
SENATE COMMITTEE ON PUBLIC SAFETY

Senator Nancy Skinner, Chair

2017 - 2018 Regular

Bill No: AB 1091 **Hearing Date:** June 20, 2017
Author: Quirk
Version: April 18, 2017
Urgency: No **Fiscal:** Yes
Consultant: NG

Subject: *Balloons: Electrically Conductive Material*

HISTORY

Source: Author

Prior Legislation: AB 2709 (Quirk) Held in Assembly Appropriations, 2016
SB 1499 (Scott) Vetoed by Governor Schwarzenegger, 2008
SB 111 (Knight) Chapter 193, Statutes of 2004
SB 1990 (Ayala) Chapter 1559, Statutes of 1990

Support: The Balloon Council; California Fire Chiefs Association; California Municipal Utilities Association; California State Association of Electrical Workers; Coalition of California Utility Employees; Fire Districts Association of California; Southern California Edison

Opposition: None known

Assembly Floor Vote: 77 - 0

PURPOSE

The purpose of this bill is to expand the definition of a crime by: 1) specifying the release of an electrically conductive balloon, filled with a gas that is lighter than air, must be willful; and 2) deleting the requirement that the release of the specified balloon be committed at specified events to trigger the criminal offense.

Existing law provides a wide variety of miscellaneous crimes that including the following, among others:

- Sale of mining machinery, failure to give buyer bill of sale or to keep record (Pen. Code § 653d)
- Leaving scene of ski accident (Pen. Code § 653i)
- Telephone calls or contact by electronic communication device with intent to annoy (Pen. Code § 653m)
- Importation of dead body, parts, or products of specified species. (Pen. Code § 653o)
- Operation of recording device in a motion picture theater. (Pen. Code § 653z)

Existing law states that a person shall not sell or distribute any balloon that is constructed of electrically conductive material, and filled without achieving the following:

- Tethering the balloon to a sufficient weight to the balloon to counter the lift capability of the balloon.
- Affixing a statement on the balloon, or ensuring that a statement is so affixed, that warns the consumer about the risk if the balloon comes in contact with electrical power lines.
- A printed identification of the manufacture of the balloon. (Pen. Code § 653.1, subd. (a).)

Existing law prohibits the selling or distribution of any balloon that is filled with a gas lighter than air that is attached to an electrically conductive string, tether, streams, or other electrically conductive attachments. (Pen. Code § 653.1, subd. (b).)

Existing law prohibits the selling or distribution of any balloon that is constructed of electrically conductive material and filled with a gas lighter than air and that is attached to another balloon constructed of electrically conductive material and filled with a gas lighter than air. (Pen. Code § 653.1, subd. (c).)

Existing law prohibits a person or a group from releasing, in the outdoors, balloons made of electrically conductive material and filled with a gas lighter than air, as part of a public or civic event, promotional activity, or product advertisement. (Pen. Code § 653.1, subd. (d).)

Existing law requires that a person who violates subdivision (a), (b), (c), or (d) of this section is guilty of an infraction punishable by a fine not exceeding one hundred dollars (\$100). Further, any person violates subdivision (a), (b), (c), or (d) of this section who has been previously convicted twice of violating subdivision (a), (b), (c), or (d) of this section is guilty of a misdemeanor. (Pen. Code § 653.1, subd. (e).)

Existing law provides an exception from this statute for manned hot air balloons, or to balloons used in governmental or scientific research projects. (Pen. Code § 653.1, subd. (f).)

This bill requires that the action of releasing an electrically conductive balloon that is filled with gas lighter than air to be willful in order for that action constitute a criminal offense.

This bill deletes the requirement that the criminal offense of releasing an electrically conductive balloon that is filled with gas lighter than air take place as part of a public or civic event, promotional activity, or product advertisement.

This bill provides that the willful release of an electrically conductive balloon that is filled with a gas lighter than air, in any area of the outdoors, constitutes a criminal offense.

COMMENTS

1. Need for This Bill

According to the author:

Popular balloons made of metallic material, commonly known as Mylar balloons, pose a significant hazard to power lines. Since the metallic material conducts electricity, when the balloon comes into contact with power lines or in close proximity, it can cause an electric arc across two power lines that release a lot of energy which if prolonged, can melt the conducting wire, damage power lines, and other equipment. Electrical protection systems are designed to detect the release of energy, and stop it by opening switches (i.e. circuit breakers, fuses, recloses). “Down-stream” customers from the switch will experience power outages. If the switch does not open fast enough, equipment damage, such as wire-down incidences, can occur and will prolong the power outage.

