# Business Update

July 26, 2019











### Forward-Looking Statements

Statements contained in this presentation about future performance, including, without limitation, operating results, capital expenditures, rate base growth, dividend policy, financial outlook, and other statements that are not purely historical, are forward-looking statements. These forward-looking statements reflect our current expectations; however, such statements involve risks and uncertainties. Actual results could differ materially from current expectations. These forward-looking statements represent our expectations only as of the date of this presentation, and Edison International assumes no duty to update them to reflect new information, events or circumstances. Important factors that could cause different results include, but are not limited to the:

- ability of SCE to recover its costs through regulated rates, including costs related to uninsured wildfire-related and mudslide-related liabilities and capital spending incurred prior to formal regulatory approval;
- ability to obtain sufficient insurance at a reasonable cost, including insurance relating to SCE's nuclear facilities and wildfire-related claims, and to recover the costs of such insurance or, in the event liabilities exceed insured amounts, the ability to recover uninsured losses from customers or other parties;
- risks associated with AB 1054 effectively mitigating the significant risk faced by California investor-owned utilities related to liability for damages arising from
  catastrophic wildfires where utility facilities are a substantial cause, including the ability of SCE and SDG&E to raise the funds required to make initial contributions
  to the insurance fund under AB 1054, SCE's ability to maintain a valid safety certification, SCE's ability to recover uninsured wildfire-related costs from the wildfire
  fund established under AB 1054, and the CPUC's interpretation of and actions under AB 1054;
- actions, or inaction, of the state of California with respect to achieving a timely and comprehensive solution mitigating the significant risk faced by California investor-owned utilities related to liability for damages arising from catastrophic wildfires where utility facilities are a substantial cause;
- decisions and other actions by the CPUC, the FERC, the NRC and other regulatory authorities, including decisions and actions related to determinations of authorized rates of return or return on equity, the GS&RP application, the recoverability of wildfire-related and mudslide-related costs, and delays in regulatory actions;
- ability of Edison International or SCE to borrow funds and access the bank and capital markets on reasonable terms;
- actions by credit rating agencies to downgrade Edison International or SCE's credit ratings or to place those ratings on negative watch or outlook;
- risks associated with the decommissioning of San Onofre, including those related to public opposition, permitting, governmental approvals, on-site storage of spent nuclear fuel, delays, contractual disputes, and cost overruns;
- extreme weather-related incidents and other natural disasters (including earthquakes and events caused, or exacerbated, by climate change, such as wildfires), which could cause, among other things, public safety issues, property damage and operational issues;
- risks associated with cost allocation resulting in higher rates for utility bundled service customers because of possible customer bypass or departure for other electricity providers such as CCAs and Electric Service Providers;
- risks inherent in SCE's transmission and distribution infrastructure investment program, including those related to project site identification, public opposition, environmental mitigation, construction, permitting, power curtailment costs (payments due under power contracts in the event there is insufficient transmission to enable acceptance of power delivery), changes in the CAISO's transmission plans, and governmental approvals; and
- risks associated with the operation of transmission and distribution assets and power generating facilities, including public and employee safety issues, the risk of utility assets causing or contributing to wildfires, failure, availability, efficiency, and output of equipment and facilities, and availability and cost of spare parts.

Other important factors are discussed under the headings "Forward-Looking Statements", "Risk Factors" and "Management's Discussion and Analysis" in Edison International's Form 10-K and other reports filed with the Securities and Exchange Commission, which are available on our website: www.edisoninvestor.com. These filings also provide additional information on historical and other factual data contained in this presentation.

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### EIX Strategy Should Produce Long-Term Value

# Sustained Earnings and Dividend Growth Led by SCE

#### **SCE Rate Base Growth Drives Earnings**

- 8.4% average annual rate base growth through 2020
- SCE earnings should track rate base growth over the long term

#### **Constructive Regulatory Structure**

- Decoupling of electricity sales
- Balancing accounts
- Forward-looking ratemaking

#### Sustainable Dividend Growth

Target payout ratio of 45-55% of SCE earnings

#### **Electric-Led Clean Energy Future**

#### **EIX Vision**

- Lead transformation of the electric power industry
- Focus on clean energy, efficient electrification, grid of the future and customers' technology choice

#### Wires-Focused SCE Strategy

- Infrastructure replacement safety and reliability
- Grid modernization California's lowcarbon goals
- Grid resiliency and safety
- Operational excellence

#### **Edison Energy Strategy**

Services for large commercial and industrial customers

### SCE Highlights

#### One of the nation's largest electric utilities

- 15 million residents in service territory
- 5 million customer accounts
- 50,000 square-mile service area

#### Significant infrastructure investment

- 1.4 million power poles
- 724,000 transformers
- 118,000 miles of distribution/transmission lines
- 3,200 MW owned generation

#### Above average rate base growth driven by

- Safety and reliability
- California's low-carbon objectives
  - > Grid modernization
  - > Transportation electrification
  - Electric vehicle charging
  - Energy storage

#### **Limited Generation Exposure**

- Own less than 20% of its power generation
- Future needs via competitive solicitations



# SCE Long-Term Growth Drivers

	Description	Timeframe/Regulatory Process
Infrastructure Replacement	Sustained level of infrastructure investment required until equilibrium replacement rates achieved and then maintained	Ongoing - current and future GRCs
Grid Modernization	Accelerate circuit upgrades, automation, communication, and analytics capabilities at optimal locations to integrate distributed energy resources	<ul> <li>2018-2020 – Approximately \$590 million of capital spending in 2018 GRC decision</li> <li>2025 – CPUC target to complete grid modernization but may take longer</li> </ul>
Transmission	Future transmission needs to meet 60% renewables mandate in 2030, 100% clean energy by 2045 and to support reliability	<ul> <li>2017-2022 – Multiple projects approved by CAISO in permitting and/or construction</li> <li>2023-2045 – Future needs largely driven by CAISO planning process</li> </ul>
Energy Storage	SCE-owned investment opportunities under existing CPUC proceedings	<ul> <li>Today – Most commitments via contracts; over 720 MW procured</li> <li>2019-2020 - \$29 million of capital spending forecasted; procurement target of 580 MW by 2020 as utility-owned or procured</li> </ul>
Electrification of Transportation and Other Sectors	Utility investment in programs to build and support the expansion of transportation electrification in passenger and light-, medium- and heavy-duty vehicles and potentially to support electrification of other sectors of the economy	<ul> <li>2018 – Medium- and Heavy-Duty (MD/HD) Vehicle Transportation Electrification (TE) program approved, totaling \$356 million; Charge Ready 2 application filed, requesting \$760 million; Charge Ready Bridge Funding approved totaling \$22 million</li> <li>2019-2030 – Potential investments to support electrification in other sectors of the economy</li> </ul>
Wildfire Prevention and Mitigation	Utility investment and operational practices that mitigate increasing wildfire risk and bolster fire prevention activities	<ul> <li>2018 – Filed Grid Safety &amp; Resiliency application, requesting \$582 million of total costs (capital: \$407 million)</li> <li>2019 – Filed Wildfire Mitigation Plan</li> <li>Ongoing – future GRCs</li> <li>First ~\$1.6 billion fire risk mitigation capital spend will not be added to rate base per AB 1054</li> </ul>
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### SCE Decoupled Regulatory Framework

#### **Regulatory Mechanism**

### Decoupling of Revenues from Sales

#### **Major Balancing Accounts**

- Sales
- Fuel and Purchased power
- Energy efficiency
- Pension expense

Advanced Long-Term Procurement Planning

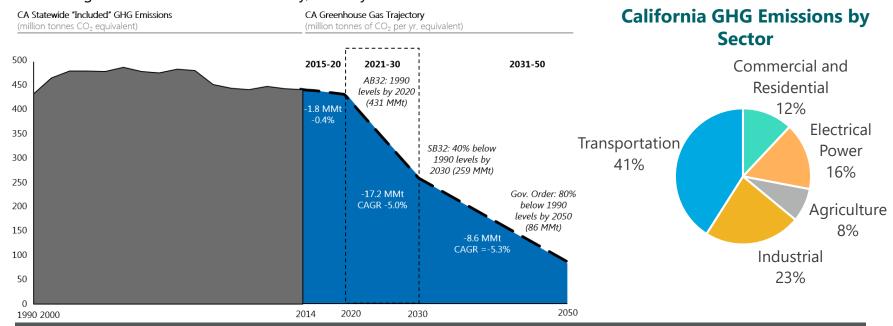
Forward-looking Ratemaking

#### **Key Benefits**

- Earnings not affected by variability of retail electricity sales
- Differences between amounts collected and authorized levels either billed or refunded
- Promotes energy conservation
- Stabilizes revenues during economic cycles
- Cost-recovery related balancing accounts represented more than 59% of costs
- Trigger mechanism for fuel and purchased power adjustments at 5% variance level
- Upfront contract approvals and prudency standards provide greater certainty of cost recovery (subject to compliancerelated reasonableness review)
- Forward and test year GRC with three-year rate cycle
- Separate cost of capital mechanism

### California's GHG Emissions Overview

- On October 7, 2015, Governor Brown signed SB 350, which requires a doubling of energy efficiency in existing buildings for California by 2030
- On September 8, 2016, Governor Brown signed SB 32, which requires statewide GHG emissions to be reduced to 40% below the 1990 level by 2030; Governor Order set a 2050 target of 80% below 1990 levels
- On July 24, 2017, Governor Brown signed AB 398, which extends cap-and-trade to 2030
- On January 26, 2018, Governor Brown released an Executive Order calling for 5 million zero emission vehicles by 2030
- On September 10, 2018, Governor Brown signed SB 100, which requires that 60% of energy sales to customers come from renewable power by 2030 and sets a 100% clean electricity goal for the state, and issued an executive order establishing a new target to achieve carbon neutrality, both by 2045



SCE is taking a leading role to ensure that transportation and building electrification plays a major part in reducing GHG and criteria pollutant emissions in California

Source: Data for both charts from California Air Resources Board; California GHG Emissions data as of 2016.

