No. 1088

Introduced by Senator Dodd

February 12, 2018

An act to add Section 768.7 to the Public Utilities Code, relating to energy. Section 8587.13 to the Government Code, and to add Chapter 11 (commencing with Section 2899) to Part 2 of Division 1 of the Public Utilities Code, relating to disaster preparedness.

LEGISLATIVE COUNSEL'S DIGEST

SB 1088, as amended, Dodd. Electrical and gas corporations: safety and resilience plans. Safety, reliability, and resiliency planning.

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations and gas corporations. Existing law authorizes the commission, after a hearing, to require every public utility to construct, maintain, and operate its line, plant, system, equipment, apparatus, tracks, and premises in a manner so as to promote and safeguard the health and safety of its employees, passengers, customers, and the public. Existing law requires electrical corporations to annually prepare and submit a wildfire mitigation plan to the commission for review. Existing law requires the commission to establish standards for disaster and emergency preparedness plans, as specified, and requires an electrical corporation to develop, adopt, and update an emergency and disaster preparedness plan, as specified. Existing law authorizes every city, county, or city and county within an electrical corporation's service area to designate a point of contact for the electrical corporation to consult with on emergency and disaster preparedness plans.

This bill would make legislative findings and declarations relative to the need for, and adoption of, safety and resilience plans by electrical and gas corporations, and the approval and enforcement of those plans by the commission, and would state the intent of the Legislature to enact later legislation to implement those findings and declarations.

The California Emergency Services Act, among other things, establishes the Office of Emergency Services for the purpose of mitigating the effects of natural, manmade, or war-caused emergencies and makes findings and declarations relating to ensuring that preparation within the state will be adequate to deal with those emergencies.

This bill would require the office, in consultation with specified public entities, by September 30, 2019, to adopt standards for reducing risks from a major event, as defined. The bill would require that those standards include model policies for implementation by local governments regarding, among other things, defensible space, and actions to be undertaken by an electrical or gas corporation, a local publicly owned electric or gas utility, or a water utility to reduce the risk of fire occurring during a major event. The bill would require the office to update the standards at least once every 2 years.

The bill would require each electrical corporation or gas corporation, beginning January 15, 2019, and by January 15 every 2 years thereafter, to prepare and submit a safety, reliability, and resiliency plan, containing specified elements, to the commission for review and approval. The bill would require the commission to approve, or approve with modifications, the submitted plan by December 31 of the year in which the plan is submitted. The bill would require the commission to authorize recovery of the costs in implementing the plan through rates, as provided. The bill would require the commission to conduct an annual proceeding to review each electrical corporation's and gas corporation's compliance with its plan, as provided. The bill would require, if, after completing the compliance review, the commission determines that an electrical corporation or gas corporation is in substantial compliance with its plan, that the commission deem the performance, operations, management, and investment addressed in the plan to be reasonable and prudent. The bill would require the commission to assess a penalty on an electrical corporation or gas corporation for noncompliance with its plan. The bill would, except as provided, prohibit an electrical corporation from delegating, transferring, or contracting out any of its distribution safety or reliability

performance obligations, as defined, and would prohibit the commission from authorizing an electrical corporation to do so.

Vote: majority. Appropriation: no. Fiscal committee: no-ves. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares as follows: 1

2 (a) The effects of climate change are happening now and will

3 continue to increase both around the world and in California.

(b) There will be more frequent and increasingly severe storms, 4 5 floods, mudslides, and wildfires.

(c) Eight of the 20 most destructive fires in California's history 6 7 have occurred since 2015, with five occurring in 2017 alone.

8 (d) Greenhouse gas emissions from wildfires undermine

California's plans to reduce emissions. The emissions from the 9

10 2017 wildfires were estimated to be nearly as much as the total 11 2017 emissions from electric generation.

12 (e) The electric and gas transmission and distribution systems can be the cause of fires which, because of climate change, can 13 14 be much more severe.

15 (f) Catastrophic storms, floods, mudslides, fires, earthquakes 16 and other major events cause loss of life, tremendous property damage, public health impacts, environmental degradation, and 17

18 damage to local economies. These events can also adversely impact

19 electric and gas transmission and distribution systems.

