STATEMENT OF ADDITIONAL INFORMATION

May 1, 2023

PACIFIC HARBOR VUL

PACIFIC SELECT EXEC SEPARATE ACCOUNT

Pacific Harbor VUL is a flexible premium variable universal life insurance policy issued by Pacific Life Insurance Company.

This Statement of Additional Information (SAI) is not a prospectus and should be read in conjunction with the Policy's prospectus, dated May 1, 2023, which is available without charge upon written or telephone request to Pacific Life or at www.PacificLife.com. Terms used in this SAI have the same meanings as in the prospectus, and some additional terms are defined particularly for this SAI. This SAI is incorporated by reference into the Policy's prospectus.

Pacific Life Insurance Company P.O. Box 2030 Omaha, NE 68103 (800) 800-7681

GENERAL INFORMATION AND HISTORY

How We Are Organized

Pacific Life was established on January 2, 1868 under the name, Pacific Mutual Life Insurance Company of California. It was reincorporated as Pacific Mutual Life Insurance Company on July 22, 1936. On September 1, 1997, Pacific Life converted from a mutual life insurance company to a stock life insurance company. Pacific Life redomesticated to Nebraska on September 1, 2005. Pacific Life is a subsidiary of Pacific LifeCorp, a holding company, which in turn is a subsidiary of Pacific Mutual Holding Company, a mutual holding company.

Modified Endowment Contract

A life insurance policy will become a Modified Endowment Contract if the sum of premium payments made during the first seven contract years, less a portion of withdrawals, exceeds the seven-pay limit defined in Section 7702A of the Internal Revenue Code. You will find a detailed discussion of Modified Endowment Contracts in VARIABLE LIFE INSURANCE AND YOUR TAXES in the prospectus.

Unless you have told us in writing that you want your Policy to become a Modified Endowment Contract, we will remove all or part of the premium payment from your Policy as of the day we applied it and return it to you. We will also adjust the Death Benefit retroactively to that date to reflect the reduction in premium payments. If we receive such a premium within 30 days before your Policy Anniversary, we will hold it and apply it to your Policy on the Policy Anniversary.

- there is no more Accumulated Value in the Investment Option you are transferring from
- your Policy enters the Grace Period and is in danger of lapsing
- we receive your Written Request to cancel the service
- we discontinue the service.

Portfolio Rebalancing

The portfolio rebalancing service automatically transfers your Policy's Accumulated Value among the Variable Investment Options according to your original percentage allocations. Here is how the service works:

- You can set up this service at any time while your Policy is In Force.
- You enroll in the service by completing a request form to enroll in the service.
- Unless you choose a different start date, your first rebalancing will take place at the end of the Business Day we receive your request. Subsequent rebalancing will take place at the end of the Business Day on

Fixed Option Interest Sweep

The Fixed Option interest sweep service allows you to make scheduled transfers of the accumulated interest earnings from any available Fixed Options to the Variable Investment Options. Here is how the service works:

- You can set up this service at any time while your Policy is In Force.
- You enroll in the service by sending us a Written Request.
- You may enroll by telephone or electronically if we have your completed telephone and electronic authorization on file.
- If you cancel this service, you must wait 30 days to begin it again.
- We do not charge for the Fixed Option interest sweep service, and we do not currently charge for transfers made under this service.
- We can discontinue, suspend or change the service at any time.
- Interest earnings transferred from any available Fixed Options to the Variable Investment Options are excluded from the transfer limitations.

Payments under the AIO program will begin as scheduled once we receive your signed AIO agreement form. We will send you a letter confirming the date and amount of the first income payment.

The income payments will usually remain constant during each *income period*, unless there is insufficient Net Cash Surrender Value to make a payment. The duration of each income period is one year, except that the first income period may differ depending on the following:

- If the AIO program start date is six months or more from your next Policy Anniversary, the income period will end on the next Policy Anniversary. In this case, the first income period will last at least six months, but not more than one year.
- If the AIO program start date is less than six months from your next Policy Anniversary, the income period will extend to the following Policy Anniversary. In this case, the first income period will last at least one year, but no more than 18 months.

After the first income period, and each year you remain in the AIO program, we will run an Illustration after each Policy Anniversary. The Illustration will generally be run at a rate chosen by you, not to exceed a gross annual rate of 12%. Your Policy must continue to have an illustrated Net Cash Surrender Value at the maturity date sufficient to meet the minimum Accumulated Value required to allow for payment of Policy charges, including Policy loan interest. There is no charge for Illustrations we run in connection with the AIO program. They do not count toward your one free Illustration per year.

We will send you a letter and the Illustration to notify you of any changes in your income payment amount or duration. The new income payment amount will be effective on the income payment date following the previous income period.

Over time, your Policy's actual performance, and perhaps your use of the Policy's options are likely to vary from the

The guaranteed rates include the insurance risks associated with insuring one person. They are calculated using 2017

insurance are reasonable under current laws, we cannot be sure that the IRS agrees with us. We can change our mortality charges if we believe the changes are needed to ensure that your Policy qualifies as a life insurance Policy.

