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MENDOCINO COUNTY

EMPLOYEES' RETIREMENT ASSOCIATION 625-B KINGS COURT UKIAH, CALIFORNIA 95482-5027

Date: April 19, 2017
To: Board of Retirement

From: James Wilbanks, Retirement Administrator Subject: Actuarial Practices and Funding Policy Draft

Attached you will find several documents for your consideration. The first document is a draft "Actuarial Practices and Funding Policy" in redline format. The changes to this document are made from the Board's existing "Statement of Actuarial Funding Policy". You will see markup in several different colors due to the fact that this proposed policy is the result of work by both staff and Segal Consulting. Legal counsel was also involved in the review of the proposed policy. This proposed policy is intended to implement the recommendations from the UAAL Analysis Report provided to the Board in late 2016.

The second document in the following materials is a clean version of the proposed policy, which may be easier to review. This document is provided for your convenience and is the result of the changes in the redline version of the policy.

The next two documents are Best Practices recommended by the Government Finance Officers Association (GFOA). These documents are provided for your reference and you may notice some of the language in the proposed policy looks very similar to language contained in the GFOA Best Practices recommendations.

The proposed policy makes no substantive changes to the existing "Statement of Actuarial Funding Policy" in regards to the actuarial funding policy. For the actuarial practices the only material difference between the proposed policy and the recommendations in the UAAL Analysis, and the GFOA Best Practice recommendations, is conducting an actuarial audit on a six year cycle instead of a five year cycle. As indicated in the proposed policy, the reason for a six year frequency for the conduct of actuarial audits is to align the timing with the triennial experience study. This frequency of actuarial audits is utilized by other 1937 Act plans and is a reasonable change to the GFOA Best Practice recommendation in order to fully achieve the objectives of an actuarial audit.

I recommend the Board adopt the proposed policy.

I. PURPOSE AND BACKGROUNDIntroduction

The purpose of this Statement of Actuarial Practices and Funding Policy is to record the funding objectives and policies and other actuarial practices set by the Board of Retirement (Board) for the Mendocino County Employees Retirement Association (MCERA). The Board establishes this Statement of Actuarial Practices and Funding Policy to help ensure future benefit payments for members of MCERA. In addition, this document records certain policy guidelines established by the Board to assist in administering MCERA in a consistent and efficient manner in accordance with current best practices in defined benefit pension administration.

This Statement of Actuarial Funding Policy supersedes any previous statements. It is a working document and may be modified as the Board deems necessary.

This Actuarial Practices and Funding Policy is a working document and may be modified as the Board deems necessary. The Funding goals and elements are outlined in Section II and the Actuarial Practices are outlined in Section III.

A. Goals of Actuarial Funding Policy

- 1. To achieve long-term full funding of the cost of benefits provided by MCERA;
- 2.1. To seek reasonable and equitable allocation of the cost of benefits over time; and,
- 3.1.To minimize volatility of the plan sponsor's contribution to the extent reasonably possible, consistent with other policy goals.

B.A. Funding Requirement and Actuarial Funding Policy Components

MCERA's annual funding requirement is comprised of a payment of the Normal Cost and a payment on the Unfunded Actuarial Accrued Liability (UAAL). The Normal Cost and the amount of payment on UAAL are determined by following three components of this funding policy:

- 1. Actuarial Cost Method: the techniques to allocate the cost/liability of retirement-benefit to a given period:
- 2.1. Asset Smoothing Method: the techniques that spread the recognition of investment gains or losses over a period of time for the purposes of determining the Actuarial Value of Assets used in the actuarial valuation process; and
- 3.1. Amortization Policy: the decisions on how, in terms of duration and pattern, toreduce the difference between the Actuarial Accrued Liability and the Valuation-Value of Assets in a systematic manner.

II. ACTUARIAL FUNDING POLICY GUIDELINES

A. Goals of Actuarial Funding Policy

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- 3. Amortization Policy: the decisions on how, in terms of duration and pattern, to reduce the difference between the Actuarial Accrued Liability and the Valuation Value of Assets in a systematic manner.

The Board adopts the following policies regarding its actuarial funding policy.

