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IN THIS ISSUE

The positive financial impacts of forgiving pre-existing water arrears when low-income customers enroll in the Philadelphia Water Department's bill assistance program.

NOTE TO READERS

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Forgiving Pre-existing Water Arrearages in Exchange for Enrollment in a Bill Assistance Program Yields Financial Benefits for the Philadelphia Water Department.

In 2016, the Philadelphia City Council unanimously adopted an "Income-based Water Rate Affordability Program" (IWRAP) to be implemented by the Philadelphia Water Department (PWD). IWRAP, which was later to become known as the "Tiered Assistance Program" (TAP), was based on the recognition that the unaffordability of water (wastewater and stormwater) service was imposing tremendous costs not only on PWD, but on the City as a whole. IWRAP was directed toward achieving an affordable water bill for customers with annual income at or below 150% of the Federal Poverty Level.[1]

One question that presented itself, however, was how to address pre-existing arrearages. Even if bills were made affordable on a going-forward basis, low-income customers had incurred millions of dollars of unpaid balances when their bills were <u>un</u>affordable. Under the IWRAP legislation, the City Council responded by mandating that "low-income customers who are enrolled in IWRAP shall be required to make ***no additional payment*** in respect to any pre-IWRAP arrears to maintain service." (emphasis added). It would make no sense, the Council reasoned, for a low-income customer's future bills for current service to be set at an affordable

[1] Water, wastewater and stormwater services are all wrapped into the term "water" for purposes of this discussion.

level if that customer's total bills remained unaffordable due to the need to pay-off pre-existing balances.

The discussion below reviews the analysis of what financial impact would arise for PWD from this treatment of pre-existing arrearages. The analysis concluded that, in fact, the treatment directed by City Council would be financially beneficial to the City.

Arrearage Forgiveness does not Create Lost Revenue. Current Rates Recognize that Aging Debt Will not be Repaid.

The arrearage forgiveness program incorporated in the City Council legislation does not create new lost revenue to PWD. PWD would fail to collect revenue from the dollar amounts represented by pre-existing arrears even in the absence of IWRAP. Since PWD has already recognized that these billed dollars will not be collected, the lost revenue from pre-existing arrearages is already embedded in rates. In contrast, an arrearage forgiveness program will increase the extent to which low income customers are able to make full bill payments and will reduce future arrears.[2]

The lost revenue from IWRAP arrearage forgiveness is already embedded in rates.[3] In its 2016 rate case, PWD presented a set of collectability factors which varied based on the age of arrears. Since these collectability factors represent the dollars of revenue PWD expects to receive, if one subtracts those collectability factors from 100% of the billing, it is possible to determine the amount of billing PWD does *not* expect to receive, even in the absence of IWRAP.[4] The amount of billing that PWD already does not expect to receive, even in the absence of IWRAP, represents the embedded lost revenue.

The revenue that PWD loses each year because of the ineffective way in which it seeks to collect arrears is substantial. More than half (54.1%) of PWD's existing arrears are older than two years. Under the rates set in PWD's 2016 rate case, of the more than $127 million monthly average arrears more than two years old, the Department projected that it would collect only $1.9 million. This represents less than 1.5% of the average aging debt. Of the $170 million in PWD arrears that are greater than one year old, PWD reports that it expects to collect less than four percent (3.9%). Granting "forgiveness" of those arrears, therefore, does not create new costs to PWD. Instead, granting arrearage forgiveness only recognizes that lost revenue in a different form.

Granting arrearage forgiveness will use the lost revenue already embedded in rates to prevent similar arrears from being incurred in the future to be charged to ratepayers. In contrast, keeping the status quo will ensure that these lost revenues will continue to be incurred and will be increased.

Participants in PWD's existing low-income program who are already in arrears are not in arrears "a little." The increasing amount of aging debt is demonstrated by a review of the long-term arrears of PWD low-income customers. In

[2] The extent to which current bills are paid is known as the "payment coverage ratio." This ratio places current bill payments in the numerator and current billed revenue in the denominator. A higher percentage indicates, therefore, that more of the revenue that is being billed is actually being paid.

[3] In other words, PWD's rates are set at levels that acknowledge that these arrears will not be repaid.

[4] Billed revenue minus revenue expected to be received = revenue not expected to be received.

its 2016 rate case, the Philadelphia Water Department stated that it could not provide the average arrears of customers currently participating in the Department's low-income program. Data on WRAP arrears,[5] however, *was* available from the PWD's previous rate case. As of May 2012, the average arrears of WRAP participants were as set forth immediately below. PWD expects to fail to collect 98% of these dollars (i.e., PWD expects to have a collection rate of 2.0%). To recognize this lost revenue through arrearage forgiveness does not create new lost revenue; it merely recognizes the revenue that PWD expects to lose in any event.