Investor Control

For a variable life insurance policy to qualify for tax deferral, assets in the separate accounts supporting the Policy must be considered to be owned by the insurance company and not by the policy owner. Under current U.S. tax law, if a policy owner has excessive control over the investments made by a separate account, or the underlying fund, the policy owner will be taxed currently on income and gains from the account or fund. In other words, in such a case of "investor control" the policy owner would not derive the tax benefits normally associated with variable life insurance.

The application of the investor control doctrine is subject to some uncertainty. Generally, according to the IRS, there are two ways that impermissible investor control may exist. The first relates to the design of the Policy or the relationship between the Policy and a separate account or underlying fund. For example, at various times, the IRS has focused on, among other factors, the number and type of investment choices available pursuant to a given Policy, whether the Policy offers access to funds that are available to the general public, the number of transfers that a policy owner may make from one investment option to another, and the degree to which a policy owner may select or control particular investments.

With respect to this first aspect of investor control, we believe that the design of our Policies and the relationship between our Policies and the Funds satisfy the current view of the IRS on this subject, such that the investor control doctrine should not apply. However, because of some uncertainty with respect to this subject and because the IRS may issue further guidance on this subject, we reserve the right to make such changes as we deem necessary or appropriate to reduce the risk that your Policy might not qualify as a life insurance policy for tax purposes.

The second way that impermissible investor control might exist concerns your actions. Under case law and IRS guidance, you may not select or control particular investments, other than choosing among broad investment choices such as selecting a particular Fund. You may not select or direct the purchase or sale of a particular investment of a Fund. All investment decisions concerning the Fund(s) must be made by the portfolio manager for such Fund in his or her sole and absolute discretion, and not by the policy owner.

Furthermore, you may not communicate directly or indirectly with such a portfolio manager or any related investment officers concerning the selection, quality, or rate of return of any specific investment or group of investments held by a Fund.

Finally, the IRS may issue additional guidance on the investor control doctrine, which might further restrict your actions or features of the Policy. Such guidance could be applied retroactively. If any of the rules outlined above are not complied with, the IRS may seek to tax you currently on income and gains from a Fund such that you would not derive the tax benefits normally associated with variable life insurance. Although highly unlikely, such an event may have an adverse impact on the Fund and other Policies. We urge you to consult your own tax advisor with respect to the application of the investor control doctrine.

Comparison to Taxable Investments

With respect to taxable investments, current tax law generally provides for a maximum tax rate for individual taxpayers, or entities taxed at the individual level, of 20% on long-term capital gains and on certain "qualifying dividends" on corporate stock. The long-term capital gains rate does not apply to corporations. Corporations pay tax based upon the corporate tax rate, which, depending upon income, may be higher than the long-term capital tax rate for individuals. An individual taxpayer will also have to satisfy a more than 60-day holding period with respect to any distributions of qualifying dividends in order to obtain the benefit of the lower tax rate. Earnings from non-qualifying dividends, interest income, other types of ordinary income and short-term capital gains will be taxed at the ordinary income tax rate applicable to the taxpayer.

These rules mean that for policyholders who are individuals the tax-related advantage of life insurance compared to certain taxable investments is reduced because the tax burden applicable to long-term capital gains and from certain "qualifying dividends" on corporate stock may be less than the individual's ordinary income tax rate which is applied to taxable distributions from a life insurance Policy.

MORE ON THE POLICIES

Distribution Arrangements

Pacific Select Distributors, LLC (PSD), our subsidiary, acts as the distributor of the Policies. PSD is located at 700 Newport Center Drive, Newport Beach, California 92660. PSD is registered as a broker-dealer with the SEC and is a member of FINRA. We pay PSD for acting as distributor under a distribution agreement. We and PSD enter into selling agreements with broker-dealers whose life insurance producers are authorized by state insurance departments to sell the Policies.

The aggregate amount of underwriting commissions paid to PSD with regard to 2022, 2021 and 2020 was \$14,545,442.21, \$17,402,895.70, and \$7,595,994.82 respectively, of which \$0 was retained.

PSD or an affiliate pays various sales compensation to broker-dealers that solicit applications for the Policies. PSD or an affiliate also may provide reimbursement for other expenses associated with the promotion and solicitation of applications for the Policies. More information on commissions paid to broker-dealers is in the ABOUT PACIFIC LIFE – Distribution Arrangements section in the Prospectus.

We and/or an affiliate may pay additional cash compensation from their own resources in connection with the promotion and solicitation of applications for the Policies by some, but not all, broker-dealers.

As of December 31, 2022, the following firms have arrangements in effect with PSD pursuant to which the firms are entitled to receive a revenue sharing payment: AIG, Equitable Advisors LLC, Benefit Funding, CBIZ, Cadaret Grant

Performance

Performance information may appear in advertisements, sales literature, or reports to Policy Owners or prospective buyers.

Information about performance of any Variable Account of the Separate Account reflects only the performance of a