20 (g) California is overdue for a major earthquake.

21 (h) Natural disasters can cause vast economic damage. The

22 North Bay and Southern California suffered major economic 23 impacts to businesses and many jobs were lost as a result of the 24

2017 wildfires.

25 (i) Failure to prepare for the effects of climate change would adversely affect the credit rating of California and local 26 27 jurisdictions.

28 (j) Executive Order B-30-15 addresses the need for climate 29 adaptation by incorporating climate change impacts into the state's 30

Five-Year Infrastructure Plan, updating the state's climate 31

adaptation strategy by identifying how climate change will affect 32 infrastructure and industry and what actions can be taken to reduce

33 the risks posed by climate change, factoring climate change into

1 state agencies' planning and investment decisions, and 2 implementing measures under existing agency and departmental

3 authority to reduce greenhouse gas emissions.

4 (k) Chapter 608 of the Statutes of 2015 requires that cities and 5 counties address climate adaptation and resilience strategies in 6 local planning.

(1) Chapter 606 of the Statutes of 2015 establishes the Integrated
Climate Adaptation and Resiliency Program to be administered
by the Office of Planning and Research to coordinate regional
and local efforts with state climate adaptation strategies to adapt

11 to the impacts of climate change.

(m) Chapter 603 of the Statutes of 2015 requires the Natural
Resources Agency to update the state's climate adaptation strategy
every three years to address vulnerabilities to climate change by
sector, including the energy sector, and requires state agencies to
maximize promoting the use of the climate adaptation strategy to
inform planning decisions and ensure that state investments
consider climate change impacts.

(n) Chapter 580 of the Statutes of 2016 requires state agencies
to take into account the impacts of climate change when planning,
designing, building, operating, maintaining, and investing in state
infrastructure.

(0) Preventing or mitigating property and infrastructure damage
and injury from catastrophic storms, floods, mudslides, fires,
earthquakes, and other major events is much safer, better for local
economies, and far less expensive than emergency repair and
reconstruction.

28 (p) Responding to catastrophic storms, floods, mudslides, fires, 29 earthquakes, and other major events requires a substantial, 30 well-trained local utility workforce. After the 2017 North Bay 31 wildfires, the Pacific Gas and Electric Company utilized 4,300 32 employees to quickly repair and restore utility service to its 33 customers. The Public Utilities Commission should require each 34 electrical and gas corporation to have a sufficiently sized and 35 trained workforce available, including employees of other utilities 36 pursuant to mutual aid agreements and employees of entities that 37 have entered into contracts with utilities, to quickly respond to 38 major events.

39 (q) Investment in reducing the risk of wildfires has a proven
40 cost savings ratio of at least three to one, but the Public Utilities

1 Commission has failed to establish adequate standards to reduce

2 the risk of wildfires caused by utility equipment and to make 3 electrical and gas corporation equipment more resilient and

4 resistant to damage.

5 (r) The Public Utilities Commission should establish fire risk

6 reduction and mitigation standards, including protocols for

7 disabling reclosers and deenergizing lines. All protocols should

8 meet or exceed industry best practices. Disabling reclosers and

9 deenergizing lines can cause impacts to fire and police response,

the availability of water, hospitals, schools, evacuation centers,and other critical facilities.

(s) Electric and gas reliability is a critical component of publicsafety.

(t) The Public Utilities Commission should require electrical
and gas corporations to harden their systems to reduce damage
from catastrophic storms, floods, mudslides, fires, earthquakes,
and other major events.

(u) The Public Utilities Commission should require electrical
 corporations to evaluate, construct, operate, and maintain
 technological solutions, including microgrids, so that critical
 facilities maintain electrical service during and after catastrophic

22 storms, floods, mudslides, fires, earthquakes, and other major 23 events.

(v) The Public Utilities Commission should not rely on
unregulated entities in lieu of public utilities to provide electric
safety or reliability.