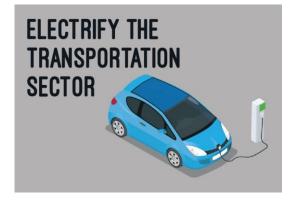
# SCE's Clean Power and Electrification Pathway

#### **Electric Power Company Roles**

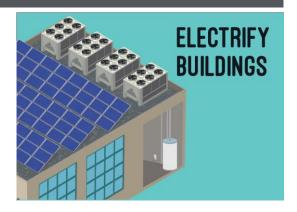


- Emissions targets met through optimization of renewables
- Implementation of upcoming IRP filing
- 80% carbon-free electricity by 2030 and 100% by 2045 supported by energy storage
- 2018 SCE renewable resources portfolio = 36.3%

% Pc	% Portfolio Breakdown		
Solar		37%	
Wind		37%	
Geothermal		22%	
Small Hydro		2%	
Biomas July 26, 2019	S	2%	



- Accelerate electrification of the transportation sector
  - At least 7 million light-duty electric vehicles on California roads
  - > 15% of medium-duty vehicles electrified
  - 6% of heavy-duty vehicles electrified
- Joint utility study launched to study transportation electrification of the I-5 corridor



- Electrify nearly one-third of residential and commercial space and water heaters
- Joint utility study by E3 shows that electrifying homes is already cost-effective for most homeowners and developers
- Senate Bill 1477 allocates \$200 million over 4 years for pilots
- Continuation of company programs and earnings incentive mechanism

### 2019 Wildfire Legislation Update

#### **Summary of Assembly Bill 1054 and Assembly Bill 111**

#### Safety Oversight and Certification

- Creates Wildfire Safety Division<sup>1</sup> to provide additional wildfire safety oversight
- Initial safety certification issued by CPUC Executive Director within 30 days of IOU request requires: 1) an approved wildfire mitigation plan; 2) utility to be in good safety standing; 3) established board safety committee with relevant safety experience; and 4) board-level reporting to the CPUC on safety issues
- Subsequent annual safety certifications issued by Wildfire Safety Division<sup>1</sup> also require: 5) approved executive compensation structure that promotes safety, ensures public safety and utility financial stability; 6) compensation limits on executive officer contracts; and 7) implementation of, and reporting to the CPUC on wildfire mitigation plans, safety culture assessments and board safety committee recommendations

#### Cost Recovery Standard

- Provided a utility is "safety certified" and elects to participate in the wildfire "insurance" fund (described below), establishes a FERC-like prudence standard to guide recovery of costs arising from catastrophic wildfires occurring after bill enactment
- Prudence is based on reasonable utility conduct with potential for full or partial recovery, considering factors within and beyond a utility's control
- FERC-like standard assumes utility is prudent, unless intervenors create serious doubt, shifting burden to the utility to prove prudence

#### Wildfire Fund

- Establishes a wildfire fund to help wildfire victims and affected communities recover and rebuild more quickly
- Liquidity fund immediately established against which utilities may draw to pay wildfire claims; if utility found to be prudent, customers reimburse fund draw; if utility found imprudent, shareholders reimburse fund draw
- Wildfire "insurance" fund is an insurance-like fund that more broadly socializes wildfire costs; utilities participation is voluntary
- Both fund options include a \$10.5 billion ratepayer contribution through the financing of a 15-year extension of the Department of Water Resources bond charge; wildfire insurance fund also includes \$10.5 billion contribution from utility shareholders
- Insurance-like fund created only if both SCE and SDG&E elect to participate within 15 days of bill enactment. SCE and SDG&E have elected to participate
  - > SCE's shareholders to initially contribute approximately \$2.4 billion by September 10 and approximately \$95 million annually on January 1 for 10 years<sup>2</sup>

### Mitigation CapEx

• First \$1.6 billion of SCE's fire risk mitigation capital expenditures as approved in wildfire mitigation plans shall not earn an equity return, but can be recovered from ratepayers through a securitizable dedicated rate component<sup>2</sup>

#### **Liability Cap**

- While fund remains solvent, wildfire cost disallowances capped over each trailing 3-year period to 20% of T&D equity rate base
- Must be safety certified and not found to be acting with willful or conscious disregard of the safety of others
- 1. Wildfire Safety Division created within CPUC until duties transferred to newly formed Office of Energy Infrastructure Safety on or after July 2021
- 2. Excluded from measurement of regulatory capital structure

### SCE 2018 General Rate Case Decision

On May 16, 2019, the CPUC issued a final decision which is focused on SCE's safety and reliability investments in infrastructure replacement and grid modernization, while mitigating customer rate impacts through lower operating costs

- 2018 base revenue requirement decision of \$5.116 billion
  - Additional \$335 million increase in 2019 and a \$412 million increase in 2020
  - 95% of requested O&M expenses were adopted
  - > Results in an approximately 5% reduction to current bundled customer rates and bills
- 2018 CPUC-jurisdictional capital spending authorization of \$2.9 billion<sup>1</sup>
  - Authorization is 92% of SCE's request excluding Grid Modernization and project approvals that were deferred to the next case for timing reasons<sup>2</sup>
  - > Grid Modernization capital spending authorization was approximately 35% of request

#### (\$ billions)

Year	SCE Tax Update Testimony 2/16/18 (Table III-1)	Decision 5/16/19	Difference to Request (\$/%)
	Base Revenue R	equirement	
2018	\$5.534	\$5.116	(\$0.418)/(7.5%)
2019	\$5.965	\$5.451	(\$0.514)/(8.6%)
2020	\$6.468	\$5.863	(\$0.605)/(9.4%)
	CPUC Rate	Base <sup>3</sup>	
2018	\$22.939	\$22.336	(\$0.603)/(2.6%)
2019	\$25.181	\$24.236	(\$0.945)/(3.8%)
2020	\$27.445	\$26.156	(\$1.289)/(4.7%)

<sup>1.</sup> Excludes capitalized overheads and customer contributions

<sup>2.</sup> Project approvals referenced include the Cerritos Channel Project Transmission Line Relocation project and Customer Service Re-Platform (CSRP) program

Net of "rate-base offset" for the 2015 GRC decision

### CPUC and FERC Cost of Capital Summary

#### **CPUC Cost of Capital**

Component	%	Cost	Weighted Cost
Conventional ROE		10.60%	
Wildfire Risk ROE <sup>1</sup>		6.00%	
Common Equity	52.0%	16.60%	8.63%
Long-Term Debt	43.0%	4.74%	2.04%
Preferred Equity	5.0%	5.70%	0.29%
Total	100.0%		10.96%

- Litigated proceeding, separate from GRC, filed on April 22<sup>nd</sup>
- Request for three-year period starting January 1, 2020
- SCE, PG&E, SDG&E, and SoCalGas concurrently filed applications; applications were consolidated into one proceeding
- Proposed trigger mechanism for adjusting the cost of capital between proceedings (similar to current mechanism)

#### **FERC Rate Case**

Breakdown of Return on Equity (ROE)	Cost
Conventional ROE	11.12%
Wildfire Risk ROE <sup>1</sup>	6.00%
Requested ROE +	17.12%
CAISO adder +	0.50%
Incentive Projects	Varies

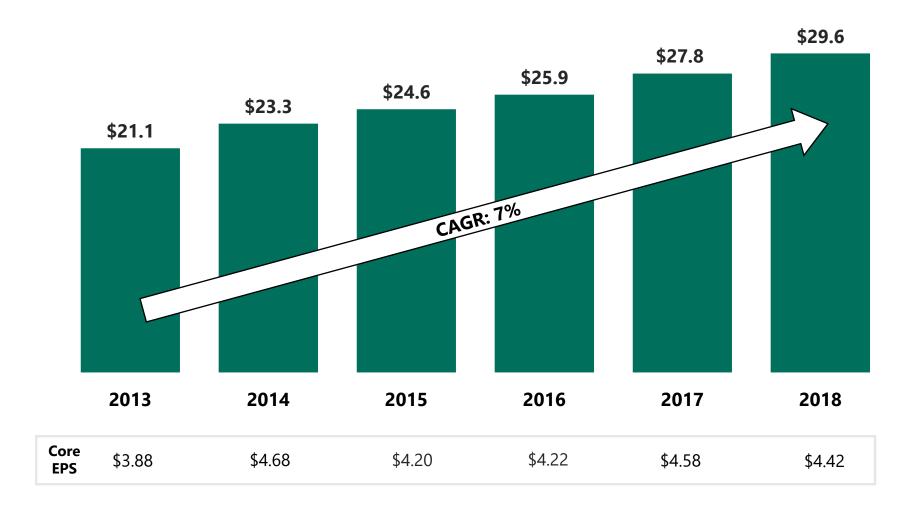
- New Rate Case filed on April 11<sup>th</sup>
- FERC accepted the new formula rate, subject to refund, on June 11<sup>th</sup>; new formula rate becomes effective November 12, 2019
- Current open proceeding was filed on October 27, 2017 prior to wildfires; settlement discussions are ongoing<sup>2</sup>
- Capital structure at FERC is based on recorded level vs. CPUC "authorized" approach

<sup>1.</sup> SCE is evaluating its request for the Wildfire Risk ROE based upon the passage of Assembly Bill 1054

<sup>2.</sup> On October 27, 2017, SCE filed an application for its 2018 FERC formula recovery mechanism which includes a requested base ROE of 10.3% + CAISO Participation (50 basis points) + weighted average of individual project incentives

### SCE Historical Rate Base and Core Earnings

(\$ billions, except per share data)



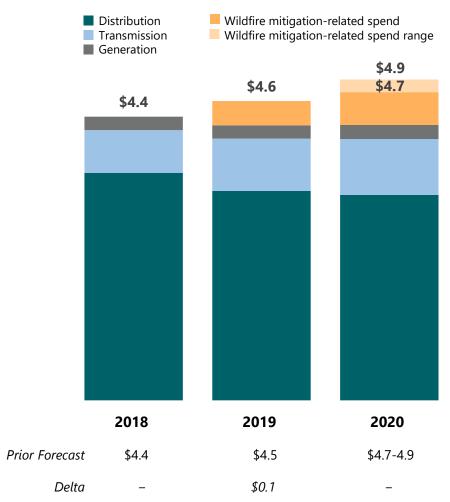
Note: Recorded rate base, year-end basis. See SCE Core EPS Non-GAAP Reconciliations and Use of Non-GAAP Financial Measures. Since 2013, rate base excludes SONGS.

