Assembly Committee on Utilities and Commerce
and
Assembly Committee on Aging and Long-Term Care

Briefing Paper for Oversight Hearing
WATER RATE AFFORDABILITY
February 3, 2014

I. SUMMARY

Water affordability is critically important to impoverished and underprivileged Californians. However, declining infrastructure and reduced demand for water are prompting investor-owned water utilities to request the California Public Utilities Commission (CPUC) approve water rate increases of 7-45%. In some cases, water bills have spiked over 300% since 2006. These rate hikes may prove unaffordable to disadvantaged and/or aging populations, thus limiting their access to clean and reliable water.

This informational hearing will specifically examine:

- Water rates and their effects on aging populations
- Water rate assistance criteria: affordability vs. income
- CPUC oversight of water utilities and possible CPUC actions to maintain water affordability in California
- Low-Income Water Rate Assistance Programs
- Other mechanisms that may help maintain water affordability in California

II. WATER RATES AND THEIR EFFECTS ON AGING POPULATIONS

In July 2012, the investor-owned water company Cal Water filed a request with the CPUC for a water rate increase of 77% over three years to ratepayers in Lucerne, one of Lake County's most disadvantaged communities. The average resident's water bill, according to local news accounts, would have doubled – skyrocketing from $62.85 to $124.22 per month. In an area with a median household income of ~$25,000 (versus California's median income of ~$61,000), the yearly water bill for a median income household would have totaled almost 6% of their annual income.

Cal Water's service area includes 21 “districts” spread across the state, including those in the areas of Livermore, Stockton, East Los Angeles, Bakersfield, South Bay, and Chico. However, of all the districts, Lucerne’s ratepayers were expected to pay the second highest share per volume of water. Estimates projected Lucerne residents would pay $7.90/cubic ft. for water and a monthly service charge of $47.31, while those in the Los Altos district (where the median household income was almost **6 times** that of Lucerne) would pay $3.01/cubic ft. and a service charge of $13.41.

The pending settlement between CPUC and Cal Water would not drastically increase water rates in Lucerne. However, over recent years, Lucerne has been subject to large rate increases. In 2005, Cal Water sought a 247% rate increase, receiving CPUC approval for (only) a 120% rate increase. In 2009, Cal Water requested an increase of 54.9%, and received approval for an increase of 41.8%.

The prospect of water rate increases is especially troubling to disadvantaged communities and aging populations in California. For example, Lake County is an attractive retirement location, boasting affordable housing and easy access to the Bay Area, Sacramento, and the coast. In 2010, approximately 17.6% of Lake County’s population was over age 65 (versus ~13% in California), a number projected to grow to 23% by 2020 and exceed 26% in 2030. In communities such as Marin County's Dillon Beach, where the estimated median income is ~$190,000 there are also low-income or aging populations. Rates in Dillon's Beach have jumped over 300% since 2006.

The procedures for requesting and setting water rates must be closely scrutinized as rate increases become exceedingly unaffordable to low-income and/or aging populations. With an ever expanding cohort of aging Californians, a majority of whom will be living on fixed or declining incomes, a range of hidden consequences accompany utility rate increase requests. Water rates should be considered in the context of ensuring that, not only water, but all of their basic needs, including health care, food, energy, or transportation, are affordable. Local government as well as state and federal agencies all have a stake in rate setting, but the public is the critical nexus that must become empowered to participate in the process of setting water rates.

III. WATER RATES: AFFORDABILITY VS. INCOME

The US EPA and the California Department of Public Health use a "water affordability threshold"[1] to factor in variable costs of living across California. For example, with a threshold of 1.5%, a household at the California median income of $61,000 would not be expected to pay over $915 for water over one year ($76.25/month). Households with water bills exceeding this threshold are considered to be paying a cost that is unaffordable and a “high burden”.

Table 1 examines the affordability of average water bills using California Department of Public Health’s affordability threshold of 1.5%. In the case of Cal Water’s Lucerne area, it is estimated that an affordable monthly bill would be $32.50 or less. In reality, the average bill is $85 – about 2.5 times the affordable amount. This is especially alarming for the aging population in the area.