(w) Electrical corporations and gas corporations should file
with the Public Utilities Commission safety, reliability, and
resiliency plans, which should address all relevant rules,
regulations, standards, and practices to prevent and mitigate risk
from catastrophic storms, floods, mudslides, fires, earthquakes,
and other major events that affect the safety and reliability of the

electric and gas system. Safety and reliability should be the highest
 priority in all commission decisions.

(x) The Public Utilities Commission should impose penalties
on an electrical corporation or gas corporation that fails to comply
with an approved plan. The amount of the penalty should be
correlated with the nature and severity of the failure to comply
with the approved plan. Any penalties should be paid exclusively

40 by shareholders of the electrical corporation or gas corporation.

1	(y) The Office of the Safety Advocate should participate in all
2	proceedings authorized by Chapter 11 (commencing with Section
3	2899) of Part 2 of Division 1 of the Public Utilities Code.
4	SEC. 2. Section 8587.13 is added to the Government Code, to
5	read:
6	8587.13. (a) For purposes of this section, "major event" means
7	a large storm, flood, mudslide, fire, earthquake, or other
8	occurrence that significantly affects the safety and reliability of
9	the electrical or gas distribution system.
10	(b) On or before September 30, 2019, and on September 30th
11	of every 2 years thereafter, the office, in consultation with the
12	Department of Forestry and Fire Protection, the Public Utilities
13	Commission, and other appropriate state and local agencies, shall
14	adopt or update standards for reducing risk from a major event.
15	(c) The standards shall include both of the following:
16	(1) Model policies to be undertaken by local governments
17	regarding zoning, defensible space, fire-resistant building
18	materials, and other measures applicable to properties at risk
19	during a major event.
20	(2) Actions to be undertaken by electrical corporations, gas
21	corporations, local publicly owned electric utilities, local publicly
22	owned gas utilities, and water utilities to reduce the risk of fire
23	during a major event.
24	SEC. 3. Chapter 11 (commencing with Section 2899) is added
25	to Part 2 of Division 1 of the Public Utilities Code, to read:
26	
27	Chapter 11. Utility Infrastructure, Safety, Reliability,
28	and Accountability
29	
30	2899. This chapter shall be known, and may be cited, as the
31	Utility Infrastructure, Safety, Reliability, and Accountability Act.
32	2899.1. For purposes of this chapter, the following definitions
33	apply:
34	(a) "Major event" means a large storm, flood, mudslide, fire,
35	earthquake, or other occurrence that significantly affects the safety
36	and reliability of the electrical or gas distribution system.
37	(b) "Plan" means the safety, reliability, and resiliency plan
38	filed by an electrical or gas corporation pursuant to Section
39	2899.1, including measures addressing both routine operations
40	and major events.

1 (c) "Utility" means an electrical corporation or gas 2 corporation.

3 2899.2. (a) On or before January 15, 2019, and on or before 4 January 15 every two years thereafter, each utility shall prepare 5 and submit to the commission for review and approval a safety, 6 reliability, and resiliency plan. The plan submitted on or before 7 January 15, 2019, shall be limited to addressing fire risks, with 8 subsequent plans addressing risks associated with routine 9 operation and all major events.

10 (b) The plan shall include all of the following elements:

(1) All relevant safety rules, regulations, standards, and
practices adopted by the commission and, after January 1, 2021,
all applicable standards adopted or updated by the Office of
Emergency Services pursuant to Section 8587.13 of the
Government Code.

16 (2) A program to comply with applicable safety rules, 17 regulations, standards, and practices adopted by the commission 18 and, after January 1, 2021, a program to comply with standards 19 adopted or updated by the Office of Emergency Services pursuant 20 to Section 8587.12 of the Covernment Code

20 to Section 8587.13 of the Government Code.

21 (3) A program to manage compliance, including, but not limited

to, plans for assigning personnel, training, and monitoring andchecking that the personnel have carried out their assignments,

24 and a system of quality assurance and quality control.

25 (4) The wildfire mitigation plan submitted pursuant of Section

26 8286, including protocols for disabling reclosers and deenergizing

portions of the electrical distribution system, as well as protocols
related to mitigating the impacts of those protocols.