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### SCE Capital Expenditure Forecast

(\$ billions)



#### **Long Term Investment Drivers**

#### **Transportation Electrification**

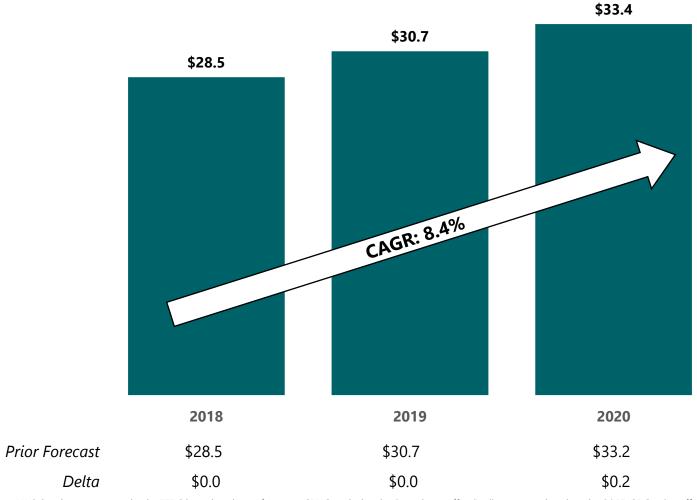
- Approved \$356 million (\$242 million of capital spending) medium- and heavy-duty vehicle transportation electrification program (included in forecast)
- Requested \$760 million (\$561 million of capital spending)
   Charge Ready 2 application which focuses on charging infrastructure for light-duty vehicles (excluded from forecast)

#### Wildfire Mitigation-Related Spend

- Grid Safety and Resiliency Program (GS&RP): \$582 million request (\$407 million of capital spending) – focused on investment and operational practices that address increasing wildfire risk and bolster fire prevention and suppression activities
- Wildfire Mitigation Plan (WMP) filed February 2019 and SCE expects to file its 2020 WMP by early 2020
- CPUC has authorized tracking of costs related to the GS&RP and WMP through memorandum accounts
- 2019 includes approximately \$390 million of wildfire mitigation-related spend, 2020 includes range of \$500 to \$700 million
- 2020 spend will be largely used towards ~\$1.6 billion fire risk spend without an equity return per AB 1054; seeking clarity on 2019 spend

# SCE Rate Base Forecast

(\$ billions)



Note: : Weighted-average year basis. FERC based on latest forecast. CPUC excludes the "rate-base offset" adjustment related to the 2015 GRC write off of the regulatory asset for 2012-2014 incremental tax repairs. Figures do not include wildfire mitigation-related dollars.

### Mitigating Catastrophic Wildfire Risk

- SCE's comprehensive risk mitigation program focuses on three key areas:
  - ➤ **Grid hardening:** Increase the use of fire-resistant poles, composite cross-arms and covered conductor in high fire risk areas; evaluate design approaches and next-generation engineering technology to further enhance public safety
  - ➤ Increased situational awareness capabilities: Expand meteorological monitoring and forecasting capabilities by installing additional weather stations and high-definition cameras to help SCE and fire agencies to better prepare, mitigate, and respond to reported fires
  - ➤ Enhanced operational practices: Restrict certain types of work in High Fire Risk Areas (HFRAs) during elevated fire risk conditions; reduce fire risk via a Public Safety Power Shutoff in HFRAs during elevated weather conditions; increase tree trimming and removal to further mitigate safety risks posed by trees or debris
- Filed annual compliance plan (Wildfire Mitigation Plan) detailing the near- and longer-term actions
  that SCE is taking to significantly reduce the risk of fire ignitions and increase emergency response and
  grid resiliency against future impacts of climate change
- Excluding the fire risk investments that will not earn an equity return per AB 1054, SCE's programs (both O&M and capital) are expected to be recovered through different avenues:
  - > Capital amounts approved in the 2018 GRC subject to management discretion
  - Grid Safety and Resiliency Program application: \$582 million of total costs (\$407 million of capital)
  - SB 901 memorandum account which will be reviewed for approval during the 2021 GRC proceeding

SCE plans to spend approximately \$390 million in 2019 and \$500-\$700 million in 2020 with continued investments beyond our forecast period

### Wildfire Mitigation Summary

#### **Grid Hardening**

- 200+ circuit miles of covered conductor installed with hundreds more miles in queue
- 9,000+ faster-acting fuses installed
- 1,600+ protective devices programmed with more sensitive (fast curve) settings (includes automatic reclosers and circuit breakers)

#### Increased Situational Awareness Capabilities

- In-house team of fire weather experts staffing our 24/7
   Situational Awareness Center
- 355+ installed weather stations with a target of 450 installations by end of 2019 and 850 by end of 2020
- 80+ installed HD cameras with a target of 160 installations providing 90% coverage by end of 2019
- Developed enhanced Fire Potential Index (FPI) to measure wildfire potential at the circuit level
- 2 supercomputers being installed to run advanced weather models to improve forecast resolution

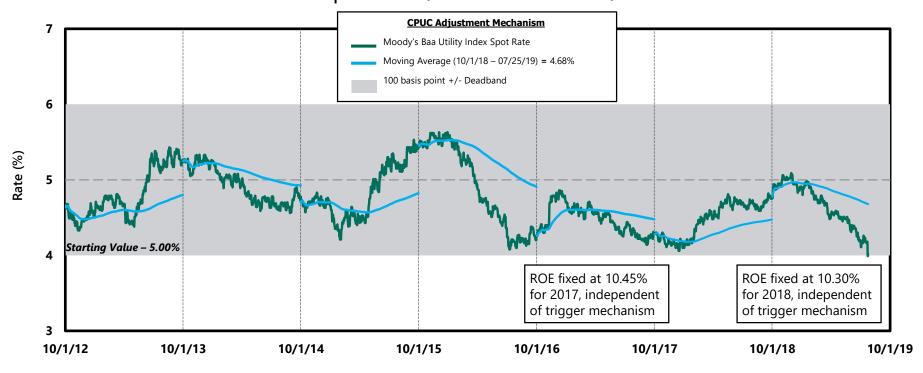
#### **Enhanced Operational Practices**

- Completed Enhanced Overhead Inspections of 400,000+ T&D structures in HFRA
- Deploying helicopters/drones to perform aerial inspections of our facilities in HFRA
- 2,000+ Circuit Breaker/Recloser Blocking devices remotely set to not automatically re-energize lines during high fire risk conditions
- Enhanced Vegetation Management
  - Increasing trim distances to keep power lines clear
  - Performing inspections/removal of hazard trees that pose risk
- Refined Public Safety Power Shutoff (PSPS) protocol and communication

# SCE Key Regulatory Proceedings

Proceeding	Description	Next Steps
	Key CPUC Pro	ceedings
2020 Cost of Capital (A. 19-04-014)	Sets CPUC cost of capital and capital structure for 2020-2022	Application filed April 22, 2019; Scoping Memo issued July 2, 2019; Intervenor and supplemental testimony due August 1, 2019; Rebuttal testimony due August 16, 2019; Hearings will be the first week of September
Grid Safety and Resiliency Program (GS&RP) (A. 18-09-002)	Requesting \$582 million of total cost for 2018-2020; focused on grid hardening and enhanced vegetation management	Application filed in September 2018; memorandum account approved in January 2019; Intervenor testimony filed April 23; Reply testimony filed May 31; Hearings scheduled for July 2019 postponed due to settlement discussions
SB 901 Proceedings: Wildfire Mitigation Plan OIR (R. 18-10-007)	The CPUC has opened two rulemakings responsive to SB 901 (one for the evaluation of wildfire mitigation plans and another for the development of a customer harm	The Wildfire Mitigation Plan (WMP) was filed on February 6, 2019; approved on May 30
Stress Test OIR (R. 19-01-006)	threshold methodology)	Proposals for consideration in the Stress Test proceeding were filed on February 11, 2019; Decision on methodology approved June 27
Charge Ready Program (A.14-10-014; A.18-06-015)	Implementation program for charger installations and market education	Pilot report filed in May 2018; Charge Ready 2 application filed in June 2018; Scoping Memo issued October 2018; Charge Ready Bridge Funding approved in December 2018; proceeding ongoing
Distribution Resources Plan (DRP) OIR (R.14-08-013)	Power grid investments to integrate distributed energy resources	Demo projects will be concluded due to significant delays in project schedules; No contracts will be executed in the solicitation for deferral projects due to lack of viable bids; Filing annual Grid Needs Assessment and Distribution Deferral Opportunities Reports on August 15
Power Charge Indifference Adjustment (PCIA) OIR (R.17-06-026)	Review, revise, and consider alternatives to the PCIA	Final Decision adopted on October 11, 2018; initiates second phase on utility portfolio optimization and cost reduction; workshops on Phase 2 underway
	Key FERC Pro	ceedings
FERC Formula Rates	Transmission rate setting with annual updates	Replacement rate filed on October 27, 2017 and in effect subject to refund; proceeding ongoing and settlement discussions are continuing; new replacement rate accepted June 11 subject to refund and new settlement process is underway
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### CPUC Cost of Capital (2013-2019)



#### Two year settlement approved for 2018-2019

- ROE adjustment based on 12-month average of Moody's Baa utility bond rates, measured from October 1 to September 30
- If index exceeds 100 bps deadband from starting index value, authorized ROE changes by half the difference
- Starting index value based on trailing 12 months of Moody's Baa index as of September 30 of each year – 5.00%