Lake and Mendocino Counties' Report on Aging[2] found that 51% of older adults in Lake and Mendocino Counties do not have incomes that meet their basic needs. Furthermore, about 8.1% of elders in Lake County had incomes below the Federal Poverty level of $10,210 in 2007. Based on inflation and the 1.5% affordability threshold, an elder in Lucerne at the poverty level would not be expected to pay more than $14.36/month for water.

Table 1: Water Affordability Threshold compared to average bill

Water utility	Estimated median income in service area	1.5% affordability threshold (monthly bill)	Actual average bill
Apple Valley Ranchos	$56,810	$71	$46-95
Cal Water, Lucerne	$26,000	$32.50	$85
Park	~$42,000	$52.50	$67
San Jose	$76,000	$95	$61
Suburban	$51,000	$63.75	$58
Valencia	$78,000	$97.50	$58

An affordability threshold of 1.5%, in combination with median income estimates in the service area of the water utility, was used to examine the affordability of monthly water bills.

The Legislature has enacted statutes[3] to provide the CPUC with oversight authority of the California Alternate Rates for Energy (CARE), which require electrical and gas corporations regulated by the CPUC to provide low-income assistance programs. These same criteria are utilized by water companies to determine eligibility for low-income programs. CARE eligibility is based on incomes less than 200% of the Federal Poverty Level (Table 2).

Table 2: CARE income guidelines for water assistance program eligibility

Household Size	Total Gross Income
1	$22,980
2	31,020
3	39,060
4	47,100
For each additional person, add	$8,040

A low-income household is a household where the total gross annual income from all sources is no more than 200% of the Federal Poverty Level based upon household size.

IV. ROLE OF THE CPUC

The CPUC is charged with ensuring California's 115 investor-owned water utilities and 14 investor-owned wastewater utilities provide safe and reliable water to customers at reasonable rates.[4] Water utilities regulated by the CPUC deliver water service to about 16% (~6 million) of the state's population.

The remaining water customers in California are served by cities, water districts, and mutual water companies, which are self-regulated and not under CPUC jurisdiction. An important distinction is that, as established in the California Constitution,[5] these entities must restrict water rates to cost of service. As a result, these entities cannot increase rates to fund low-income programs for their customers. Some of these entities solicit donations to support such programs..

The water utilities regulated by the CPUC are natural monopolies with no direct competition and classified as such:

- 10 large Class A utilities (those with >10,000 connections). These serve 95% of the 6 million customers of the investor-owned water utilities.
- 6 Class B (2,001–10,000 connections)
- 23 Class C (501–2,000 connections)
- 76 Class D (<500 connections)

The CPUC assesses the fiscal condition of the water utilities and provides them a reasonable rate of return to ensure they are able to provide service to their customers and satisfy their shareholders. In 2012, water utilities under CPUC's jurisdiction posted revenues totaling $1.4 billion.

A. Rate Change Requests By Water Utilities

Rate changes, generally increases, are requested by the Class A water utilities through General Rate Cases (GRC) to recover expenses associated with operating and maintaining the water systems, including those incurred to meet water quality and environmental regulations, conduct inspections and maintenance, and make infrastructure improvements.

Every three years Class A water utilities must file a GRC with the CPUC.[6] The GRC includes detailed cost estimates, expenses, capital expenditures, and forecasted water sales. The CPUC Office of Ratepayer Advocates (ORA) conducts a thorough investigation to determine whether a rate increase is justified to ratepayers, and organizes hearings to gather input from the public and expert witnesses. The process is typically completed within 14-20 months.

In lieu of a GRC, the CPUC allows smaller utilities (Classes B/C/D) inflation-based rate increases via advice letters. **However, it is unclear whether customers can access these advice letters so that they may exercise their right to file protests to the rate increases.**

In recent years, **water utilities have requested rate increase requests ranging from 7-45%** over three year spans (see Table 3). The CPUC has granted rate increases of 10%-24%. For example, the Golden State Water Company requested a total 28.66% rate increase over 2013-2015, while the CPUC authorized only a 20.34% rate increase – about 70% of the total request. **Average water bills range from ~$42-$82,** and with the rate increases**, bills are rising or have risen to ~$46-$95 (a $4-$13 increase).**

However, <u>average</u> dollar amount increases may not represent the water bills of those most affected by the rate increase. For example, if a community contains many vacation or empty homes, the typical bill may be much higher than the average suggested by the utility. In Lucerne, where there are many vacation and foreclosed homes, Cal Water estimated the average monthly bill was $62/month, but the county argued the average was closer to $158.