29 (5) Actions the utility will take to ensure that its system will 30 achieve the highest level of safety, reliability, and resilience, and

31 to ensure that its system is not vulnerable to widespread failure

32 during a major event, including hardening and modernizing its

33 infrastructure with improved engineering, system design,

34 standards, equipment, and facilities.

35 (6) Plans for vegetation management.

36 (7) For gas corporations, both of the following:

37 (A) A program to preemptively replace pipe and other equipment

38 that is aging, brittle, or otherwise vulnerable to damage from a

39 major event, or that could endanger public or employee safety.

1 (B) A program to locate, mark and repair leaks, relight pilot 2 lights, and all other activity needed to restore service following a

3 *major event.*

4 (8) For electrical corporations, a program to evaluate, 5 construct, operate, and maintain technological solutions, including 6 microgrids that can be islanded from the distribution grid for 7 critical customers, such as schools, hospitals, critical care patients,

8 water pumping and treatment facilities, and government and other
9 facilities that provide public safety or other critical functions.

(9) The disaster and emergency preparedness plan prepared
 pursuant to Section 768.6, including both of the following:

12 (A) Plans to prepare for, and to restore service after, a major 13 event, including workforce mobilization, and prepositioning 14 equipment and employees.

15 (B) Plans for community outreach and public awareness before, 16 during, and after a major event.

(10) Plans for distribution grid operation during a major event,including an incident command system.

19 (11) Clear evidence that the utility has an adequately sized and

trained workforce to promptly restore service after a major event,
taking into account employees of other utilities pursuant to mutual

aid agreements and employees of entities that have entered intocontracts with the utility.

(12) Activities to support customers during and after a major
event, including outage reporting, billing, repair processing and
timing, access to utility representatives, emergency
communications, and restoration plans.

28 (13) Forecasted costs of every element of the plan.

(14) Any other element pertaining to electric and gas safety,
reliability, or resiliency deemed appropriate by the commission.

31 (c) (1) The commission shall review the plans of the utilities in 32 a single consolidated proceeding. The commission shall verify that the plans comply with all applicable rules, regulations, and 33 34 standards, including those adopted by the Office of Emergency 35 Services pursuant to Section 8589.8 of the Government Code, as appropriate. The commission shall evaluate the reasonableness 36 37 of the elements of the plans considering the risks involved and the 38 costs to implement the plan.

39 (2) In reviewing the plans, the commission shall make safety
40 and reliability of electric or gas services the highest priority.

1 (3) Notwithstanding Section 1701.5, on or before December 31, 2 2019, and on or before December 31 of each year in which the 3 utilities have submitted plans pursuant to subdivision (a), the 4 commission shall approve, or approve with modification, the 5 submitted plans. If the commission fails to issue a decision on a 6 plan on or before December 31, the utility shall implement its 7 submitted plan until the time the commission approves the plan, 8 at which time the utility shall implement the plan as approved by 9 the commission. The commission shall authorize the recovery in 10 rates of the costs incurred by the utility in implementing its 11 submitted plan prior to the approval by the commission without a 12 reasonable review.

9

(4) (A) The commission shall authorize rate recovery of the
reasonable revenue requirements to implement plans approved by
the commission in the proceeding reviewing the plans pursuant to
paragraph (1). Except as provided in subparagraph (B), authorized
revenue shall not be reviewed, adjusted, or authorized in a utility's
general rate case.

(B) Forecasted costs deemed outside the scope of the plan by
the commission may be requested and considered in a utility's
general rate case or other appropriate proceeding.

(5) The utilities shall not divert revenues authorized to
 implement the plan to any activities or investments outside their
 plans.

(6) Each utility shall establish a memorandum account to track
costs incurred for fire risk mitigation from January 1, 2019, until
the commission's approval of the utility's plan submitted on or
before January 15, 2019, that are not otherwise covered in the
utility's revenue requirements. The commission shall review the
costs in the memorandum accounts and disallow recovery of those
costs the commission deems unreasonable.

(d) On or after January 1, 2019, each utility's Risk Assessment
 Mitigation Phase filing shall exclude risks addressed in the plan

34 required pursuant to subdivision (b).