The power outages disrupt all sorts of activities, including traffic signals, lights, business and personal activity. Wire-down incidences are a significant public safety risk because people can come into contact with high voltage power.

While power outages are caused by a variety of reasons, metallic balloons often represent a significant portion of power outages that can be reduced. Other common causes of power outages include weather, fallen tree limbs, auto accidents into power poles, malfunctioning equipment, birds and rodents.

Below is a table specifying the number of power outages for a given year for a sample of utilities. SCE is Southern California Edison; PG&E = Pacific Gas is Electric; SMUD is Sacramento Municipal Utilities; LADWP = L.A. Department of Water and Power, SDG&E is San Diego Gas & Electric

Year	SCE	PG&E	LADWP	SDG&E	SMUD
2011	640	300	245	73	20
2012	714	280	221	68	8
2013	690	310	211	57	20
2014	656	320	233 (9% of total power outages)	45	28
2015	924 (96 wire-down incidents, peak in summer months, 2,400 hours of balloon-caused outages)	350	500	69	35
2016	Not Available	Not available	666	Not available	Not available

Conclusions from this data shows that power outages due to metallic balloons have been increasing. Even though balloons are currently required to have weights attached, the ongoing number of power outages due to metallic balloons is evidence that these requirements are not sufficient for addressing the problem. Either balloons are not being sold with weights, or are attached so poorly that these balloons continue to escape, or customers or the recipient of the balloon simply detach the weight and are careless or release the metallic balloon on purpose.

Utilities have also been releasing press releases warning customers about the hazards of metallic balloons, and these efforts continue to ineffective in addressing the problem.

2. Background

Generally, there are two common types of balloons currently in use: Mylar or latex balloons. Mylar balloons are made with Mylar nylon, a material not classified as biodegradable, and are typically coated with a metallic finish that conducts electricity. Latex balloons are biodegradable and do not typically conduct electricity.¹

According to Southern California Edison:

When Mylar balloons are released into the air, they will often come into contact with high voltage power lines that result in power surges, outages, and damage to equipment due to their metallic composition, which is a conductor for electricity. Between 2011 and 2016, there has been more than 4,500 Mylar balloon related power outages within Southern California Edison's service territory. In 2016 alone, there were 942 outages, an average of more than 2.5 outages per day, which resulted in 2,502 total hours of lost power to residential and business customers.

Of the 942 Mylar balloon related outages that occurred last year, 111 resulted in a power line coming down. Downed wires create significant public safety hazards for the general public, utility workers and first-responders that my inadvertently come into contact with a live power line and cause electrocution.

According to data from the Los Angeles Department of Water and Power (LADWP), the LADWP experienced 18 power outages from Mylar balloons from Monday, May 15, 2017 to Sunday, May 21, 2017. The data also demonstrated that, for this period of time, approximately 23,000 customers were affected by power outages resulting from Mylar balloons. The average length of a power outage caused by Mylar balloons, during this period of time, was roughly 2 hours.

¹ John Lindsey, "Windblown Mylar Balloons Pose Risk to Wildlife and Power Lines," *The San Luis Obispo Tribune*, February 6, 2016, accessed June 6, 2017.
<http://www.sanluisobispo.com/news/weather/weather-watch/article58874343.html>

3. What this Bill Does

Existing law specifies that the release, willful or unintentional, of an electrically conductive balloon, filled with a gas that is lighter than air, must be released at a public or civic event, promotional activity, or as product advertisement in order to constitute a criminal offense.

As stated above, this bill specifies that the release of an electrically conductive balloon, filled with a gas that is lighter, must be willful in order to constitute a criminal offense. Additionally, this bill deletes the requirement that the release of the specified balloon must be conducted at a public or civic event, promotional activity, or as product advertisement in order to constitute a criminal offense. This bill, therefore, provides that the willful release of the specified balloon, such as a Mylar balloon, in any area of the outdoors, constitutes a criminal offense, and is punishable by a fine up to \$100. Further, if an individual is previously convicted twice of this offense, the repeated offense may be charged as a misdemeanor.

4. Argument in Support

According to the California Municipal Utilities Association:

Metallic balloons conduct electricity, and although current law requires these balloons be sold attached to a weighted tether, each year, thousands of power outages in California are directly attributable to drifting metallic balloons colliding with a power line, and resulting in power outages that can affect thousands of electric utility customers, resulting in an outage that can last for many hours, disrupting the lives of Californians at home as well as bringing businesses to a halt.

In 2015, the state's five largest electric utilities experienced over 1,800 power outages caused by electrically conductive balloons. Since 2013, metallic balloons were identified as the cause of two wildfires and one brush fire, burning a total of 11,500 acres.

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