In the case of Lucerne, the pending settlement has resulted in a modified proposal that would not dramatically increase rates. **This kind of outcome is highly dependent upon ratepayer participation in the dispute process,** as customers in Lucerne staged an intense fight against the proposed rate increases. This demonstrates the importance of the CPUC and water utilities educating ratepayers regarding the proper avenues and timing for input in the GRC.

For many ratepayers, the GRC is not sufficiently transparent – a reason why the public may perceive the CPUC is not providing adequate protection. The Legislature, CPUC, water utilities, and the public must work together to find solutions that (1) maintain access to affordable water and (2) build ratepayer trust through education, outreach, and communication.

Table 3: Examples of recent rate increase requests by investor-owned utilities[7]

Company	**Rate increase request**	**Result of GRC (% rate increase granted by CPUC)**	**Average water bill plus increase**
Apple Valley Ranchos	20% for 2012 2.35% for 2013 3.32% for 2014	14.7% for 2012	~$42-82 + ~$4-13/month increase
California Water	19.4% for 2014 3.0% for 2015 2.9% for 2016	Interim rates granted for 2014 (2013 rates plus inflation) GRC settlement pending	~$47-60 + ~$13-20/month increase by end of 3 years (if approved)
Golden State	21.4% for 2013 2.7% for 2014 3.2% for 2015	15.0% for 2013 2.6% for 2014 2.0% for 2015	~$45 + ~$5/month increase
Great Oaks	14.28% for 2013 -3.09% for 2014 -2.85% for 2015	7.73% for 2013 0.7% for 2014 1.42% for 2015	Unknown
Park	26.16% for 2013 3.77% for 2014 5.53% for 2015	21.01% for 2013	~$57 + ~$10/month increase
San Jose	21.51% for 2013 4.87% for 2014 12.59% for 2015	Interim rates granted for 2013 (2012 rates plus inflation)	~$61 + ~$26/month increase (if approved)
Suburban	35.85% for 2012 4.18% for 2013 2.61% for 2014	24.3% for 2012 Rehearing of GRC in process	~$48 + ~$10-12/month increase
Valencia	15.97% for 2014 2.93% for 2015 4.23% for 2016	Filed for interim rates	~$58 + ~$7/month increase (if approved)

The dollar amount increase is based on average (10-30 ccf) monthly usage for a 5/8 x 3/4-inch or 3/4-inch meter. "Average" monthly usage may not reflect typical water bills, as vacation or empty homes can skew the average.

B. Possible CPUC Actions to Maintain Water Affordability In California

Through an open rulemaking[8] the CPUC is establishing policies to (1) balance rates for multi-district water utilities and (2) mitigate water affordability. The CPUC Division of Water and Audits (DWA) prepared a report on the rulemaking[9] to provide recommendations

on available mechanisms to control water costs. These are: consolidation of multi-district utilities, rate regionalization/consolidation, rate design, and ratepayer relief programs. The CPUC has not ruled on the DWA recommendations. Each of these programs has both benefits and disadvantages, as discussed further below.

- **Consolidation in multi-district utilities.** Rate consolidation refers to aggregating costs and averages them over a larger customer base. Consolidation has been proposed because the cost of providing water service in California varies according to many factors, such as population density, geography, and local resource costs.[10] Whereas electric and gas utilities typically set a consistent rate across an entire service territory, water utilities with discontinuous service territories have different rates in each district. The basic question is whether the benefits of cost equity among ratepayers outweigh the loss of pricing efficiency (as ratepayers would no longer face true costs associated with service in their area).

    - The benefits of consolidation: costs for operations such as billing and customer service are spread over a larger customer base, helping to stabilize rates and revenues, improve affordability, plan for future infrastructure, and streamline administration.

    - The disadvantages of consolidation: by weakening price signals in high water cost areas, rate consolidation undermines efficient water use and conservation. The true costs of providing water service may not be reflected in the local rates, encouraging overdevelopment in areas where the water is scarce and/or high cost. Additionally, unintended consequences, such as low-income communities subsidizing more affluent communities in a high cost area, could occur.