C.Actuarial Cost Method

The Entry Age¹ actuarial cost method shall be applied to the projected retirement benefits in determining the Normal Cost and the Actuarial Liability.

D. Asset Smoothing Method

The investment gains or losses of each valuation period, as a result of comparing the actual market return and the expected return on Valuation Value of Assets, shall be recognized in level amount over 5 years in calculating the Actuarial Value of Assets. Deferred investment gains or losses cannot exceed 25% of the Market Value of Assets.

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¹ This method has had historically also been referred to as the Entry Age Normal method but following recent-guidance from both GASB and the California Actuarial Advisory Panel, it is currently referred to as the Entry Age actuarial cost method in this policy.

The Board acknowledges the occasional need for an reserves the right to consider future ad-hoc adjustments to the asset smoothing method to achieve a more level pattern of recognition of the net deferred investment gains or losses after a period of significant market change followed by a period of market correction, upon receiving the necessary analysis from its actuary.

E. Amortization Policy

- 1. The UAAL (i.e., the difference between the Actuarial Accrued Liability and the Valuation Value of Assets), as of June 30, 2012 shall continue to be amortized over its declining 30-year schedule (with 27 years remaining as of June 30, 2012);
- 2. Any new UAAL as a result of actuarial gains or losses identified in the actuarial valuations as of June 20, 2013 or later will be amortized over a period of 18 years;
- 3. Any new UAAL as a result of change in the actuarial assumptions or methods, effective with the actuarial valuation as of June 2013 or later will be amortized over a period of 18 years;
- 4. Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis:
 - a. With the exception noted in b. below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years;
 - b. The increase in UAAL resulting from a temporary retirement incentive will be funded over 5 years;
- 5. UAAL shall be amortized over "closed" amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation;
- 6. UAAL shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of estimate covered payroll, based on the current actuarial assumption for general payroll increase;
- 7. In addition to the UAAL contribution rate, an amortization amount equal to the UAAL contribution rate times the covered payroll (as estimated in the actuarial valuation that establishes such UAAL contribution rate) shall be calculated for each employer. The final UAAL payment by each employer shall be equal to the UAAL contribution rate times the actual covered payroll or the above amortization amount, if greater; and,
- 8. If an overfunding exists (i.e., the total of all UAA: becomes negative so that there is a surplus and the amount of such surplus is in excess of 20% of the AAL per

Section 7522.52 of CalPEPRA), such actuarial surplus and any subsequent surpluses will be amortized over an "open" amortization period of 30 years. Any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL: will be amortized as the first of a new series of amortization layers, using the above amortization periods.

F. Other Policy Considerations

1. Lag between Date of Actuarial Valuation and Date of Contribution Rate Implementation

In order to allow the employer to more accurately budget or pension contributions and for other practical considerations, the contribution rates determined in each valuation (as of June 30) will apply to the fiscal year beginning 12 months after the valuation date. However, the UAAL contribution rates in the current actuarial valuation are adjusted to account for the delay in implementing any changes in contribution rates during this 12-month period.

Any change in contribution rate requirement that results from plan amendment is generally implemented as of the effective date of the plan amendment or as soon as administratively feasible.

2. Actuarial Assumptions Guidelines

The actuarial assumptions directly affect only the timing of contributions; the ultimate contribution level is determined by the benefits and the expenses actually paid offset by the actual investment returns. To the extent that actual experience deviates from the assumptions, experience gains and losses will occur. These gains (or losses) then serve to reduce (or increase) the future contribution requirements.

Actuarial assumptions are generally grouped into two major categories:

- a. Demographic assumptions including rates of withdrawal, service retirement, disability retirement, mortality, etc.
- b. Economic assumptions including price inflation, wage inflation, investment return, salary increase, etc.

The actuarial assumptions represent the Board's reasonable estimate of anticipated experience under MCERA and are intended to be long term in nature. Therefore, in developing the actuarial assumptions, the Board considers not only past experience but also trends, external forces and future expectations.

3. Glossary of Terms

a. Actuarial Funding Method – A technique to allocate present value of

projected benefits among past and future periods of service.