2899.3. (a) For purposes of this section, "distribution safety
or reliability obligations" of an electrical corporation include,
but are not limited to, owning, controlling, operating, managing,
maintaining, planning, engineering, designing, investing in, and
constructing the distribution system in its service territory, system

40 reliability, emergency response and restoration, vegetation

1 management, service connections, service turnons and turnoffs,

- 2 and service inquiries relating to the operation of the distribution3 system.
- 4 (b) An electrical corporation shall not delegate, transfer, or 5 contract out any distribution safety or reliability performance 6 obligation.

7 (c) The commission shall not permit, authorize, or direct an
8 electrical corporation to delegate, transfer, or contract out, or
9 authorize any other entity to perform, a utility distribution safety
10 or reliability performance obligation.

(d) This section does not prohibit contracting out line clearance 11 12 tree trimming under the supervision of the electrical corporation, the purchase of materials or equipment, contracting for 13 14 construction of infrastructure owned by the electrical corporation, 15 contracting for pole test and treat services, contracting for bulk electricity capacity, energy, or storage that is not for purposes of 16 17 distribution safety and reliability, or contracting for information 18 technology services.

19 2899.4. The commission shall conduct an annual proceeding
20 to review each utility's compliance with its plan, including a factual
21 analysis of any major events that occurred, as follows:

(a) Beginning March 1, 2020, and each March 1 thereafter,
each utility shall file with the commission a report addressing
compliance with the plan during the prior calendar year.

(b) (1) Prior to March 1, 2020, and prior to each March 1
thereafter, the commission shall make available a list of qualified
independent evaluators with experience in assessing electric and
gas operations.

29 (2) Each utility shall engage an independent evaluator listed 30 pursuant to paragraph (1) to review and assess the utility's 31 compliance with its plan. The independent evaluator shall consult 32 with, and operate under the direction of, the Safety and 33 Enforcement Division of the commission. The independent 34 evaluator shall issue a report on July 1 of each year in which a 35 report required by subdivision (a) is filed. As a part of the independent evaluator's report, the independent evaluator shall 36 37 determine whether any revenue authorized to implement the plan 38 was diverted to any activities or investments outside the plan.

39 (3) The commission shall authorize the utility to recover in rates40 the costs of the independent evaluation.

1 (4) The commission shall have exclusive jurisdiction over 2 compliance by a utility with the standards adopted pursuant to 3 Section 8587.13 of the Government Code.

4 2899.5. The commission shall assess penalties if a utility fails

to substantially comply with its plan. In determining an appropriate
amount of the penalty, the commission shall consider all of the
following:

8 (a) The nature and severity of any noncompliance with the plan, 9 including whether the noncompliance resulted in harm.

10 (b) The extent to which the commission has found that the utility 11 complied with its plans in prior years.

- 12 (c) Whether the utility self-reported the circumstances 13 constituting noncompliance.
- 14 *(d)* Whether the utility implemented corrective actions with 15 respect to the noncompliance.

(e) Whether the utility had advance notice of the circumstancesconstituting noncompliance.

- 18 *(f)* Whether the utility had previously engaged in conduct of a 19 similar nature that caused significant property damage or injury.
- (g) Any other factors established by the commission in a
 rulemaking proceeding, consistent with purposes of this section.
- 22 2899.6. After completing the review pursuant to Section 2899.4,
- 23 if the commission determines that a utility was in substantial

24 compliance with its plan, the utility's performance, operations,

25 management, and investments addressed in the plan shall be 26 deemed reasonable and prudent for all purposes.

27 SECTION 1. Section 768.7 is added to the Public Utilities

28 Code, to read:

768.7. (a) The Legislature finds and declares all of the
 following:

- 31 (1) The effects of climate change are happening now and will
- 32 continue to increase both around the world and in California.

33 (2) There will be more frequent and increasingly severe storms,
 34 floods, mudslides, and wildfires.

- 35 (3) Emissions of greenhouse gases from wildfires undermine
- 36 California's goals to reduce those emissions. The amount of
- 37 emissions of greenhouse gases from the 2017 wildfires was
- 38 estimated to be nearly as much as the total amount of 2017
- 39 emissions from electrical generation.