	CPUC Authorized		Settlement Terms (2018- 2019)	
	Capital Structure	2017	2018-2019	
Common Equity	48%	10.45%	10.30%	
Preferred	9%	5.79%	5.82%	
Long-term Debt	43%	5.49%	4.98%	
Weighted Average Cost of Capital		7.90%	7.61%	

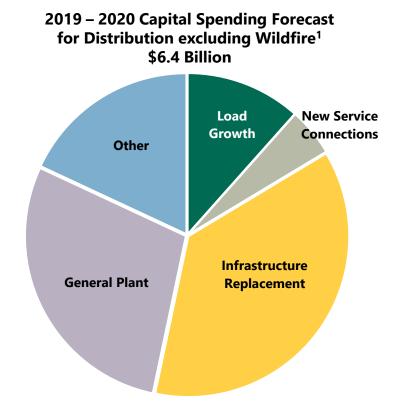
### SCE Distribution System Investments

#### **Distribution Trends**

- Continued focus on safety and reliability with infrastructure replacement representing a large portion of total distribution capital spend, but not yet reaching equilibrium replacement rate
  - Includes pole loading replacement program and overhead conductor replacements
- Distribution grid requires upgrades to circuit capacity, automation, and control systems to support reliability as use of distributed energy resources increases

#### 2019-2020 Capital Spending Drivers

- Automation of distribution circuits
- Cable and conductor replacements
- 4kV cutovers/removals
- Pole replacements
- Distribution preventive maintenance
- Overhead conductor replacements
- Circuit breaker and transformer bank replacements/upgrades



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<sup>1.</sup> Other includes grid modernization, GRC energy storage, charge ready pilot programs, mobile home pilot programs and transportation electrification programs

### SCE Transportation Electrification (TE) Proposals

- Proposals build on SCE's Clean Power and Electrification Pathway, which is an integrated approach to reduce GHG emissions and air pollution by taking action in three California economic sectors: electricity, transportation and buildings
- These programs accelerate electrification of the transportation sector, supporting SCE's vision of placing at least 7 million light-duty passenger vehicles on the roads and transitioning to zero-emission trucks and transit
  - ➤ Additional studies launched to increase adoption, such as electrification of the I-5 corridor

#### Medium- and Heavy-Duty (MD/HD) Vehicle Transportation Electrification Program

### \$356 million Total Cost<sup>1</sup> (in nominal dollars); approved May 2018

- 5-year program
- Approved capital spend of \$242 million; O&M of \$115 million
- Included in capital spend and rate base forecasts

#### **Charge Ready Pilot**

### Charge Ready Pilot - \$22 million Total Cost<sup>1</sup> (in 2014 dollars); approved January 2016

- Approved capital spend of \$12 million; O&M of \$10 million
- Supports 1,280 chargers
- · Included in capital spend and rate base forecasts
- 1. Total Cost includes both O&M and capital spend

#### **Charge Ready Bridge Funding and 2**

### Charge Ready "Bridge" Funding - \$22 million Total Cost (in 2014 dollars); approved December 2018

- Additional approved capital spend of \$12 million; O&M of \$10 million; bridge funding must be subtracted from any authorized Charge Ready 2 funding
- Included in capital spend and rate base forecasts
- SCE to install at least 1,000 chargers, including 20% in multi-unit dwellings

### Charge Ready 2 – \$760 million Total Cost<sup>1</sup> (in 2018 dollars); filed June 2018 (pending CPUC approval)

- 4-year program, providing over 50,000 chargers
- \$561 million in capital spend; O&M of \$199 million
- Not included in capital spend or rate base forecasts

# SCE Energy Storage

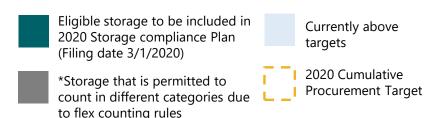
#### **CPUC Energy Storage Program Requirements**:

- Storage Rulemaking (R.10-12-007) established 1,325 MW target for IOUs by 2024 (580 MW SCE share; spread as biennial targets during 2014-20); ownership allowed up to 290 MW for SCE
- Flexibility to transfer across categories, expanded in Storage Rulemaking (R.15-03-011)\*
- Decision (D. 17-04-039) added AB 2868 opportunity for programs and investments of an additional 500 MW of distribution-level energy storage systems, distributed equally among the IOUs (166 MW SCE share; spread as biennial targets, 2018 and onward; no more than 25% can be customer programs)

#### **SCE Procurement Activities to Meet CPUC Requirements:**

- SCE has procured over 720 MW of energy storage (includes 60 MW of utility owned storage), ~600 MW of which is eligible to count towards CPUC targets
- SCE recently submitted its 2018 Local Capacity Requirements RFP (2018 LCR RFP) and its second Aliso Canyon Energy Storage RFO (ACES 2 RFO) for approval. Upon Commission approval of these energy storage resources, SCE will have exceeded the 580 MW target set by AB 2514
- SCE filed its 2018 Energy Storage and Investment Plan (ESP&IP) on March 1, 2018; the AB 2514 track was approved by D.18-10-036 on October 25, 2018, however, the Commission rejected SCE's AB 2868 proposals in D.19-06-032

#### **SCE 2018 Storage Portfolio** 350 300 \*Up to 80% 310 of MW to 250 be shifted between T&D 200 185 \*85 MW 150 excess may offset T&D 100 targets 85 50 0 Transmission Distribution Customer



### SCE Large Transmission Projects

Sum	nsmission Projects		
Project Name Total Cost <sup>5</sup> Remaining Investment (as of June 30, 2019)		Estimated In-Service Date	
West of Devers <sup>1,2</sup>	\$848 million	\$525 million	2021
Mesa Substation <sup>1</sup>	\$646 million	\$345 million	2022
Alberhill System <sup>3</sup>	\$486 million	\$447 million	3
Riverside Transmission Reliability <sup>4</sup>	\$451 million	\$441 million	2024
Eldorado-Lugo-Mohave Upgrade	\$257 million	\$192 million	2021
FERC Cost of C	Capital		Boulder City, NV

#### 11.5% ROE in 2019<sup>6</sup> (subject to refund):

- ROE = Requested Base of 10.3% + CAISO Participation + weighted average of individual project incentives
  - Application for 2018 and 2019 FERC Formula recovery mechanism filed on October 27, 2017 and April 11, 2019, respectively
  - Requested 50 bp CAISO adder; approved, but application for rehearing requested by CPUC
  - ROE and 2018 Transmission Revenue Requirement is accepted and suspended pending settlement discussions



Los Angeles •

Santa Barbara

Hesperia

Jurupa Valle Riverside

Alberhill

- **CPUC** approved
- Morongo Transmission holds an option to invest up to \$400 million, or half of the estimated cost of the transmission facilities only, at the in-service date. If the option is exercised, SCE's rate base would be offset by that amount
- In August 2018, the CPUC approved the revised alternate decision which left the proceeding open and directed SCE to supplement the existing record with additional analysis as it relates to the Project need and alternatives. Potential revisions to the Project have not been reflected in the total cost of the Project or estimated in service date
- Riverside Transmission Reliability Project total cost is currently estimated to be \$451 million, however costs could increase depending on the final route alternative selected
- Total Costs are nominal direct expenditures, subject to CPUC and FERC cost recovery approval. SCE regularly evaluates the cost and schedule based on permitting processes, given that SCE continues to see delays in securing project approvals
- SCE's April 11, 2019 filing to revise its return on equity is pending review with the FERC and is not reflected in the stated figure

Laughlin, NV

San Bernardino Devers

Palm Springs

### SCE Operational Excellence

#### **Defining Excellence**

#### **Top Quartile**

- Safety
- Reliability
- Customer service
- Cost efficiency

#### **Optimize**

- Capital productivity
- Purchased power cost
- Digitization

High performing, continuous improvement culture

Ongoing
Operational
Excellence
Efforts

#### **Measuring Excellence**

- Employee and public safety metrics
- System performance and reliability (SAIDI, SAIFI, MAIFI)
- Customer satisfaction calculation based on internal voice-of-customer surveys
- O&M cost per customer
- Reduce system rate growth with O&M / purchased power cost reductions

### Responding to Industry Change

#### **Long-Term Industry Trends**

- The technology landscape is evolving at an unprecedented pace, with innovation driving advances in cost and capabilities of distributed energy resources
- Customer expectations are changing with increasing choices and alternatives, a growing priority of sustainability objectives, and flattening demand
- The regulatory environment for utilities is complex, increasingly supportive of new forms of competition but unable to keep pace with new business models
- Policies both in California and globally are setting aggressive greenhouse gas reduction targets

#### **Strategy**

#### **SCE Strategy**

- Clean the power system by accelerating the de-carbonization of electricity supply
- Help customers make cleaner energy choices to support electrification and leverage flexible energy demand
- Strengthen and modernize the grid by replacing aging infrastructure and deploying technology
- Achieve operational and service excellence with top tier performance in safety, reliability, affordability, and customer satisfaction

#### **Beyond SCE**

 Position Edison Energy as an independent energy advisor and integrator for large commercial and industrial customers

### Edison Energy Summary

#### **Edison Energy**

- Energy is a significant risk large commercial and industrial customers face. Edison Energy creates competitive advantage for market leaders by quantifying this risk and designing the portfolio solution to protect shareholder value threatened by complex energy policies, technological advancements, and new products.
- Optimized portfolio solutions based on robust analytics of the customer's energy portfolio in alignment with their goals and strategic objectives
- Implementation of solutions through existing service lines or brokering with third parties
- Edison International investment \$84 million as of June 30, 2019