- **b.** <u>Actuarial Accrued Liability</u> The portion of the present value of projected benefits that is attributed to past service by the actuarial funding method.
- **c.** <u>Normal Cost</u> The portion of the present value of projected benefits that is attributed to current service by the actuarial funding method.
- **d.** Entry Age Actuarial Cost Method A funding method that calculates MCERA's Normal Cost as a level percentage of pay over the working lifetime of the plan's members.
- e. Actuarial Value of Assets The market value of assets less or plus the deferred investment gains or losses not yet recognized by the asset smoothing method.
- e.f. <u>Actuarial-Valuation Value of Assets</u> The value of assets used in the actuarial valuation to determine contribution rate requirements. It is equal to the Actuarial Value of Assets reduced by the value of any non-valuation reserves.
- **f.g.** Unfunded Actuarial Accrued Liability The portion of the Actuarial Accrued Liability that is not currently covered by plan assets. It is calculated by subtracting the Actuarial Accrued Liability from the Valuation Value of Assets.
- g.h. Valuation Date June 30 of every year.

III. ACTUARIAL PRACTICES

The Board adopts the following actuarial practices:

A. Actuarial Valuation

The actuarial valuation report is an important document as it is the basic source document for information regarding actuarially determined contributions and the funded status of pension plans. The actuarial valuation report, prepared in accordance with Actuarial Standards of Practice (ASOP), is even more critical with the implementation of GASB Statement No. 68, Accounting and Financial Reporting for Pensions, because funding information for pensions is no longer automatically be provided in financial reports prepared by the employer. That is, the actuarial valuation report is the sole source of information for many financial decision makers desiring to make informed decisions about the funding of pension benefits.

The Board will direct the consulting actuary to produce an actuarial valuation report on an annual basis after the end of the plan's fiscal year on June 30 annually. The actuarial valuation report shall be based upon the membership and position of the plan

as of the end of the fiscal year.

When a new consulting actuary is engaged by the Board, the new consulting actuary shall perform a full replication of the previous actuarial valuation to establish a comparative baseline.

B. Experience Study

An actuarial experience study reviews the differences between the assumed and actual experience over multiple years with the goal of examining the trends related to actual experience and recommending changes to assumptions, if needed.

The reliability of an actuarial valuation depends on the use of reasonable methods and assumptions. Actuarial experience studies can help to ensure the assumptions are in line with the plan's demographic and economic experience, or can be used as a guide to make necessary changes.

The Board will direct the consulting actuary to conduct an actuarial experience study at least once every three years.

C. Actuarial Audit

Due diligence requires that pension plan fiduciaries and plan sponsors exercise prudence in selecting service providers such as actuaries, and monitor the quality of their work. An actuarial audit is a valuable tool for monitoring the quality of actuarial services performed on behalf of the pension plan. An actuarial audit involves engaging the services of an outside actuary (reviewing actuary) to scrutinize the work of the plan's consulting actuary.

The Board will provide for an actuarial audit at least once every six years. The frequency is utilized so that an actuarial audit is conducted after the completion of the triennial experience study. This cycle provides a better basis for auditing and evaluating the work of the consulting actuary.

IV. POLICY REVIEW

This Policy is subject to change in the exercise of the Board's judgment. The Board shall review this Policy Charter at least once every five years to ensure that it remains relevant and appropriate and consistent with state and federal laws and regulations. In the event of legislative changes to the pertinent sections addressed in the Policy, the Board will review the Policy as appropriate.

V. POLICY HISTORY

This policy supersedes the "Statement of Actuarial Funding Policy" adopted by the Board on

July 17, 2013.

The Board adopted this policy on April 15, 2017.



I. PURPOSE AND BACKGROUND

The purpose of this Actuarial Practices and Funding Policy is to record the funding objectives and policies and other actuarial practices set by the Board of Retirement (Board) for the Mendocino County Employees Retirement Association (MCERA). The Board establishes this Actuarial Practices and Funding Policy to help ensure future benefit payments for members of MCERA. In addition, this document records certain policy guidelines established by the Board to assist in administering MCERA in a consistent and efficient manner in accordance with current best practices in defined benefit pension administration.