  In 1992, the CPUC ORA established guidelines to assess whether district consolidation requests by multi-district water utilities are reasonable.[11] They include:

    - Proximity of districts
    - Rate comparability, where no more than a 25% difference is seen or predicted
    - Similar sources of water supply
    - Similar operation of districts

  The guidelines further state that no districts should be combined for the purpose of having one district subsidize another. DWA raises this point, stating that consolidation is antithetical to CPUC's requirement of not having cross-subsidization when considering consolidation.

  In their draft report on balanced rate rulemaking, DWA recommended the 1992 guidelines be supplemented when the CPUC considers consolidation of water utilities, stating the CPUC should also examine:

    - Infrastructure condition
    - Whether the district and its customers can support the costs of improvements

- Whether rates continue to be reasonable
- Whether consolidation increases opportunities to secure state/federal grants for improvements
- Reaction of affected customers

- **Rate Regionalization/Consolidation.** The CPUC has allowed Class A multi-district water companies to use ratepayer funds to subsidize customers in high cost areas. This practice is called “regionalization” or “consolidation of rates.” However, it can be difficult to determine when subsidization is justified, as low-income customers in a low cost area may subsidize higher-income customers in a high cost area. When allowed, this subsidization has been implicit, with many ratepayers unaware of the policy.

- **Rate Design.** Current rate design is based upon tiered rate structures tied to average water consumption in the district. "Tiered rates" refers to a billing structure where the rates change based on volume of usage. The lowest tier is the lowest rate charged. As usage increases the rates charged increases in each "tier" of usage. DWA recommended the lowest tier be based upon median indoor water consumption by customers in that district.

- **Ratepayer Relief Programs.** These programs can include rate relief for all customers or only those qualifying as low-income.

    - Low-Income Rate Assistance (LIRA) programs. Varying discounts are provided to ratepayers of Class A water utilities if they meet low-income eligibility criteria. For the most part, these discounts are funded by non-participating ratepayers. For small water utilities, this may not be an option.

    - Rate Support Fund (RSF), which is unique to Cal Water, is an explicit intra-utility cross-subsidization program that offers relief to customers in Cal Water's high cost areas. Cal Water identified three high-cost districts, and collects surcharges from all ratepayers to fund the program. All customers in a high cost district, regardless of income, receive the RSF discount.

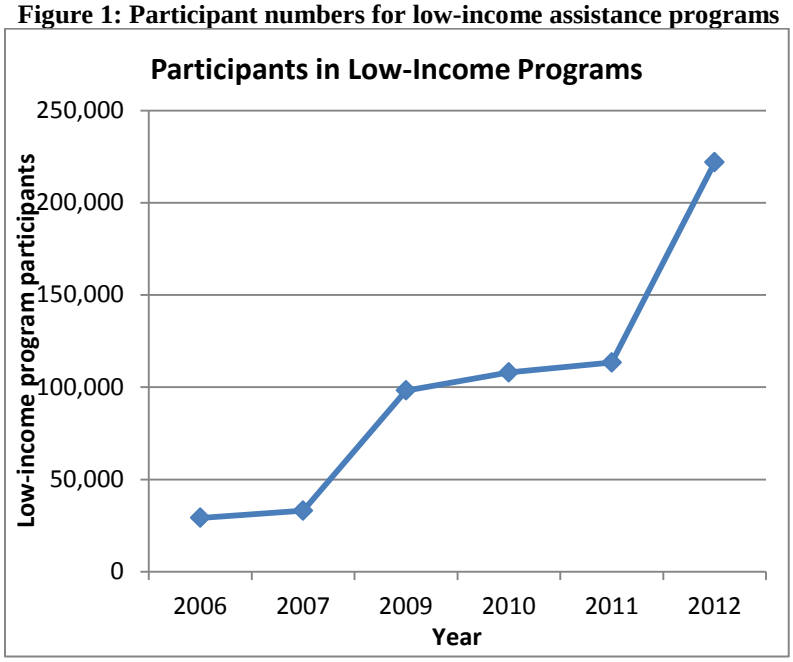
C. CPUC Approved Class A Utility Low-Income Water Rate Assistance Programs

Currently, only the Class A water utilities are authorized by the CPUC to offer LIRA programs. As of October 2012, an estimated 221,940 residential water customers participated in the assistance programs, approximately 3.7% of the population served by CPUC-regulated water utilities.