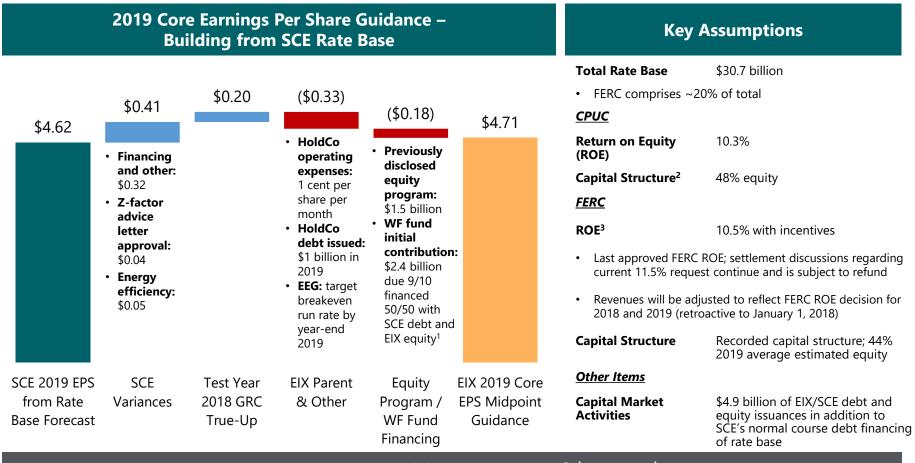




The Opportunity: Trusted Advisor and Solution Integrator

July 26, 2019 Energy for What's Ahead®

### 2019 EIX Core Earnings Guidance

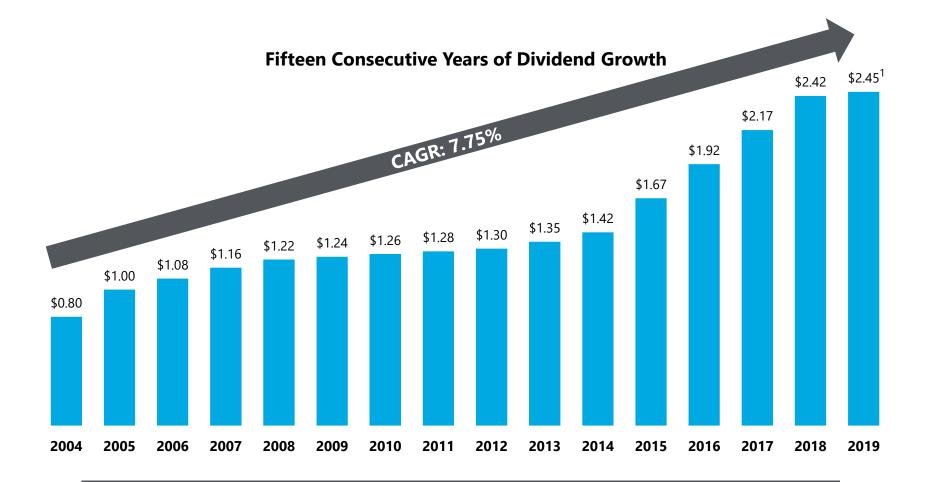


#### EIX 2019 Core EPS guidance range of \$4.61 - \$4.81

Note: See Earnings Per Share Non-GAAP Reconciliations and Use of Non-GAAP Financial Measures in Appendix. All tax-affected information on this slide is based on our current combined statutory tax rate of approximately 28%. Guidance update reflects incremental financing activity only. Totals may not foot due to rounding.

- 1. For modeling purposes, SCE debt and EIX equity (based on 7/22/19 price of \$69.68) issued on contribution due date (9/10/19); actual dilutive impact to vary based on capital mix, pricing, and timing
- 2. On February 28, 2019, SCE filed an application with the CPUC for a waiver of compliance with this equity ratio requirement, describing that while the wildfire-related charge accrued in the fourth quarter of 2018 caused its equity ratio to fall below 47% on a spot basis as of December 31, 2018, SCE remains in compliance with the 48% equity ratio over the applicable 37-month average basis. While the CPUC reviews the waiver application, SCE is considered in compliance with the capital structure rules
- 3. SCE's April 11, 2019 filing to revise its ROE is pending review with the FERC and not reflected in guidance assumptions

### EIX Annual Dividends Per Share



Target dividend growth within target payout ratio of 45-55% of SCE's earnings

<sup>1. 2019</sup> dividend annualized based on December 6, 2018 declaration

# Appendix

# SCE Historical Capital Expenditures



## Credit Ratings Summary

	S&P	Moody's	Fitch
Date of Report	July 26, 2019	July 12, 2019	July 18, 2019
Edison International			
Corporate / Outlook	BBB/Stable	Baa3/Negative	BBB-/Negative
Senior Unsecured	BBB-	Baa3	BBB-
Commercial Paper	A-2	P-3	F3
Southern California Edison			
Corporate / Outlook	BBB/Stable	Baa2/Negative	BBB-/Negative
First Mortgage Bonds	A-	A3	BBB+
Senior Unsecured	BBB	Baa2	BBB
Preferred Securities	BB+	Ba1	BB+
Commercial Paper	A-2	P-2	F3

We expect Moody's and Fitch to re-assess ratings because of our election to participate in the wildfire insurance fund

### Distribution Power Grid of the Future

#### **Current State**

#### **One-Way Electricity Flow**

- System designed to distribute electricity from large central generating plants
- Voltage centrally maintained
- Increasing integration of distributed energy resources
- Limited situational awareness and visualization tools for power grid operators

**Renewable Generation Mandates** 

**Subsidized Residential Solar** 

**Limited Electric Vehicle Charging Infrastructure** 

#### **Future State**

#### **Variable, Two-Way Electricity Flow**

- Distribution system at the center of the power grid
- System designed to manage fluctuating resources and customer demand
- Digital monitoring and control devices and advanced communications systems to improve safety and reliability, and integrate DERs
- Improved data management and power grid operations and cyber risk mitigation
- Integrated utility distribution with distributed energy resources planning

# **Maximize Distributed Resources and Electric Vehicle Adoption**

 Distribution power grid infrastructure design supports customer choice and greater resiliency

# EIX's 2018 Sustainability Report Highlights

"At Edison International, we are leading the transformation of the electric power industry toward a clean energy future by focusing on opportunities in clean energy, efficient electrification, the grid of the future, and customer choice. As we pursue this vision, sustainability remains at the core of who we are and what we do." - Pedro Pizarro, Edison International CEO

#### Transition to a Clean Energy Future



of the electricity that SCE delivered came from carbon-free resources.

Close to 80% of this carbon-free electricity. or 36% of SCE's total, came from California eligible renewable resources.



energy procurement deals announced for



through 2024 to launch the nation's largest truck and transit charging program



electric car charge ports installed through SCE's Charge Ready Pilot.

Total installed since pilot inception through year-end 2018.

#### **Operations & Governance**



reduction in SCE's System Average Interruption Duration Index (SAIDI)

for lowest repair SAIDI on record\*\*



interruption (CMI) avoided

due to SCE's new ability to predict early equipment failure using advanced analytics



of Edison International board directors were female and/or from a diverse racial/ethnic background at year-end.



than national average

SCE has the lowest system average rate among California investor-owned utilities.

#### **Customers, Communities & Employees**



in total philanthropy\*\*'

including \$1.2 million in scholarships to 30 Edison Scholars



TOP QUARTILE

2018 Business Electric Utility **Customer Satisfaction Study** 

SCE ranked second: up three positions from 2017.



procurement spend with Diverse Business Enterprises at SCE, totaling \$2.13 billion



BEST PLACES

Human Rights Campaign Corporate Equality Index (100% score) for 11th year in a row

- Edison Energy is not the same company as Southern California Edison, the utility, and Edison Energy is not regulated by the California Public Utilities Commission
- Cumulative duration (in minutes) of sustained repair outages, lasting longer than five minutes, experienced by the average customer in a year (including major event days)
- In February 2019, the EIX board approved a \$3 million donation to the Edison International Wildfire Assistance Fund to enhance community resiliency and wildfire prevention and mitigation. This affects the 2019 data year and is not reflected here