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IV. POLICY REVIEW

This Policy is subject to change in the exercise of the Board's judgment. The Board shall review this Policy at least once every five years to ensure that it remains relevant and appropriate and consistent with state and federal laws and regulations. In the event of legislative changes to the pertinent sections addressed in the Policy, the Board will review the Policy as appropriate.

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The Board adopted this policy on April 19, 2017.



Sustainable Funding Practices for Defined Benefit Pensions and Other Postemployment Benefits (OPEB)

Best Practice Background:

The fundamental financial objective of government employers that offer defined benefit (DB) pensions and other postemployment benefits (OPEB) to their employees is to fund the long-term cost of the benefits promised to participants. It is widely acknowledged that the appropriate way to attain reasonable assurance that benefits will remain sustainable is for a government to accumulate resources for future benefit payments in a systematic and disciplined manner during the active service life of the benefitting employees.

Long-term funding is accomplished through contributions from the employer and employee, and from investment earnings, which typically provide the largest component of funding. Contributions often are expressed as a percentage of active member payroll, which should remain approximately level from one year to the next. A funding policy for benefits offered codifies the government's commitment to fund benefit promises based on regular actuarial valuations. Creating a funding policy that embodies this funding principle is a prudent governance practice and helps achieve intergenerational equity among those who are called on to financially support the benefits, thereby avoiding the transfer of costs into the future.

Recommendation:

GFOA recommends that government officials ensure that the costs of DB pensions and OPEB are properly measured and reported. Sustainability requires governments that sponsor or participate in DB pension plans, or that offer OPEB, to contribute the full amount of their actuarially determined contribution (ADC) each year. Failing to fund the ADC during recessionary periods impairs investment returns by providing inadequate funds to invest when stock prices are low. As a result, long-term investment performance will suffer and ultimately require higher contributions.

Public officials and associated trustees should, at a minimum, adhere to the following best practices for sustaining DB pension plans and OPEB, as applicable:

1. Adopt a funding policy with a target funded ratio of 100 percent or more (full funding). The funding policy should provide for a stable amortization period over time, with parameters provided for making changes based on specific circumstances. The amortization period for the unfunded actuarial accrued liability should be consistent with the funding policy.

- 2. Discuss the funding and amortization methods with the government's actuary and select the one most closely aligned with the government's funding policy. The actuarial funding method selected is a key component of the funding policy for the offered benefits. Some funding methods may result in greater variation in the ADC (the portion of the present value of projected benefits that is attributable to the current period) than others. Governments should take measures to reduce the volatility in the ADC in order to create a more predictable operating budget and enhance their ability to meet their funding obligations.
- 3. The funding policy should stipulate that employer and employee contributions are to be made at regular intervals, with the contribution amount determined by the results of a recent actuarial valuation of the system. To ensure that this objective can be achieved, the funding policy should be integrated with investment and asset allocation policies. Reductions or postponements in collecting the ADC would typically be inconsistent with the assumptions made in computing the ADC. When contributions fall below the ADC, the board of trustees should prepare a report that analyzes the effect of the underfunding and distribute that report to all stakeholders.
- 4. Have a qualified actuary prepare an actuarial valuation³ at least biennially, in accordance with generally accepted actuarial principles. Each valuation should include a gain/loss analysis that identifies the magnitude of actuarial gains and losses, based on variations between actual and assumed experience for each major assumption.
- 5. Have an actuarial experience study⁴ performed at least once every five years and update actuarial assumptions as needed. Assumptions that should be carefully reviewed include the long-term return on assets, salary growth, inflation, mortality tables, age eligibility, and any anticipated changes in the covered population of plan participants. As part of this review, assess the overall risk of the assumptions to ensure that what may have been determined to be an acceptable level of risk in any one area has not been compounded.
- 6. Have an independent actuary perform a comprehensive actuarial audit of the actuarial valuations⁵ at least once every five to eight years. The purpose of such a review is to provide an independent assessment of the reasonableness of the actuarial methods and assumptions in use and the validity of the resulting actuarially computed contributions and liabilities. Actuarial assumptions should be carefully reviewed, discussed with outside experts (including investment advisors), and explicitly approved by the governing body.
- 7. Communicate plan status and activities by preparing and widely distributing a comprehensive annual financial report (CAFR) covering the retirement system, and distribute summary information to all plan participants. The CAFR should be prepared following GFOA's guidance for the preparation of a public-employee retirement system CAFR.