Average Monthly Arrears: PWD WRAP Participants

	2009	2010	2011	2012
Average arrears of WRAP participants in arrears	$3,379	$3,868	$4,142	$4,186

SOURCE: Discovery response by PWD in 2012 PWD rate case.

The problem with the status quo is more than the fact that low-income arrears are large. Under PWD's status quo, the arrearages of low-income WRAP participants are not only large, but they are growing as well. In just the four years from 2009 through 2012, the average arrearages grew by more than $800 ($4,186 - $3,379 = $807), or by nearly 25% ($807 / $3,379 = 0.239). The arrearage forgiveness program required by the City Council's legislation will, therefore, not only help address a short-term problem of non-collection by PWD, but will help address the long-term status quo problem of growing arrearages.

Arrearage Forgiveness Improves the Collection of Current Bills and Addresses both the Short- and Long-Term Problems Created by the Status Quo.

The lack of arrearage forgiveness not only makes it likely that PWD would fail to collect its pre-existing arrearages, but it also places payments toward bills for *current* service in jeopardy.

PWD's status quo makes it likely that the Department will collect a very small percentage of current bills. As a result, the large and growing low-income arrears that have been identified above will continue to grow in the future, to the detriment of both PWD's ratepayers and of the City. The IWRAP program, coupled with arrearage forgiveness, will reverse that trend.

The impact of imposing unaffordable burdens is illustrated by the Apprise, Inc. evaluation of the New Jersey Universal Service Fund. That Apprise report shows the following for gas or electric customers (target affordable bill burden of 3%):

[5] PWD's WRAP program is to be distinguished from its IWRAP program. WRAP was the name of the program that preceded Philadelphia's move to an income-based low-income discount.

Distribution of Effective Coverage Rate by Net Energy Burden (gas or electric: 3%)				
Burden as income percent	Bill Payment Coverage Rate[6]			
	< 50%	50% - <90%	90% - <100%	100% or more
<2%	0.0%	2.7%	5.3%	92.0%
2% - 3%	0.0%	6.0%	11.5%	82.5%
3% - 4%	0.0%	10.0%	13.2%	76.9%
4% - 6%	0.0%	11.6%	16.6%	71.6%
6% - 8%	0.4%	16.6%	17.4%	65.6%
More than 8%	1.0%	25.6%	16.1%	57.4%

As can be seen in this Table, so long as the bill burden remained in the target range in New Jersey (2% – 3% of income), from 94% to 97% of the low-income customers generated a bill payment coverage ratio over 90%. In contrast, when bill burdens exceeded 8% of income, fewer than 60% of program participants paid their full bill. In contrast to the 94% to 97% paying at least 90% of their full bill with an affordable bill burden, fewer than 75% (16.1% + 57.4% = 73.5%) did when bill burdens reached more than 8% of income.

Similar results have arisen from the Pennsylvania low-income affordability programs. Each year, the Pennsylvania PUC's Bureau of Consumer Services ("BCS") collects and reports data on the performance of the state's "universal service" programs. The data collection allows policy-makers and utility service providers to compare the performance of low-income residential customers participating in the low-income bill affordability programs of Pennsylvania utilities (called Customer Assistance Programs, or "CAPs") to the performance of "confirmed low-income" customers in general. In 2013 (the most recent year for which data was available at the time the Philadelphia analysis was completed), Pennsylvania utilities had 1.046 million confirmed low-income customer accounts statewide.[7] The confirmed low-income accounts were heavily payment-troubled. Fifteen percent of these confirmed low-income customers had been disconnected for nonpayment in 2013, of which only 72% were reconnected. More than 22% of all confirmed low-income accounts were in debt, with those confirmed low-income customers having an average monthly arrears of $656. Of those confirmed low-income accounts in arrears, fewer than half were on payment agreements.

In contrast to these payment difficulties for confirmed low-income customers, the participants in the low-income CAP programs, providing discounted bills and earned arrearage forgiveness, had an average payment coverage ratio of 86%. Through their affordability programs, in other words, Pennsylvania's utilities took extremely payment-troubled confirmed low-income customers and structured a response where the utilities were receiving nearly $9 of every $10 billed.

An arrearage forgiveness program, through which program participants will earn credits toward their pre-existing arrears over a defined period of time, is a standard program component for every CAP amongst Pennsylvania's electric and gas utilities. A PWD arrearage forgiveness credit that would retire arrears over a 24-month

[6] For example, 11.5% of customers with a bill burden of between 2% and 3% paid between 90% and 100% of their bill; 92.0% of customers with a bill burden of less than 2% paid 100% or more of their bill.