### SCE Customer Demand Trends

Commercial         42,004         42,396         42,189         42,514         42,514           Industrial         8,392         7,623         7,162         6,659           Public authorities         4,975         4,795         4,715         4,711           Agricultural and other         2,019         1,950         1,803         1,498           Subtotal         87,416         86,857         85,448         85,602         6           Resale         1,308         1,080         1,794         1,568           Total Kilowatt-Hour Sales         88,725         87,937         87,242         87,170         8           Customers         88,725         87,937         87,242         87,170         8           Customers         4,368,897         4,393,150         4,417,340         4,447,706         4,4           Commercial         557,957         561,475         565,222         569,222         55           Industrial         10,782         10,811         10,445         10,274           Public authorities         46,234         46,436         46,133         46,410           Agricultural         21,404         21,306         21,233         21,045         3 <tr< th=""><th></th><th></th><th></th><th></th><th></th><th></th></tr<>						
Commercial         42,004         42,396         42,189         42,514         42,514           Industrial         8,392         7,623         7,162         6,659           Public authorities         4,975         4,795         4,715         4,711           Agricultural and other         2,019         1,950         1,803         1,498           Subtotal         87,416         86,857         85,448         85,602         6           Resale         1,308         1,080         1,794         1,568           Total Kilowatt-Hour Sales         88,725         87,937         87,242         87,170         8           Customers         88,725         87,937         87,242         87,170         8           Customers         4,368,897         4,393,150         4,417,340         4,447,706         4,4           Commercial         557,957         561,475         565,222         569,222         55           Industrial         10,782         10,811         10,445         10,274           Public authorities         46,234         46,436         46,133         46,410           Agricultural         21,404         21,306         21,233         21,045         3 <tr< th=""><th>Kilowatt-Hour Sales (millions of kWh)</th><th>2014</th><th>2015</th><th>2016</th><th>2017</th><th>2018</th></tr<>	Kilowatt-Hour Sales (millions of kWh)	2014	2015	2016	2017	2018
Industrial   8,392   7,623   7,162   6,659   Public authorities   4,975   4,795   4,715   4,711   Agricultural and other   2,019   1,950   1,803   1,498   85,602   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659   6,659	Residential	30,027	30,093	29,579	30,221	29,865
Public authorities         4,975         4,795         4,715         4,711           Agricultural and other         2,019         1,950         1,803         1,498           Subtotal         87,416         86,857         85,448         85,602         6           Resale         1,308         1,080         1,794         1,568           Total Kilowatt-Hour Sales         88,725         87,937         87,242         87,170         8           Customers         Residential         4,368,897         4,393,150         4,417,340         4,447,706         4,4           Commercial         557,957         561,475         565,222         569,222         56           Industrial         10,782         10,811         10,445         10,274         4           Public authorities         46,234         46,436         46,133         46,410         4           Agricultural         21,404         21,306         21,233         21,045         3           Railroads and railways         105         130         133         137           Interdepartmental         22         22         22         24           Total Number of Customers         5,005,401         5,033,330         5,060,528 <td>Commercial</td> <td>42,004</td> <td>42,396</td> <td>42,189</td> <td>42,514</td> <td>42,369</td>	Commercial	42,004	42,396	42,189	42,514	42,369
Agricultural and other         2,019         1,950         1,803         1,498           Subtotal         87,416         86,857         85,448         85,602         6           Resale         1,308         1,080         1,794         1,568           Total Kilowatt-Hour Sales         88,725         87,937         87,242         87,170         8           Customers         88,725         87,937         87,242         87,170         8           Residential         4,368,897         4,393,150         4,417,340         4,447,706         4,4           Commercial         557,957         561,475         565,222         569,222         55           Industrial         10,782         10,811         10,445         10,274           Public authorities         46,234         46,436         46,133         46,410         46           Agricultural         21,404         21,306         21,233         21,045         36           Railroads and railways         105         130         133         137           Interdepartmental         22         22         22         24           Total Number of Customers         5,005,401         5,033,330         5,060,528         5,094,818	Industrial	8,392	7,623	7,162	6,659	6,786
Subtotal         87,416         86,857         85,448         85,602         6           Resale         1,308         1,080         1,794         1,568           Total Kilowatt-Hour Sales         88,725         87,937         87,242         87,170         8           Customers         88,725         87,937         87,242         87,170         8           Residential         4,368,897         4,393,150         4,417,340         4,447,706         4,4           Commercial         557,957         561,475         565,222         569,222         5           Industrial         10,782         10,811         10,445         10,274         10           Public authorities         46,234         46,436         46,133         46,410         4           Agricultural         21,404         21,306         21,233         21,045         3           Railroads and railways         105         130         133         137           Interdepartmental         22         22         22         24           Total Number of Customers         5,005,401         5,033,330         5,060,528         5,094,818         5,12           Number of New Connections         29,879         31,653	Public authorities	4,975	4,795	4,715	4,711	4,510
Resale       1,308       1,080       1,794       1,568         Total Kilowatt-Hour Sales       88,725       87,937       87,242       87,170       88         Customers         Residential       4,368,897       4,393,150       4,417,340       4,447,706       4,4         Commercial       557,957       561,475       565,222       569,222       50         Industrial       10,782       10,811       10,445       10,274       10,274         Public authorities       46,234       46,436       46,133       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,410       46,	Agricultural and other	<u>2,019</u>	<u>1,950</u>	<u>1,803</u>	<u>1,498</u>	<u>1,745</u>
Total Kilowatt-Hour Sales       88,725       87,937       87,242       87,170       88         Customers       Residential       4,368,897       4,393,150       4,417,340       4,447,706       4,44         Commercial       557,957       561,475       565,222       569,222       55         Industrial       10,782       10,811       10,445       10,274         Public authorities       46,234       46,436       46,133       46,410       4         Agricultural       21,404       21,306       21,233       21,045       3         Railroads and railways       105       130       133       137       3         Interdepartmental       22       22       22       24       24         Total Number of Customers       5,005,401       5,033,330       5,060,528       5,094,818       5,12         Number of New Connections       29,879       31,653       38,076       39,621       3	Subtotal	87,416	86,857	85,448	85,602	85,276
Customers         Residential       4,368,897       4,393,150       4,417,340       4,447,706       4,44         Commercial       557,957       561,475       565,222       569,222       56         Industrial       10,782       10,811       10,445       10,274       10         Public authorities       46,234       46,436       46,133       46,410       4         Agricultural       21,404       21,306       21,233       21,045       3         Railroads and railways       105       130       133       137       3         Interdepartmental       22       22       22       24         Total Number of Customers       5,005,401       5,033,330       5,060,528       5,094,818       5,12         Number of New Connections       29,879       31,653       38,076       39,621       3	Resale	1,308	1,080	1,794	1,568	1,867
Residential       4,368,897       4,393,150       4,417,340       4,447,706       4,4         Commercial       557,957       561,475       565,222       569,222       5         Industrial       10,782       10,811       10,445       10,274         Public authorities       46,234       46,436       46,133       46,410       4         Agricultural       21,404       21,306       21,233       21,045       3         Railroads and railways       105       130       133       137         Interdepartmental       22       22       22       24         Total Number of Customers       5,005,401       5,033,330       5,060,528       5,094,818       5,12         Number of New Connections       29,879       31,653       38,076       39,621       3	Total Kilowatt-Hour Sales	88,725	87,937	87,242	87,170	87,143
Commercial       557,957       561,475       565,222       569,222       55         Industrial       10,782       10,811       10,445       10,274       10         Public authorities       46,234       46,436       46,133       46,410       4         Agricultural       21,404       21,306       21,233       21,045       3         Railroads and railways       105       130       133       137         Interdepartmental       22       22       22       24         Total Number of Customers       5,005,401       5,033,330       5,060,528       5,094,818       5,12         Number of New Connections       29,879       31,653       38,076       39,621       3	Customers					
Industrial       10,782       10,811       10,445       10,274         Public authorities       46,234       46,436       46,133       46,410         Agricultural       21,404       21,306       21,233       21,045         Railroads and railways       105       130       133       137         Interdepartmental       22       22       22       22         Total Number of Customers       5,005,401       5,033,330       5,060,528       5,094,818       5,12         Number of New Connections       29,879       31,653       38,076       39,621       33	Residential	4,368,897	4,393,150	4,417,340	4,447,706	4,477,508
Public authorities       46,234       46,436       46,133       46,410       46,410         Agricultural       21,404       21,306       21,233       21,045       21,233         Railroads and railways       105       130       133       137         Interdepartmental       22       22       22       22         Total Number of Customers       5,005,401       5,033,330       5,060,528       5,094,818       5,12         Number of New Connections       29,879       31,653       38,076       39,621       33	Commercial	557,957	561,475	565,222	569,222	572,313
Agricultural       21,404       21,306       21,233       21,045       21,045         Railroads and railways       105       130       133       137         Interdepartmental       22       22       22       24         Total Number of Customers       5,005,401       5,033,330       5,060,528       5,094,818       5,12         Number of New Connections       29,879       31,653       38,076       39,621       38,076	Industrial	10,782	10,811	10,445	10,274	10,078
Railroads and railways       105       130       133       137         Interdepartmental       22       22       22       22         Total Number of Customers       5,005,401       5,033,330       5,060,528       5,094,818       5,12         Number of New Connections       29,879       31,653       38,076       39,621       33	Public authorities	46,234	46,436	46,133	46,410	46,059
Interdepartmental         22         22         22         22         24           Total Number of Customers         5,005,401         5,033,330         5,060,528         5,094,818         5,12           Number of New Connections         29,879         31,653         38,076         39,621         3	Agricultural	21,404	21,306	21,233	21,045	20,872
Total Number of Customers         5,005,401         5,033,330         5,060,528         5,094,818         5,12           Number of New Connections         29,879         31,653         38,076         39,621         3	Railroads and railways	105	130	133	137	131
Number of New Connections 29,879 31,653 38,076 39,621 3	Interdepartmental	22	22	22	24	24
	<b>Total Number of Customers</b>	5,005,401	5,033,330	5,060,528	5,094,818	5,126,985
Area Peak Demand (MW) 23,055 23,079 23,091 23,508 2	Number of New Connections	29,879	31,653	38,076	39,621	39,633
	Area Peak Demand (MW)	23,055	23,079	23,091	23,508	23,766

### SCE Bundled Revenue Requirement

		Require
		\$millions
Fuel & Purchased Power (44%)	<u>Fuel &amp; Purchased Power</u> – includes CDWR Bond Charge	4,268
(***)	<u>Distribution</u> – poles, wires, substations, service centers; Edison SmartConnect®	3,680
Distribution (38%)	Generation – owned generation investment and O&M	830
Generation (8%)	<u>Transmission</u> – greater than 220kV	789
Transmission (8%) Other (2%)	Other – CPUC and legislative public purpose programs, system reliability investments, nuclear decommissioning, and prior-year over collections	185
	Total Bundled Revenue Requirement (\$millions)	\$9,

SCE Systemwide Average Rate History (¢/kWh)									
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
14.3	14.1	14.3	15.9	16.7	16.2	14.8	15.7	16.0	16.4

= Bundled Systemwide Average Rate (¢/kWh)

Note: Rates in effect as of June 1, 2019. Represents bundled service which excludes Direct Access/CCA customers that do not receive generation services from SCE.