GFOA recommends the following options to reduce ADC volatility:

1. Smoothing returns on assets. Smoothing investment returns over several years recognizes that investment portfolio performance fluctuates, and only by coincidence will it exactly equal the assumed actuarial rate of return for any given year. This approach reduces the volatility within the calculation of the ADC. A smoothing period is used to balance the need for a longer-term investment horizon with the short-term market fluctuations in the

value of assets. While the smoothing period is typically about five years, it can be longer, if controls are in place to assure that any variation between the market value and actuarial value of assets does not become too large. A common approach is to establish corridors around the market value of assets that stipulate the maximum percentage by which the actuarially smoothed value will be allowed to deviate from actual market value. Once a smoothing method is established, the governing board should adhere to it and avoid making arbitrary changes to the methodology.

- 2. Diversifying the investment portfolio to reduce volatility in investment returns. Diversifying assets across and within asset classes is a fundamental risk management tool that also has the effect of reducing the fluctuations in ADC volatility. Although annual changes in the ADC are affected by numerous factors, the most significant is usually investment return. Retirement systems should periodically conduct asset-liability studies for use in reviewing their asset allocation policies. The risk of investment strategies should also be assessed as well as an evaluation of any management fees associated with investment strategies utilized. (See GFOA's Best Practice, "Asset Allocation for Defined Benefit Plans," 2009).
- 3. *Managing investment returns long term*. Because the investment return assumption is an average long-term expected rate of return, excess earnings in any one year will likely be offset by lower-than-expected rates of return in a future year. Thus, any program that is derived from an excess-earnings concept is detrimental to the funded status of the plan.
- 4. *Managing growth in liabilities*. All benefit increases for members and beneficiaries should be carefully considered, appropriately approved, and consistent with applicable Internal Revenue Service requirements. Whether cost of living adjustments (COLAs), benefit formula enhancements, or postretirement benefit increases, a clear strategy should be developed that integrates benefit enhancements with the funding policy. Further, all benefit enhancements and COLAs should be actuarially valued and presented to the appropriate governing bodies before they are adopted so the effect of the benefit enhancements on the fund's actuarial accrued liability, funded ratio, and contribution rates is fully understood. This step will help ensure that the goals of fully funding member benefits and financial sustainability are achieved. If a benefit enhancement is being considered, a source of funding should be identified that can support the enhancement over the long term.

To further ensure sustainable funding practices, design the plan to prevent calculation abuses of retirement benefit enhancements such as salary spiking, and any other ethical violations. These violations can create negative public perceptions that are harmful to all participants and can adversely affect the sustainability of the system. Policies to safeguard against ethical violations and benefit calculation abuses should be considered.

Notes:

- 1. GFOA recommends that a pension funding policy use a fixed (closed) amortization method so that the entire liability would be fully amortized at the end of a set duration, e.g., 25 years. See GFOA Best Practice, "Core Elements of a Funding Policy," 2013.
- 2. The use of projected unit credit method typically would not be consistent with the goal of level funding.
- 3. The purpose of an actuarial valuation is 1) to determine the amount of actuarially determined contributions (i.e., an amount that, if contributed consistently and combined with investment earnings, would be

- sufficient to pay promised benefits in full over the long-term) and 2) to measure the plan's funding progress.
- 4. An actuarial experience study reviews the differences between a plan's assumed and actual experience over multiple years (typically 3 to 5), with the goal of examining the trends related to actual experience and recommending changes to assumptions, if needed.
- 5. Because the reliability of an actuarial valuation depends on the use of reasonable methods and assumptions, a comprehensive audit of the actuarial valuations is conducted to review the appropriateness of the actuarial methods, assumptions, and their application.