Many customers were unaware of the water utilities’ programs, and participation was dismally low compared to similar programs in place at large energy utilities. However, as of 2012, CPUC required large water and energy utilities to exchange data on participating low-income customers and enroll the other utility’s eligible customers after an opportunity to opt-out. Implementation of this auto-enrollment policy markedly increased participation in the low-income programs in 2012, as evidenced by a 95% increase over 2011 numbers (Figure

1). This is a considerable improvement over the estimated 15.2% participation rate in 2006. As energy utilities report 90% participation of eligible low-income households in their programs, data sharing has enabled water utilities to benefit from energy utilities' extensive outreach efforts.

Figure 1: Participant numbers for low-income assistance programs



With the implementation of the auto-enrollment program in 2012, the number of low-income assistance program participants increased by 95% from 2011 (from 113,360 to 221,940).

D. How Does the CPUC Design and Approve Low-Income Discounts Programs for Class A Water Utilities?

Discounts available to qualifying low-income customers vary widely among Class A utilities, ranging from percentage-based to flat dollar discounts on the ratepayer's bill (Table 4). Within the percentage-based discount programs, the relief can be tied to monthly service charges (15-50% off) or the total bill (15% off). Flat discounts are based upon the total bill and range from $6.50-$25.50. With the exception of California American's discount of $25.50 in the Toro area of its Monterey district, **most of these subsidies are less than $10 and may not sufficiently address affordability.**

Furthermore, surcharges levied upon non-participating customers (i.e., those not eligible for rate relief programs) are not standardized. They range from flat surcharges of $0.04-$6.07 per month to usage-based surcharges of $0.014-$0.156 per ccf (100 cubic feet, ccf). The Golden State Water Company utilizes different surcharges across its three regions, while Cal Water uses either flat or usage-based surcharges dependent upon customer type. Some companies (Great Oaks Water Company and San Gabriel Valley Water Company) say they do not levy surcharges upon their non-participating customers, although that would imply that they are expending shareholder revenues in lieu of charges on non-participating customers.

Table 4: Low-income assistance programs offered by CPUC-regulated water utilities

Water utility	Assistance program discount	Surcharge to non-participating customers
Apple Valley Ranchos	$6.69 on total bill	$0.61/month
California American	$7-$25.50 on monthly bill (varies by district)	None currently
California Water	50% on monthly service charge ($3-$10)	Metered: $0.0626/ccf Flat rate: $2.07-$2.38
Golden State	$3-$17 on monthly bill (varies by district)	Region 1: $0.054/ccf; Region 2: $0.156/ccfl; Region 3: $0.082/ccf; Region 1 flat rate: $1.96
Great Oaks	50% on bi-monthly service charge ($9-$14)	None currently
Park	$6.65 on total bill	$6.07/month
San Gabriel Valley	50% on monthly service charge (~$5-$8)	None currently
San Jose	15% on total bill (~$9)	$1.15/month
Suburban	$6.50 on total bill	$0.014/ccf
Valencia	50% on monthly service charge (~$4-$6)	$0.04/month

It is unclear how the CPUC approves the low-income assistance programs, what the CPUC takes into account when it approves these program (such as the estimated number of eligible customers, the size of the customer base), or why the low-income assistance programs are inconsistent.

E. Should the CPUC Authorize Low-Income Discounts Programs for Smaller Water Utilities?

Using various estimates, ~300,000 customers are served by Class B, C, and D water utilities. A 2007 DWA analysis estimated that in these areas, 23.6% of households and 31.2% of families could be considered low-income.[12] Therefore, about 70,000 to 95,000 Class B, C, and D utility customers (0.18-0.25% of California's population) may be eligible for assistance.

With such a low number of potential eligible ratepayers, the costs of administering low-income programs might not be feasible because with small numbers of customers, providing a discount to low-income customer may have a significant impact on the bills paid by non-participating ratepayers.

V. OTHER MECHANISMS MAY HELP MAINTAIN WATER AFFORDABILITY IN CALIFORNIA

Water utilities may qualify for State and Federal grants and low interest loans from regulatory agencies to make infrastructure improvements to meet water quality requirements. Low-income households may qualify for assistance programs available from federal agencies. Specifically:

- State loans and grants. The California Department of Public Health (CDPH) Drinking Water Program[13] provides assistance for the planning and construction of improvements to publicly and privately owned community water systems and nonprofit, non-community water systems for eligible public health projects. Eligible project types include treatment

works, transmission and distribution, source, and storage projects.The Drinking Water Program provides support for small water systems for improving technical, managerial, and financial capacity and provides funding opportunities for water system improvements. Zero interest loans up to $20 million and 100% grant funding for severely disadvantaged communities are available.