+ Bundled kWh (millions)

2019 Bundled Revenue Requirement

¢/kWh

7.2

6.2

1.2

1.5

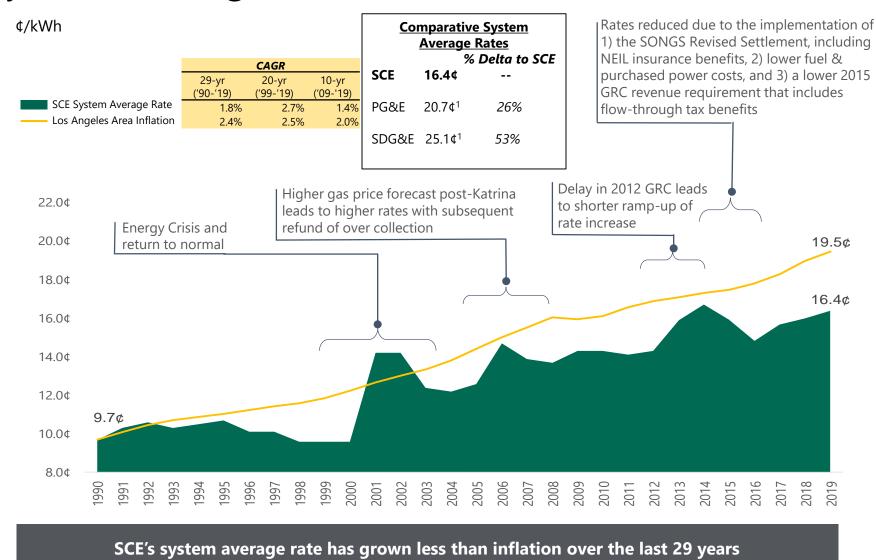
0.1

\$9,753

59,396

16.4¢

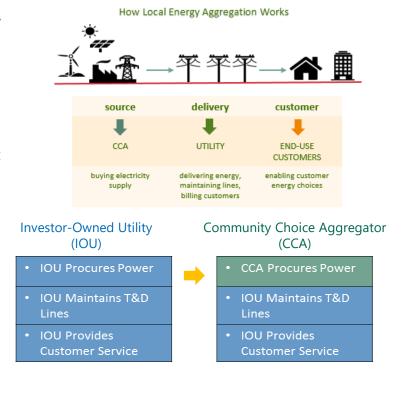
# System Average Rate Historical Growth



<sup>1.</sup> PG&E Advice 5573-E-A, SDG&E Advice 3377-E July 26, 2019

### Community Choice Aggregator (CCA) Overview

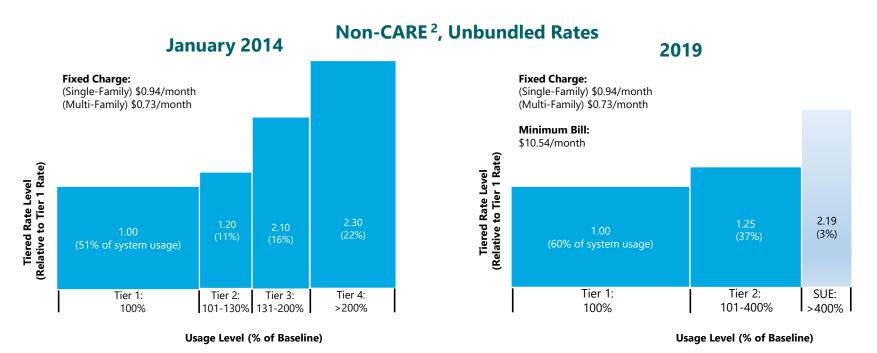
- Assembly Bill 117<sup>1</sup> permits cities and counties, and Joint Powers Agencies (JPAs) to act as CCAs to purchase and sell electricity on behalf of the utility customers within their jurisdiction
- An Order Instituting Rulemaking (OIR R.17-06-026) was opened on June 29, 2017 to review, revise, and consider alternatives to the "Power Charge Indifference Adjustment" or PCIA
  - ➤ The PCIA allocates a proportional share of above-market costs of SCE's energy procurement portfolio to departing load customers to ensure remaining bundled service customers are indifferent
  - October 11, 2018 Commission decision changes PCIA methodology and has substantially addressed the historical subsidy to departing load that materialized when renewables market prices declined over the past 4 years
    - Decision also established a Phase 2, which will address utility portfolio optimization, PCIA "pre-payment" options for entities and individual departing load customers, and implementation of the "true-up" process for Resource Adequacy and Renewable Energy Credits costs
- On February 8, 2018, the Commission approved Resolution E-4907 requiring CCAs to demonstrate compliance with annual Resource Adequacy (RA) requirements prior to commencing operations
- Existing Direct Access and CCA load is expected to be ~35% of SCE's total load by the end of 2019



Approximately 40% of SCE's bundled service load could be part of a CCA or Direct Access by the end of 2020

### Residential Rate Design OIR Decision

- CPUC Order Instituting Ratemaking R. 12-06-013 comprehensively reviewed residential rate structure, including a future transition to Time of Use (TOU) rates
  - ➤ In March 2018, SCE began to migrate 400,000 residential customers to TOU rate structures
  - > Remaining eligible residential customers to be migrated beginning October 2020
- July 2015 CPUC Decision D. 15-07-001 includes:
  - > Transition to 2 tiered rate structure, coupled with Super-User Electric (SUE) Surcharge<sup>1</sup>
  - "Super User Electric Surcharge" for usage 400% above baseline (~3% of all usage)
  - Minimum bills of approximately \$10/month (applied to delivery revenue only)



<sup>1.</sup> Completed in 2019

<sup>2.</sup> SCE's California Alternate Rates for Energy (CARE) program is an income-qualifying program that reduces energy bills for eligible customers by about 30%

# Impacts of Abundant Solar Energy (Duck Curve)

#### **New Time-of-Use (TOU) Periods**

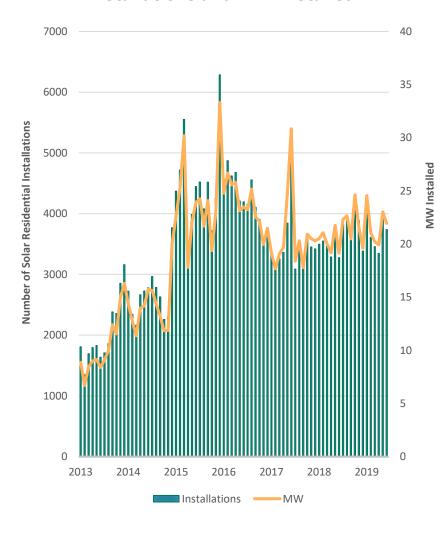
- On March 1, 2019, SCE changed its basic TOU pricing period definition for the first time in over 30 years
- Abundant mid-day renewable energy lowers prices from 8am-4pm
- Highest cost period is now 4pm-9pm, all-days<sup>1</sup>

	Season	Previous	New
On-Peak	Summer	Weekdays: 12-6pm	Weekdays: 4-9pm
Mid-Peak	Summer	Weekdays: 8am-12pm; 6pm-11pm	Weekends: 4-9pm
	Winter	Weekdays: 8am-9pm	Weekdays and Weekends: 4-9pm
Off-Peak	Summer	Weekdays: 11pm-8am Weekends: All	Weekdays and Weekends: All except 4-9pm
	Winter	Weekdays: 9pm-8am Weekends: All	Weekdays and Weekends: 9pm-8am
Super Off-Peak	Winter	N/A	Weekdays and Weekends: 8am-4pm

<sup>1.</sup> TOU pricing periods defined for non-residential customers per CPUC Decision D.18-07-006. Similar residential TOU definitions were filed by SCE in A.17-12-012

# SCE Net Energy Metering

#### Monthly Residential Solar Installations and MW Installed



### **SCE Net Metering Statistics (6/19)**

- 315,756 combined residential and non-residential projects 2,649 MW installed
- 99.8 % solar projects
- 308,576 residential (6.9% of all residential customers) 1,686 MW
- 7.180 non-residential 964 MW
- Approximately 4,631,727 MWh/year generated

### **Key Dates**

#### **July 1, 2017**

- Official start of NEM successor tariff; customers are subject to:
  - Mandatory TOU rate
  - Non-bypassable charges
  - > Application fees

#### July 31, 2017

 Residential customers who meet this deadline are grandfathered for current TOU periods for maximum of 5 years (10 for non-residential)

#### September 9, 2017

Smart Inverters required on all solar installations

#### July 25, 2018

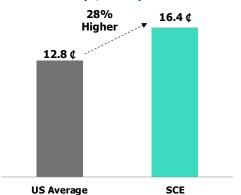
Smart Inverters with Reactive Power Priority required on all solar installations

#### **Near Term Outlook**

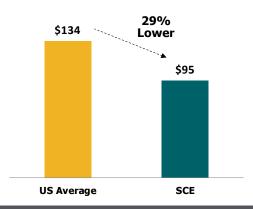
- Combination of a flatter tiered rate and the mandatory TOU NEM 2.0 rate structure has helped reduce the per customer cost shift; further efforts to reduce the shift through new TOU pricing periods
- Commission to revisit NEM Successor Tariff by July 2020 where increased customer/demand charges and market priced export compensation rates will be explored

### SCE Rates and Bills Comparison

### 2018 Average Residential Rates (¢/kWh)



### 2018 Average Residential Bills (\$ per Month)



#### **Key Factors**

- SCE's residential rates are above national average due, in part, to a cleaner fuel mix, high cost of living, and lower system load factor
- SCE's residential customer usage is lower than the national average due to mild climate and higher energy efficiency appliance and building standards
- Average monthly residential bills are lower than the national average as higher rate levels are more than offset by lower usage

SCE's average residential rates are above national average, but residential bills are below national average due to lower usage

Source: EIA's Form 861M (formerly Form 826) Data Monthly Electric Utility Sales and Revenue Data for 2018. https://www.eia.gov/electricity/data/eia861m/index.html.