[7] Pennsylvania utilities had an ***estimated*** 1,987,364 number of low-income customer accounts. Accordingly, the utilities had "confirmed" roughly 53% of their estimated number of low-income accounts. Given that these numbers include both gas and electric utilities, however, it cannot be concluded that these numbers reflect "households." Some accounts may be counted twice, once by the electric utility and again by the natural gas utility.

period, with a pro rata share of the pre-existing account balance retired for each complete payment made by a program participant, would mirror the best practices of Pennsylvania utilities. The time period over which arrears would be "forgiven" should be sufficiently long to provide some budget mitigation,[8] while being sufficiently short to stay within a low-income household's planning horizon. Experience indicates that the longer the period over which arrears are retired, the less meaningful that retirement is as a noticeable incentive to guide participant behavior. In Philadelphia, a two-year retirement period would fall exactly halfway between PGW's (natural gas) 36-month retirement period and PECO's (electric) 12-month period.

Pennsylvania's CAPs show that the capability to retire those arrears, as part of an affordable bill program, results in improved payment patterns and higher bill coverage. In other words, heavily burdened low-income customers can see a light at the end of the tunnel when affordable payments and arrearage forgiveness are available.

The Status Quo's Use of Payment Plans Fails to Collect Low-Income Arrearages.

PWD cannot realistically assert that deferred payment agreements will retire pre-existing low-income arrearages and collect those outstanding account balances. In its 2016 rate case, PWD reported that it no longer tracked the success rate of deferred payment arrangements, whether those arrangements were for low-income customers or for non-low-income customers. Because of this lack of data, it is thus again necessary to use data from the prior rate case (when PWD did track and report the success, or lack thereof, of its payment plans). In 2012, PWD reported that, in Fiscal Year 2012, an astonishing 85% of customers entering into payment plans with PWD defaulted before successfully completing their payment plans. That performance was a decline in the success of payment plans in Fiscal Year 2011, when 73% of "first" payment plans (13,548 of 18,685) and 76% of "second" payment plans (13,457 of 17,629) defaulted. Moreover, this default rate was of _all_ payment plans, both low-income and non-low-income, not simply low-income payment plans. The default rate of low-income plans would have been even higher. It is not surprising that an affordability model reliant upon payment agreements results in significant termination rates and low-income families experiencing long periods without life-essential water service, as reported by Philadelphia low-income advocates.[9]

The problem with ineffective payment agreements is that when customers cannot afford to pay older arrears, they also fall further behind on newer arrears and current bills. Payments are applied against the oldest account balances first. If a customer has arrears that are two years old, in other words, that customer also has arrears that are less than two years old. Under the status quo, customers cannot pay their current bills without first having paid all of their arrears. Customers cannot retire their new arrears without having first retired their older arrears.

Payment agreements cannot effectively address

[8] Each additional year over which the arrearage credits are spread reduces the annual budget impact.

[9] See April 9, 2015 Transcript of City Council's Committee on Finance Hearing regarding Bill No. 140607, testimony of Robert W. Ballenger. See also Main Brief of the Community Lawyering Clinic in the Matter of PWD's Proposed FY 2017-2018 Rate Increase (reporting on the reduction in residential water customer accounts, FY 2015 shutoffs of over 32,000 households, and disparate impacts on African-American communities in Philadelphia).

the lack of bill affordability. Assume that a 2012 WRAP customer owing an average arrears (as reported in the Table above) enters into a "five percent plan," under which the outstanding balance is divided into 20 equal parts. Each month, in addition to the current bill, the customer would be required to make an *additional* payment of more than $209 ($4,186 x 0.05 = $209.30). As the Table below shows, under this approach, the arrearage payments alone would represent a payment burden of between 10% and 34% of income.

Affordability of Arrearage Payment
Under PWD's 5% Deferred Payment Plan

	Annual Income	Monthly Arrearage Pyt ($4,186 x .05)	Annual Arrearage Pyt (monthly pyt x 12)	Arrearage Pyt as Percent of Income
Below 50%	$7,368	$209	$2,508	34%
50-74%	$11,513	$209	$2,508	22%
75-99%	$16,119	$209	$2,508	16%
100-124%	$20,632	$209	$2,508	12%
125-149%	$25,329	$209	$2,508	10%

These payment burdens would be *in addition to* the payments toward bills for current service. The result would be to completely undo the affordability impacts that the City Council sought to achieve, with all of the resulting adverse financial impacts to both the PWD and the City, itself.