References:

- Financing Retirement System Benefits, Richard G. Roeder, GFOA, 1987.
- Pension Accounting and Reporting, Second Edition, William R. Schwartz, GFOA, 1995.
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Enhancing Reliability of Actuarial Valuations for Pension Plans

Best Practice Background:

The actuarial valuation is the primary service that state and local government pension plans engage actuaries to provide, determining the contributions estimated to be necessary for funding the plan's benefits and providing information about the plan's current funded status. The actuarial valuation is also the foundation for calculating the accounting information presented in the plan's annual financial report (although calculations for funding purposes and calculations for accounting and financial reporting purposes differ).

Actuaries also provide other services that can help decision makers gauge the reasonableness of the assumptions used and of the risks assumed by the plan, thereby allowing them to identify changes that may be needed to maintain the plan's solvency. These services, which are not part of the baseline valuation, are needed to enhance the reliability of the valuation and thereby ensure that the plan is properly funded.

Recommendation:

Because actuarial information directly affects the funded level and sustainability of pension plans, the GFOA urges pension plan fiduciaries to take the following steps to obtain additional information that will enhance the reliability of their actuarial valuations:

- 1. Ensure that all of the information the pension fund provides to the actuary is both accurate and up to date. Include the following information:
 - **Census data.** This is information such as birth dates, hire dates, gender, pay, member contributions, and other data related to active and retired members and used in the valuation.
 - Changes to plan provisions and plan administrative procedures. This is information such as changes to the plan's benefit provisions, actuarial factors, special benefit calculations, 2 investment policy, capital market expectations, or related risks.
- 2. Engage the actuary to perform additional services, to validate the actuarial assumptions used for the valuation or to help the plan with risk management strategies and future trends forecasting. Such services include:

- Actuarial Gain/Loss Analysis. An actuarial gain/loss analysis which determines the gain or loss arising from the difference between estimates and actual experience can help plan administrators better understand the differences between the plan's assumptions and its actual experience with pay increases, investment returns, incidence of retirement, withdrawal from employment, and other assumptions. An actuarial gain/loss analysis is typically done over a single year and may be included in the actuarial valuation.
- Actuarial Experience Study. While an actuarial gain/loss analysis helps provide a better understanding of a plan's assumed and actual experience during the year, this timeframe is not long enough to identify trends. An actuarial experience study reviews the differences between a plan's assumed and actual experience over multiple years (typically 3 to 5), with the goal of examining the trends related to actual experience and recommending changes to assumptions, if needed.3
- Actuarial Projections. Public pension plans face a variety of risks, including investment losses, mortality improvements, and contributions that are lower than what is required to fund benefits. Projections can be used to examine these (and other) risks by building mathematical models of the plan and projecting the plan's funded status, investment returns, or contributions under different scenarios. This helps decision makers understand the plan's dynamics, the likelihood of adverse outcomes, and the effectiveness of proposed changes.
- **Asset/Liability Study.** Like an actuarial projection, an asset/liability study models and projects the plan's future assets and liabilities under various scenarios. However, asset/liability studies differ from projections in that they focus more on the risks associated with the plan's asset allocation and investment performance. Asset/liability studies are often used for examining changes to asset allocations or testing potential approaches to managing investment risks.
- Sensitivity Analysis. This is a type of actuarial projection that measures the effect of a change in actuarial assumptions on the plan's funded status or required contributions.
- Analysis of Proposed Benefit Changes. In considering benefit changes, decision makers
 need to understand the potential cost implications of the changes before they are enacted.
 Consequently, an actuarial analysis of proposed benefit changes is strongly recommended
 before changes are approved. In addition to estimating the changes in costs, the analysis
 can also provide insight into potential related changes in participant behavior (i.e.,
 retirement rates).

Notes:

¹ For additional information on the actuarial report, see the GFOA best practice, <u>The Role of the Actuarial Valuation Report in Plan Funding</u> (2013)

² Special benefit calculations would include optional forms of payment (e.g., joint and survivor annuities, period certain annuities,), early retirement benefits, partial lump sum distributions, divorce orders, IRC 415 limits, and service purchase calculations.

³ The GFOA recommends that an actuarial experience study be performed at least every five years. (*See The Role of the Actuarial Valuation Report in Plan Funding*).

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