

Date of Hearing: April 27, 2022

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

AB 2868 (Choi) – As Amended April 7, 2022

**SUBJECT:** Year-round daylight saving time

**SUMMARY:** Would set California's standard time to year-round daylight saving time (DST), if the federal government authorizes such a change, as specified. Specifically, **this bill:**

- 1) Would provide effective immediately after federal law authorizes the state to apply year-round DST, the standard time within the state shall advance by one hour commencing at 2 a.m. on the second Sunday of the March following the effective date of the federal authorization.
- 2) Provides that the DST period will not end and will apply year-round.

**EXISTING LAW:**

- 1) Establishes, under federal law, the standard time of the United States for each of nine zones and advances the standard time of each zone by one hour during the period commencing at 2:00 a.m. on the second Sunday of March of each year and ending at 2:00 a.m. on the first Sunday of November of each year. Federal law does not allow a state to set its standard time to year-round DST without the approval of the federal government. (15 U.S. Code § 261-263);
- 2) Mandates that standard time within the state shall advance by one hour during the DST period commencing at 2 a.m. on the second Sunday of March of each year and ending at 2 a.m. on the first Sunday of November of each year. The Legislature may amend this section by a two-thirds vote to change the dates and times of the DST period, consistent with federal law. If federal law authorizes the state to provide for the year-round application of DST, the Legislature may amend this section by a two-thirds vote to provide for that application. (Government Code § 6808)

**FISCAL EFFECT:** Unknown. The bill is keyed fiscal and will be referred to the Assembly Committee on Appropriations for their review.

**BACKGROUND:**

*Daylight Saving Time in the United States* – DST has been used in the United States since World War I. On April 30, 1916, in an effort to conserve fuel needed to produce electric power, Germany and Austria advanced the hands of the clock one hour until the following October. Some countries followed suit immediately in 1916, others following later in 1917 and the U.S. formally adopted the plan in 1918. After the War ended, the law proved so unpopular in the U.S. that it was repealed in 1919 with a Congressional override of President Wilson's veto. DST became a local option, and was continued in only a few states and cities. During World War II, President Franklin Roosevelt instituted year-round DST, called "War Time," from February 9, 1942 to September 30, 1945.

From 1945 to 1966, there was no federal law regarding DST, so states and localities were free to choose whether or not to observe DST and could choose when it began and ended. This understandably caused confusion, especially for the broadcasting industry, as well as for railways, airlines, and bus companies. Because of the different local customs and laws, radio and TV stations and the transportation companies had to publish new schedules every time a state or town began or ended DST. In response, Congress passed the Uniform Time Act of 1966 (15 U.S. Code Section 260a), which created DST to begin on the last Sunday of April and to end on the last Sunday of October. Any State that wanted to be exempt from DST could do so by passing a state law – only Arizona and Hawaii have done so. The Federal Law does not, however, give states the option to remain on DST year round.

In 1972, Congress revised the law to provide that, if a state was in two or more time zones, the state could exempt the part of the state that was in one time zone while providing that the part of the state in a different time zone would observe DST. The Federal law was amended in 1986 to begin DST on the first Sunday in April. The Energy Policy Act of 2005 extended DST in the U.S. beginning in 2007, though Congress retained the right to revert to the 1986 law should the change prove unpopular or if energy savings are not significant. Going from 2007 forward, DST in the U.S. begins at 2:00 a.m. on the second Sunday of March and ends at 2:00 a.m. on the first Sunday of November.

*Proposition 12 (1949) and Proposition 7 (2018)* – California was one of the states that adopted DST at a time when there were no federal laws on the subject. In 1949, voters adopted Proposition 12, known as The Daylight Saving Time Act, which established standard time within California as the time which the federal government describes and designates as United States Standard Pacific Time. The initiative also required that the state advance time one hour during the period from the last Sunday in April until the last Sunday in September. Later, in 1962, California voters approved an amendment to the act that extended California DST until the last Sunday in October. This extension conformed California DST to DSTs as practiced in the rest of the major states. More recently, in 2018, voters passed Proposition 7 which repealed the old Proposition 12 of 1949 and replaced it with a version of California DST that was compliant with the existing federal law. Proposition 7 also allowed the Legislature by two-thirds vote to make future changes to California's DST period, including applying a year-round application of DST, if changes are consistent with federal law.

*DST and Energy Savings* – Since 1916, the argument behind DST has been simple: by springing the clock forward during the summer when there is more sunlight we can take advantage of natural light and use less energy or fuel. Yet, there is no clear evidence that DST results in energy savings. Some studies were conducted immediately following the passing of the Energy Policy Act of 2005, but not in more recent years.

The Energy Policy Act of 2005 which extended DST beginning in 2007, and is the current iteration of DST, also required the U.S. Department of Energy (DOE) to evaluate whether extended DST affected energy consumption and submit the findings to Congress. The key findings of the DOE report<sup>1</sup> are as follows:

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<sup>1</sup> Department of Energy. Impact of Extended Daylight Saving Time on National Energy Consumption. October 2008 <<https://www.energy.gov/eere/analysis/impact-extended-daylight-saving-time-national-energy-consumption-report-congress>>.

