency will be charged as though a flow equaling one hundred and twenty-five (125) percent of the capacity of such meter were being delivered, as determined by the General Manager.

(d) The General Manager shall have the power to waive the provisions of Sections 4504(a), 4504(b) and 4504(c) for a specified period with respect to any service connection if in his judgment such a waiver will serve to accomplish the current objectives of the District and will not adversely affect the operation of the District's distribution system or impair its ability to provide service to all member public agencies.

**§ 4700. General Authorization**

(f) Upon completion of the service connection, the District shall be responsible for any subsequent maintenance, alteration, reconstruction or relocation of such service connection except changes which are requested by a member public agency, which changes shall be handled as a new service connection. However, the cost for replacement of a classical venturi meter shall be the member public agency's responsibility when the following occurs: 1) the member public agency requests a meter type other than a classical venturi meter, and 2) the actual lifespan of the new meter is less than sixty (60) years from the date of commissioning. The member agency shall be responsible for each subsequent meter replacement, including all temporary or interim costs incurred during the replacement process, up to sixty (60) years from the time the original classical venturi meter was replaced. In addition, prior to the release of water by the District into the pipeline distribution system of member public agency or of member public agency's affected distributor, each agency shall install its own flow control device or devices as a means of maintaining uniform flow. Should the service connection be of the type that delivers water into an open channel or basin for groundwater replenishment use, then member public agency shall have the following options for the design, construction, ownership and maintenance of the required flow control device or devices.

(1) The District at the request of member public agency will design, construct, own, operate and maintain such flow control device or devices deemed necessary for the regulation of water deliveries, in which case the District's responsibility shall not extend beyond the ownership of the flow control facility, and any and all liabilities arising from release of water in the quantities agreed upon by member public agency and the District shall be the full responsibility of member public agency. Construction of the aforementioned facility shall be included as an additional feature of the service connection and the related cost shall be included as a part of the total cost of the service connection.

(2) Member public agency may design, construct, own, and maintain the aforementioned flow control facility, in which case the District's responsibility shall not extend beyond ownership of its meter facility, and any and all liabilities arising from release of water in the quantities agreed upon by member public agency and the District shall be the full responsibility of member public agency. However, the quantity of water delivered to member public agency through the flow control facility at any time shall be only as requested by member public agency, subject to the ability of the District to operationally meet such requests.

**§ 4504. Rates of Flow.**

(a) Within any 24-hour period, changes in rate of flow through any service connection serving a member public agency will be limited to ten (10) percent above and below the previous 24-hour average rate of flow except when a specific request for a change in rate that would exceed such limitations has been made to the District; such requests (1) shall be made at least 6 hours in advance of the time such change is to be made; (2) shall be approved by the General Manager only if in his judgment the change would not adversely affect the District's ability to apportion available water equitably. The General Manager is hereby authorized to reduce the maximum obtainable rate of flow at any service connection where this regulation is being violated and in the event the capacity of the distribution system is insufficient to accommodate the above mentioned daily fluctuations in delivery rate, the General Manager shall regulate the rates of flow at any or all service connections so as to assure equitable service to all agencies. However, the District will endeavor to meet all reasonable demands for service so long as comparable service can be provided to all member public agencies being served from a related section of the District's distribution system.

(b) When flow through a service connection serving a member public agency is reduced below ten (10) percent of the requested or actual maximum design capacity of the meter, whichever is less, at that connection during a period when the service connection turnout valve is in the open position, the member public agency will be charged as though a flow equaling ten (10) percent of the capacity of such meter were being delivered, as determined by the General Manager, unless the District has been advised by the member public agency that no deliveries are required at that connection for a specified period. This Section 4504(b) shall not apply to those service connections which are not connected to pressure pipelines of the District or to those service connections being operated intermittently in a manner determined by the General Manager to be of benefit to the District under conditions such that when flow does occur at these service connections it exceeds ten (10) percent of the meter capacity. The General Manager shall have the power to waive the requirements of this Section 4504(b), with respect to any meter under either of the following conditions:

- 1) Where the member public agency served by the meter is doing everything within its capability, as determined by the General Manager, to adjust its facilities and operations to take delivery at rates of flow not less than ten (10) percent of the requested or actual maximum design capacity of the meter, whichever is less, at that connection during a period when the service connection turnout valve is in the open position, or
- 2) When, at the member public agency's request, the District has evaluated and approved meter flows at less than ten (10) percent of the requested or actual maximum design capacity of the meter, whichever is less. All of the following shall occur for this exception to be allowed:
  - a. Analysis and testing validates the accurate operation of the service connection at the requested flow range, as determined by the General Manager;

- b. The revised operational range of the service connection complies with all other Administrative Code requirements, including, but not limited to, Section 4506 (Metering of Water) requiring that service connection meters have no more than a two (2) percent error when measuring flows;
- c. The service connection is using a meter type that is not a classical venturi;
- d. The member public agency is responsible for all costs in evaluating, testing, and adjusting the meter; and
- e. When flow through the service connection is reduced below the revised operational range of the meter, the member public agency will be charged as though a flow equaling the revised minimum flow is being delivered, as memorialized in an amended service connection agreement.

(c) When flow through a service connection serving a member public agency is increased above the actual maximum design capacity of the meter, the member public agency will be charged as though a flow equaling one hundred and twenty-five (125) percent of the capacity of such meter were being delivered, as determined by the General Manager.

(d) The General Manager shall have the power to waive the provisions of Sections 4504(a), 4504(b) and 4504(c) for a specified period with respect to any service connection if in his judgment such a waiver will serve to accomplish the current objectives of the District and will not adversely affect the operation of the District's distribution system or impair its ability to provide service to all member public agencies.

**§ 4700. General Authorization**

(f) Upon completion of the service connection, the District shall be responsible for any subsequent maintenance, alteration, reconstruction or relocation of such service connection except changes which are requested by a member public agency, which changes shall be handled as a new service connection. However, the cost for replacement of a classical venturi meter shall be the member public agency's responsibility when the following occurs: 1) the member public agency requests a meter type other than a classical venturi, and 2) the actual lifespan of the new meter is less than sixty (60) years from the date of commissioning. The member agency shall be responsible for each subsequent meter replacement, including all temporary or interim costs incurred during the replacement process, up to sixty (60) years from the time the original classical venturi meter was replaced. In addition, prior to the release of water by the District into the pipeline distribution system of member public agency or of member public agency's affected distributor, each agency shall install its own flow control device or devices as a means of maintaining uniform flow. Should the service connection be of the type that delivers water into an open channel or basin for groundwater replenishment use, then member public agency shall have the following options for the design, construction, ownership and maintenance of the required flow control device or devices.

(1) The District at the request of member public agency will design, construct, own, operate and maintain such flow control device or devices deemed necessary for the regulation of water deliveries, in which case the District's responsibility shall not extend beyond the ownership of the flow control facility, and any and all liabilities arising from release of water in the quantities agreed upon by member public agency and the District shall be the full responsibility of member public agency. Construction of the aforementioned facility shall be included as an additional feature of the service connection and the related cost shall be included as a part of the total cost of the service connection.

(2) Member public agency may design, construct, own, and maintain the aforementioned flow control facility, in which case the District's responsibility shall not extend beyond ownership of its meter facility, and any and all liabilities arising from release of water in the quantities agreed upon by member public agency and the District shall be the full responsibility of member public agency. However, the quantity of water delivered to member public agency through the flow control facility at any time shall be only as requested by member public agency, subject to the ability of the District to operationally meet such requests.

Paragraph (b) [formerly Section 322.5.2] based on Res. 7241- February 10, 1970 and Res. 7260- May 12,1970; paragraph (a) [formerly Section 322.5.1] based on Res. 7260- May 12, 1970 amending Res. 3896- August 18,1981;