Granting Arrearage Forgiveness Generates Positive Cash Flow for PWD

It is possible to apply the New Jersey results from above to PWD data to illustrate how and why arrearage forgiveness makes financial sense to a utility such as PWD by generating a positive cash flow. PWD knows from its 2016 rate case that there are an estimated 31,000 participants for IWRAP. PWD knows further from the rate case that annual water bills for low-income PWD customers average $813. In addition, PWD included a collectability factor of 2% for arrears two years old or older when it presented the "revenue assumptions" in the Financial Plan for its 2016 rate case. If we assume that 75% of IWRAP participants will be in arrears, and that the average arrears is $2,000,[10] providing arrearage forgiveness would cost PWD $930,030. Since the proposed arrearage forgiveness would be spread over two years, however, the *annual* cost would be only $465,015.

The question, then, is how much additional collection of bills for current service would occur if no arrearage repayment increment is added to the current bill, compared with increasing the total burden to IWRAP participants by charging additional payments toward arrears. This can be calculated by comparing the dollars collected given an affordable burden (as set for IWRAP) to the dollars collected given an unaffordable burden (current bill plus arrearage repayment). The additional dollars collected for bills for current service would reach $1,523,570 per year. Without the IWRAP, PWD would collect $17,176,084 while with the program, PWD would collect $18,699,654.

[10] The average arrears of participants in the existing WRAP program, with participation of roughly 7,000 customers, was roughly $4,200 in 2012. The IWRAP program, however, has a much larger participation base. As a result, the average arrears would presumably be lower. In 2014, the average arrears of low-income customers in arrears on payment agreements was somewhat over $600. In order to avoid understating the arrears of PWD low-income customers, the average arrears used in this Table was increased. To the extent that the average arrears is less than $2,000, the net gain to PWD from an arrearage forgiveness program would be even greater.

As can be seen, in other words, through the arrearage forgiveness program, if all arrears are forgiven in one year, Philadelphia would be spending $0.930 million to gain $1.524 million. If, instead, all arrears are forgiven over two years, Philadelphia would be spending $0.465 million to gain $1.524 million. In either situation, PWD "gains" more money through an increased collection of current bills than it "loses" through the grant of arrearage forgiveness.

Summary and Conclusions.

Several conclusions flow from the data and discussion presented to the Philadelphia City Council of an arrearage forgiveness program for PWD. The City Council's legislation explicitly states that "low-income customers who are enrolled in IWRAP shall be required to make *no additional payment* in respect to any pre-IWRAP arrears to maintain service" (emphasis added) and requires the City to establish an earned forgiveness program. These components of the City Council's legislation constitute not only good social policy from the perspective of Philadelphia's low-income customers, but also good financial policy from the perspective of the Philadelphia Water Department.

The ultimate conclusion FSC presented to the Philadelphia City Council was that providing an arrearage forgiveness program for PWD makes financial and economic sense for the City and for PWD, itself. The following conclusions were included in the FSC analysis:

- An arrearage forgiveness program would not create new costs for PWD. In its 2016 rate case, PWD projected that it would collect only 2.0% of arrearages that are two or more years old. Two-year arrearages represent more than half (54%) of all unpaid dollars owed to PWD.

- Nonpayment of arrears two years old or older also places in jeopardy arrearages that are less than two years old. When payments are made, the oldest arrears get paid first. If the two-year arrears are not paid, the 30-day arrears are not paid either.

- In contrast to PWD's 2% collection rate on long-term arrears, Pennsylvania programs that incorporate arrearage forgiveness result in the collection of nearly $9 out of every $10 billed to low-income customers.

- In contrast to this collection rate of nearly $9 out of every $10 billed in Pennsylvania's low-income programs that mirror IWRAP, the status quo's attempts to collect low-income arrears through deferred payment arrangements is marred by failure. In the most recent year for which PWD could report data, more than 85% of *all* deferred payment arrangements failed. Deferred payment arrangements place unaffordable burdens on low-income households.[11]

- Imposing an unaffordable bill burden on IWRAP participants places the collection of bills for current service in jeopardy. The percentage of the bill for current service which is paid decreases as the overall bill burden increases above an affordable level. In the absence of

[11] A "bill burden" is a bill as a percentage of income. For example, a $500 bill coupled with a $6,000 annual income represents a burden of 8.3% (500 / 6,000 = 0.0833).

arrearage forgiveness, the status quo of large and increasing low-income arrears will continue.

- Rather than continuing the status quo of large and growing low-income arrearages, providing arrearage forgiveness for IWRAP customers will result in a positive cash flow for PWD. The extent to which payments toward current bills increases given an affordable bill burden will far exceed the extent to which payments toward pre-existing arrears will decrease as a result of any arrearage forgiveness.

For more information regarding the Philadelphia IWRAP program, or for a copy of FSC's analysis of arrearage forgiveness in Philadelphia, please write:

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