# Second Quarter Earnings Summary

		Q2 2019	Q2 2018	١	/ariance
Basic Earnings Per Share (EPS) <sup>1</sup>					
SCE	\$	1.28	\$ 0.91	\$	0.37
EIX Parent & Other		(80.0)	(0.06)		(0.02)
Basic EPS	\$	1.20	\$ 0.85	\$	0.35
Less: Non-core Items					
SCE <sup>2</sup>	\$	(0.38)	\$ _	\$	(0.38)
EIX Parent & Other	_	_	_		
Total Non-core	\$	(0.38)	\$ _	\$	(0.38)
Core Earnings Per Share (EPS)					
SCE	\$	1.66	\$ 0.91	\$	0.75
EIX Parent & Other		(80.0)	(0.06)		(0.02)
Core EPS	\$	1.58	\$ 0.85	\$	0.73

Key SCE EPS Drivers <sup>3</sup>		
Test Year 2018 GRC true-up		\$ 0.20
Higher revenue		0.34
- CPUC revenue	0.28	
- FERC and other operating revenue Lower O&M	0.06	0.14
Lower depreciation		0.07
Higher net financing costs		(0.01)
Other income and expenses	_	0.01
Total core drivers		\$ 0.75
Non-core items <sup>2</sup>		(0.38)
Total	3	\$ 0.37

Key EIX EPS Drivers	
EIX parent and other — Higher interest expense	\$ (0.03)
EEG — Lower corporate expenses	 0.01
Total core drivers	\$ (0.02)
Total	\$ (0.02)

Note: Diluted earnings were \$1.20 and \$0.84 per share for the three months ended June 30, 2019 and 2018, respectively.

<sup>1.</sup> See Earnings Non-GAAP reconciliations and Use of Non-GAAP Financial Measures in Appendix

<sup>2.</sup> Impact of 2018 GRC final decision related to impairment of utility property, plant and equipment

<sup>3.</sup> Adjusted to exclude Test Year 2018 GRC true-up

### Year to Date Earnings Summary

	YTD 2019	YTD 2018	٧	ariance
Basic Earnings Per Share (EPS) <sup>1</sup>				
SCE	\$ 2.18	\$ 1.79	\$	0.39
EIX Parent & Other	(0.13)	(0.27)		0.14
Basic EPS	\$ 2.05	\$ 1.52	\$	0.53
Less: Non-core Items				
SCE <sup>2</sup>	\$ (0.16)	\$ _	\$	(0.16)
EIX Parent & Other <sup>3</sup>	_	(0.13)		0.13
Total Non-core	\$ (0.16)	\$ (0.13)	\$	(0.03)
Core Earnings Per Share (EPS)				
SCE	\$ 2.34	\$ 1.79	\$	0.55
EIX Parent & Other	(0.13)	(0.14)		0.01
Core EPS	\$ 2.21	\$ 1.65	\$	0.56

Key SCE EPS Drivers⁴		
Test Year 2018 GRC true-up		\$ 0.20
Higher revenue		0.43
- CPUC revenue	0.34	
- FERC and other operating revenue	0.09	
Higher O&M		(0.04)
Lower depreciation		0.03
Higher net financing costs		(0.09)
Income taxes		0.02
Total core drivers		\$ 0.55
Non-core items <sup>2</sup>		(0.16)
Total		\$ 0.39

Key EIX EPS Drivers	
EIX parent and other — Higher interest expense	\$ (0.02)
EEG — Lower losses at the competitive business and lower corporate expenses	 0.03
Total core drivers	\$ 0.01
Non-core items <sup>3</sup>	0.13
Total	\$ 0.14

Note: Diluted earnings were \$2.05 and \$1.51 per share for the six months ended June 30, 2019 and 2018, respectively.

<sup>1.</sup> See Earnings Non-GAAP reconciliations and Use of Non-GAAP Financial Measures in Appendix

<sup>2.</sup> Impact of 2018 GRC final decision related to impairment of utility property, plant and equipment, changes in the allocation of deferred tax re-measurement between customers, shareholders and gain from sale of nuclear fuel as a result of Revised San Onofre Settlement Agreement

<sup>3.</sup> Loss on sale of SoCore Energy

<sup>4.</sup> Adjusted to exclude Test Year 2018 GRC true-up

# SCE Annual Results of Operations

(\$ millions)

- Earning activities revenue authorized by CPUC and FERC to provide reasonable cost recovery and return on investment
- Cost-recovery activities CPUC- and FERC-authorized balancing accounts to recover specific project or program costs, subject to reasonableness review or compliance with upfront standards

	2018				2017	
	Earnings Activities	Cost-Recovery Activities	Total Consolidated	Earnings Activities	Cost-Recovery Activities	Total Consolidated
Operating revenue	\$6,560	\$6,051	\$12,611	\$6,611	\$5,643	\$12,254
Purchased power and fuel	_	5,406	5,406	_	4,873	4,873
Operation and maintenance	1,972	730	2,702	1,898	824	2,722
Wildfire-related claims, net of recoveries	2,669	_	2,669	_	_	_
Depreciation and amortization	1,867	_	1,867	2,032	_	2,032
Property and other taxes	392	_	392	372	_	372
Impairment and other charges	(12)	_	(12)	716	_	716
Other operating income	(7)		(7)	(8)		(8)
Total operating expenses	6,881	6,136	13,017	5,010	5,697	10,707
Operating (loss) income	(321)	(85)	(406)	1,601	(54)	1,547
Interest expense	(671)	(2)	(673)	(588)	(1)	(589)
Other income and expenses	107	87	194	93	55	148
(Loss) income before income taxes	(885)	_	(885)	1,106	_	1,106
Income tax (benefit) expense	(696)		(696)	(30)		(30)
Net (loss) income	(189)	_	(189)	1,136	_	1,136
Preferred and preference stock dividend requirements	121		121	124		124
Net (loss) income available for common stock	<u>(\$310)</u>	_	(\$310)	\$ <u>1,012</u>	_	\$1,012
Less: Non-core items			(1,750)			(481)
Core Earnings			<u>\$1,440</u>			<u>\$1,493</u>

Note: See Use of Non-GAAP Financial Measures.

# Earnings Per Share Non-GAAP Reconciliations

Reconciliation of EIX Basic Earnings Per Share Guidance to EIX Core Earnings Per Share Guidance

EPS Attributable to Edison International		2019	
	Low	<u>Midpoint</u>	<u>High</u>
SCE		\$4.88	
EIX Parent & Other		(0.32)	
Basic EPS <sup>1</sup>	\$4.46	\$4.56	\$4.66
Non-Core Items			
SCE <sup>2,3</sup>	(0.15)	(0.15)	(0.15)
EIX Parent & Other	_	_	_
Total Non-Core <sup>1</sup>	(0.15)	(0.15)	(0.15)
Core EPS			
SCE		\$5.03	
EIX Parent & Other		(0.32)	
Core EPS <sup>1</sup>	\$4.61	\$4.71	\$4.81

<sup>1.</sup> EPS is calculated on the assumed weighted-average share count for 2019. Please see 2019 EIX Core Earnings Guidance slide for more information.

<sup>2.</sup> Includes \$0.22 per share of non-core items recorded for the three months ended March 31, 2019 and \$(0.37) per share related to the impairment of utility property, plant and equipment due to the receipt of the 2018 GRC final decision in May 2019

<sup>3.</sup> Includes \$(0.01) as a result of share count dilution

# Earnings Non-GAAP Reconciliations

(\$ millions)

Reconciliation of EIX GAAP Earnings to EIX Core Earnings

Earnings Attributable to Edison International	Q2 2019	Q2 2018	YTD 2019	YTD 2018
SCE	\$419	\$297	\$712	\$583
EIX Parent & Other	(27)	(21)	(42)	(89)
Basic Earnings	\$392	\$276	\$670	\$494
Non-Core Items  SCE <sup>1</sup> EIX Parent & Other <sup>2</sup>	(\$123)	<del>-</del> 2	(\$51)	— (42)
Total Non-Core	(\$123)	\$2	(\$51)	(\$42)
Core Earnings				
SCE	\$542	\$297	\$763	\$583
EIX Parent & Other	(27)	(23)	(42)	(47)
Core Earnings	\$515	\$274	\$721	\$536

<sup>1.</sup> Includes an impairment charge of \$170 million (\$123 million after-tax) recorded in 2019 for SCE related to disallowed historical capital expenditures in SCE's 2018 GRC final decision in the second quarter of 2019. The six months ended June 30, 2019, includes income tax benefits of \$69 million recorded in 2019 for SCE related to changes in the allocation of deferred tax re-measurement between customers and shareholders as a result of a CPUC resolution issued in February 2019

<sup>2.</sup> Includes Loss of \$63 million (\$46 million after-tax) recorded in 2018 for Edison International Parent and Other related to sale of SoCore Energy in April 2018

### EIX Core EPS Non-GAAP Reconciliations

Reconciliation of Edison International Basic Earnings Per Share to Edison International Core Earnings Per Share

Earnings Per Share Attributable to Edison International	2018	2017
Basic EPS	(\$1.30)	\$1.73
Non-Core Items		
SCE		
Wildfire-related claims, net of recoveries	(5.60)	
Settlement of 1994 – 2006 California tax audits	0.20	
Write down, impairment and other as a result of Revised San Onofre Settlement Agreement	0.03	(1.38)
Re-measurement of deferred taxes as a result of Tax Reform		(0.10)
Edison International Parent and Other		
Settlement of 1994 – 2006 California tax audits	(0.04)	
Re-measurement of deferred taxes as a result of Tax Reform	_	(1.33)
Sale of SoCore Energy and other	(0.14)	0.04
Discontinued operations		
Settlement of 1994 – 2006 California tax audits	0.10	
Less: Total Non-Core Items	(5.45)	(2.77)
Core EPS	\$4.15	\$4.50

Note: See Use of Non-GAAP Financial Measures.

### Use of Non-GAAP Financial Measures

Edison International's earnings are prepared in accordance with generally accepted accounting principles used in the United States. Management uses core earnings internally for financial planning and for analysis of performance. Core earnings are also used when communicating with investors and analysts regarding Edison International's earnings results to facilitate comparisons of the Company's performance from period to period. Core earnings are a non-GAAP financial measure and may not be comparable to those of other companies. Core earnings (or losses) are defined as earnings or losses attributable to Edison International shareholders less income or loss from discontinued operations and income or loss from significant discrete items that management does not consider representative of ongoing earnings, such as: exit activities, including sale of certain assets, and other activities that are no longer continuing; asset impairments and certain tax, regulatory or legal settlements or proceedings.

A reconciliation of Non-GAAP information to GAAP information is included either on the slide where the information appears or on another slide referenced in this presentation.

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