- The total electricity savings of extended DST were about 1.3 Tera Watt-hour (TWh). This corresponds to 0.5 percent per each day of extended DST or 0.03 percent of electricity consumption over the year.
- The electricity savings translate to a reduction of 17 Trillion Btu over the spring and fall Extended DST periods, or roughly 0.02 percent of total U.S. energy consumption during 2007.
- Electricity savings generally occurred over a three- to five-hour period in the evening with small increases in usage during the early-morning hours.

In 2007, the California Energy Commission (CEC) released a study in response to the expansion of DST. This study, titled “*The Effect of Early Daylight Saving Time on California Electricity Consumption: A Statistical Analysis*,” revealed that the “extension of DST to March 2007 had little or no effect on energy consumption in California, according to a statistical analysis. The most likely approximation is a 0.2 percent decrease during these three weeks”<sup>2</sup>

In 2008, the National Bureau of Economic Research released a study on the effectiveness of DST. The study, titled “*Does Daylight Saving Time Save Energy? Evidence from a Natural Experiment in Indiana*,” sought to provide the first empirical estimates of DST effects on electricity consumption in the United States by focusing on residential electricity demand as far back as the mid-1970s. The bureau’s main finding was that, contrary to the intent of the policy, DST increases residential electricity demand by approximately one percent. According to the study, during DST, there is a tradeoff between the demand for electricity and the demand for heating and cooling. That is, as the demand for electricity is reduced, the demand for heating and cooling is increased. These findings estimate that DST increased cost of electricity to Indiana households by about \$9 million per year. The study further speculates that this impact is likely to vary by region, with regions where demand for heating and cooling is greater experiencing a higher increase in electricity use.<sup>3</sup>

## COMMENTS:

- 1) *Author’s Statement.* According to the author, “AB 2868 implements the will of California voters, as expressed in the November 2018 election, to set California’s standard time to year-round Daylight Saving Time (DST) pending federal approval.”
- 2) *Energy Savings a Strong Maybe.* The data regarding energy savings are more than 10 years old and inconclusive. Contemporary arguments against permanent DST are not related to energy and instead center on health and safety considerations. In terms of impacts on ratepayers or grid reliability, the DOE report provides the most favorable data. It found an approximate 2% decrease in net hourly energy consumption in California Independent System Operator (CAISO) territories, with consumption decreasing by about 4% in the evening hours (between 4 and 9 pm) and increasing by about 2% in the morning (between 6 and 8 am). However, CEC modeling, also using data from CAISO territories but only considering the three week extension of DST in the spring, found only a 0.2% decrease in energy consumption. Additionally, much has

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<sup>2</sup> California Energy Commission. *The Effect of Early Daylight Saving Time on California*. May 2007. <<http://www.energy.ca.gov/2007publications/CEC-200-2007-004/CEC-200-2007-004.PDF>>.

<sup>3</sup> Grant, Laura and Kotchen, Matthew. “Does Daylight Saving Time Save Energy? Evidence from a Natural Experiment in Indiana.” October 2008. <<http://www.nber.org/papers/w14429.pdf>>.

changed in energy production, consumption, and rates since these data were collected in 2008. So to reiterate, the energy impact of permanent DST is inconclusive and the available data are more than 10 years old.

- 3) *Double Referral*. This bill was previously heard in the Assembly Committee on Government Organization on April 20<sup>th</sup>, 2022, where it passed with a 19-0-3 vote.
- 4) *Prior Legislation*.

AB 7 (Chu, 2019) would have established year-round DST effective immediately once the federal government authorizes such a change. Never heard in Senate Committee on Energy, Utilities and Communications. Status: Died – the Senate Committee on Energy, Utilities, and Communications.

Proposition 7 (November 2018). Made numerous changes to the state’s statute concerning DST, including: conform the dates of DST observance with those in the federal statute, authorizes the state, by a two-thirds votes of the legislature, to adopt a year-round DST if allowed by the federal government, repealed numerous sections of the 1949 California DST Act.

AB 807 (Chu) directed the Secretary of State to place an initiative on the ballot to allow voters to decide whether to authorize the Legislature, by a two-thirds vote of the members, to make changes to the state’s observance of DST consistent with, and to the extent authorized by, federal law. Status: Chapter 60, Statutes of 2018.

AB 385 (Chu, 2016). Would have repealed the DST Act and authorized the Legislature by majority vote to amend the law for the application of permanent (year-round) DST, if authorized by federal law. Status: Failed passage on the Senate Floor.

AB 2496 (Chu, 2016). Would have declared the intent of the Legislature to enact legislation to establish United States Standard Pacific Time as the standard time within the state during the entire year. Status: Died at the Assembly Desk.

AJR 28 (Obernolte) urged Congress and the President to enact legislation that would allow states to adopt permanent (year-round) DST. Status: Chapter 167, Statutes of 2016.

SJRX2 1 (Karnette) memorialized Congress to approve legislation that allows a state to uniformly apply DST year-round. Status: Chapter 1, Statutes of 2001.

AJR 56 (Longville) memorialized the President and Congress to enact legislation to allow states the opportunity to choose year-round DST, in addition to standard time or the current system of “traditional” DST. Status: Chapter 127, Statutes of 2000.

## **REGISTERED SUPPORT / OPPOSITION:**

### **Support**

California Fuels and Convenience Alliance  
California Statewide Law Enforcement Association

**Opposition**

Agudath Israel of California

**Oppose Unless Amended**

Let's Sleep! CA  
Save Standard Time

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