Water utilities can also use Prop 50 funds (from the Water Security, Clean Drinking Water, and Coastal and Beach Protection Act of 2002) at no cost for investments in supply, treatment, and security.

It is unclear whether CPUC-regulated water utilities have utilized the CDPH Drinking Water Program, or Prop 50 funds. It is also unclear whether the CPUC has encouraged water companies to use these programs for infrastructure improvements to help reduce the impact of rate increases.

- The California Water Action Plan[14] issued by the California Department of Water Resources states that "All Californians have a right to safe, clean, affordable and accessible water adequate for human consumption, cooking, and sanitation purposes." The plan identifies steps to craft more sustainable water policies. The Governor's 2014-15 Budget Proposal allocates $619 million to support the plan's efforts, with one key objective being the improvement of drinking water in communities where existing supplies are substandard. This funding could potentially provide additional assistance to ratepayers suffering from rate increases if the rate increases are caused by infrastructure improvements necessary for safe drinking water.

- Low-Income Home Energy Assistance Program (LIHEAP). This is a federal assistance program. LIHEAP funds cannot be used to pay water bills, with an exception being water used for air conditioning. LIHEAP grantee agencies may authorize use of funds for water bills in such cases, but are not required to do so.

- US Department of Housing and Urban Development (HUD). HUD offers a utility allowance program where a qualified low-income ratepayer living in public housing can obtain federal assistance for water services. Utility allowances can be small or large, ranging from less than $10 to over $200 for a residential household per month, depending on the public housing agency, the number of utilities and uses covered, and the dwelling unit and/or household size.

- Dissolving a water company. Another possible option could be for the CPUC to take steps to dissolve a water company if water services could be taken over by a public district or local government. This may facilitate eligibility for assistance from local, state, and federal programs.

VI. IS A STATE-WIDE LOW-INCOME RATE ASSISTANCE PROGRAM NEEDED?

A state-wide low-income water rate assistance program could be a valuable asset to California ratepayers. Standardized discounts (to low-income ratepayers) and surcharges (to non-participating customers) would increase transparency and eliminate the convoluted patchwork of existing LIRA programs. However, many complicating factors could derail implementation of such an initiative, and these are outlined below.

1. Who would administer the program, and at what cost? Should administration be conducted by the utilities or through a centralized mechanism? Smaller utilities might face large administration costs if required to implement their own programs.

2. What would be a fair and appropriate discount? The water bills for customers of different water utilities currently vary widely in terms of total dollar amounts and the location where customers reside vary widely in affordability. Should a percentage-based or flat discount be used? Should it be based on the total bill, the fixed service charge, or on water usage?

3. Should water affordability criteria be revised? If so, how many customers would be eligible and how would program administration costs change? Should water affordability criteria be a factor in the selection of a discount amount?

4. How would the program be funded?
    a. Would it be a surcharge to non-participating customers? Should it be a flat surcharge tied to meter size? A usage-based surcharge? A percentage of their total bill? This must be a fair and appropriate surcharge and not collect more than needed for the program.
    b. Could monies be collected from private charities? For example, the Sacramento Department of Utilities offers an assistance program financed through donations to the Salvation Army. Additionally, San Francisco Water collects private donations for its Community Assistance Program, which provides a water/sewer bill discount and a conservation evaluation.
    c. Should a program be limited to only customers of regulated utilities (i.e., 16% of the state population) or should a state-wide program be available to all low-income and disadvantaged customers?
    d. Should a statewide program be funded from the General Fund rather than a subset of ratepayers?

5. Could extension of a LIRA program to Class B, C, and D utilities be both fair to eligible ratepayers **and** cost-efficient for the water utility?

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[2] PSA 26, Area Agency on Aging of Lake & Mendocino Counties. 2012-2016 Area Plan for Aging Services. http://www.co.lake.ca.us/Assets/Social+Services/AAA/Docs/12-16AP.pdf
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