1 (4) The electrical and gas transmission and distribution systems

2 can be the cause of fires which, because of climate change, can be
 3 much more severe.

4 (5) The electrical and natural gas transmission and distribution

5 systems can be impacted by storms, floods, mudslides, wildfires,

6 earthquakes, and other major events. These impacts can, and have,

7 caused loss of life, tremendous property damage, and damage to
 8 local economies.

9 (6) California is overdue for a major earthquake.

10 (7) Natural disasters can cause vast economic damage. The

11 North Bay suffered major economic impacts to businesses and

12 many jobs were lost as a result of the 2017 wildfires.

- 13 (8) Failure to prepare for the effects of climate change would
- adversely affect the credit rating of California and local
 jurisdictions.

16 (9) Preventing or mitigating damage from storms, floods,

17 mudslides, wildfires, earthquakes, and other major events is much

18 safer for life and property, better for local economies, and far less

19 expensive than emergency repair and reconstruction.

20 (10) Responding to storms, floods, mudslides, wildfires,

21 earthquakes, and other major events requires a substantial,

22 well-trained local utility workforce. After the 2017 North Bay

23 wildfires, Pacific Gas and Electric Company utilized 4,300

24 employees to quickly repair and restore utility service to its

25 customers. The commission should require that each electrical and

26 gas corporation have a sufficiently sized and trained workforce to

27 respond quickly to major events.

28 (11) The commission has failed to establish adequate standards

29 to reduce the risk of wildfires caused by utility equipment and to

30 make electrical and gas corporations' equipment more resilient

31 and resistant to damage.

32 (12) The commission should establish wildfire risk reduction

33 and mitigation standards including standards for disabling reclosers

34 and deenergizing electrical lines. All standards should meet or

exceed industry best practices. Disabling reclosers and deenergizing
 electrical lines can cause impacts to fire and police response, the

36 electrical lines can cause impacts to fire and police response, the
 37 availability of water, hospitals, schools, evacuation centers, and

37 availability of water, hospitals, schools, evacuation centers, and 38 other critical facilities. The commission should require electrical

39 corporations to construct, operate, and maintain microgrids so that

40 critical facilities do not lose electrical service in the event of major

1 events. The commission shall not rely on unregulated entities in 2 lieu of public utilities to provide electrical safety or reliability. 3 (13) Every other year, the commission should require each 4 electrical corporation and each gas corporation to prepare and 5 submit its utility safety and resilience plan for review and approval. 6 Each plan should include all relevant standards and practices to 7 prevent and mitigate risk from storms, floods, mudslides, wildfires, 8 earthquakes, and other major events, and measures to comply with 9 those standards and practices including investment and operation 10 plans, utility microgrids, and workforce sizing and training 11 practices. These safety and resilience plans should incorporate the 12 disaster and emergency preparedness standards and plans prepared 13 pursuant to Section 768.6. The plans should include a budget for 14 all capital costs, and operations and maintenance expenses, 15 including insurance levels and costs, needed to implement the plan. 16 The commission should review the plans in a single proceeding 17 for all energy utilities and either approve or approve with 18 modifications each plan, including authorizing the revenue 19 requirements to implement the plans. Any revenue requirement 20 authorized in this proceeding should not also be eligible for 21 recovery in any other proceeding. After the proceeding in which 22 the plans are initially reviewed and approved, each subsequent 23 proceeding under this paragraph should review each energy utility's 24 compliance with its approved plan along with a review of costs of 25 any repair and restoration for catastrophic events. 26 (14) Failure of an energy utility to substantially comply with 27 an approved plan should result in shareholders of the utility paying 28 penalties. Penalties should be tiered based on the severity of the 29 noncompliance and should credit self-reporting of violations. 30 Substantial compliance with an approved plan should mean that 31 the utility acted reasonably and prudently. 32 (15) Safety and reliability should be the first priority in all

32 (15) Safety and reliability should be the first priority in a 33 commission decisions.

34 (16) The Office of the Safety Advocate should participate in all

35 proceedings authorized by this section.

36 (b) It is the intent of the Legislature to enact later Legislation

37 to implement the findings and declarations of subdivision (a).