

# **San Diego Community Power**

## **Energy Risk Management Policy**

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## **Energy Risk Management Policy**

### **1.0 General Provisions**

#### **1.1 Background and Purpose of Policy**

San Diego Community Power (SDCP) participates in energy markets for purposes of fulfilling its role as a Community Choice Aggregator serving retail electricity customers located within the San Diego region. This Energy Risk Management Policy (Policy) has been developed to facilitate the achievement of SDCP's organizational objectives while adhering to policies established by SDCP's Board of Directors (Board), power supply and related contract commitments, good utility practice, and applicable laws and regulations.

This Policy defines SDCP's general energy risk management framework and provides management with the authority to establish processes for monitoring, measuring, reporting, and controlling market and credit risks to which SDCP is exposed in its normal course of business.

#### **1.2 Scope of Business and Related Market Risks**

SDCP provides electric energy to retail customers within its service territory, which requires completion of the following business activities: bilateral purchases and sales of electricity under short-, medium- and long- term contracts; scheduling of load and generation of electricity into California Independent System Operator (CAISO) markets; retail marketing of electricity to consumers within its service territory; compliance with voluntary objectives and regulatory requirements that relate to carbon-free and Renewables Portfolio Standard (RPS) compliance; participation in the CAISO-administered Congestion Revenue Rights ("CRRs") market; management of the balance between load and generation over the short-, medium- and long-term planning horizons; and compliance with California Public Utilities Commission (CPUC) Resource Adequacy (RA) requirements. Participation in such activities expose SDCP to certain risks, which include, but are not limited to, the following:

- Market Price Risk
- Counterparty Credit and Performance Risk
- Load and Generation Volumetric Risk
- Operational Risk
- Liquidity Risk
- Regulatory/Legislative Risk

To mitigate SDCP's exposure to such risks, this Policy has been drafted to focus on the following areas of concern:

- Risk Management Goals and Principles
- Definitions of Risks
- Internal Control Principles
- Risk Management Business Practices
- Risk Management Governance

This Policy does not address the following types of general business risk, which should be treated separately in other policies, ordinances and regulations pertaining to SDCP: fire, accident and casualty;



health, safety, and workers' compensation; general liability; and other such typically insurable perils. The term "risk management," as used herein, is therefore understood to refer solely to market risks as defined herein, and not those other categories of risk.

### **1.3 Policy Administration**

This version of the Energy Risk Management Policy was adopted by the SDCP Board of Directors on June 25, 2020. This Policy may be amended as needed by SDCP's Board. SDCP's Finance and Risk Management Committee (FRMC) may periodically recommend policy updates to the Board.

### **1.4 Policy Distribution and Acknowledgment**

This Policy shall be distributed to all SDCP employees and third-party contractors who are engaged in the planning, procurement, sale and scheduling of electricity on SDCP's behalf and/or in other SDCP departments providing oversight and support for these activities. All such employees and contractors are required to confirm in writing on an annual basis that they have:

- Read SDCP's Risk Management Policy
- Understand the terms and agreements of said Policy
- Will comply with said Policy
- Understand that any violation of said Policy shall be subject to employee discipline up to and including termination of employment.

### **1.5 Policy Interpretation**

Questions about the interpretation of any matters of the Policy should be referred to the Risk Management Committee. All legal matters stemming from this Policy will be referred to General Counsel.

## **2.0 Risk Management Goals**

The goals of SDCP's energy risk management practices are to:

- [1] assist in achieving the business objectives of retail rate stability and competitiveness;
- [2] avoid losses and excessive costs, which would materially impact the financial condition of SDCP;
- [3] establish the parameters for energy procurement and sales activity to minimize costs while ensuring compliance with approved risk limits and policy objectives;
- [4] assist in assuring that market activities and transactions are undertaken in compliance with established procurement authorities, applicable laws, regulations and orders; and
- [5] encourage the development and maintenance of a corporate culture at SDCP in which the proper balance is struck between control and facilitation and in which professionalism, discipline, technical skills, and analytical rigor come together to achieve SDCP objectives.

## **3.0 Risk Management Principles**



### **3.1 General Risk Management Principles**

SDCP manages its energy resources and transactions with the objectives of reducing greenhouse gas emissions, supporting local economic development and providing customers with stable, competitive electric rates while contemporaneously minimizing risks. SDCP's risk management principles include the identification of relevant risks, systematic risk measurement and reporting, and strict adherence to established risk policies. SDCP will not engage in transactions without proper authorization or if such transactions are determined to be inconsistent with this Policy.

It is the policy of SDCP that all personnel, including the Board, management, and agents, adhere to standards of integrity, ethics, conflicts of interest, compliance with statutory law and regulations and other applicable SDCP standards of personal conduct while employed by or affiliated with SDCP.

### **3.2 Conflicts of Interest**

All SDCP Directors, management, employees, consultants, and agents participating in any transaction or activity within the coverage of this Policy are obligated to give notice in writing to SDCP of any interest such person has in any counterparty that seeks to do business with SDCP, and to identify any real or potential conflict of interest such person has or may have with regard to any existing or potential contract or transaction with SDCP. Further, all persons are prohibited from personally participating in any transaction or similar activity that is within the coverage of this Policy, or prohibited by California Government Code § 1090, and that is directly or indirectly related to the trading of electricity and/or environmental attributes as a commodity.

If there is any doubt as to whether a prohibited condition exists, then it is the employee's responsibility to discuss the possible prohibited condition with her/his manager or supervisor.

### **3.3 Adherence to Statutory Requirements**

Compliance is required with rules promulgated by the state of California, California Public Utilities Commission, California Energy Commission, Federal Energy Regulatory Commission (FERC), Commodity Futures Trading Commission (CFTC), and other regulatory agencies.

Congress, FERC and CFTC have enacted laws, regulations, and rules that prohibit, among other things, any action or course of conduct that actually or potentially operates as a fraud or deceit upon any person in connection with the purchase or sale of electric energy or transmission services. These laws also prohibit any person or entity from making any untrue statement of fact or omitting to state a material fact where the omission would make a statement misleading. Violation of these laws can lead to both civil and criminal actions against the individual involved, as well as SDCP. This Policy is intended to comply with these laws, regulations and rules and to avoid improper conduct on the part of anyone employed by SDCP. These procedures may be modified from time to time by legal requirements, auditor recommendations, FRMC and ROC requests, and other considerations.

In the event of an investigation or inquiry by a regulatory agency, SDCP will provide legal counsel to employees. However, SDCP will not appoint legal counsel to an employee if SDCP's General Counsel and Chief Executive Officer determine that the employee was not acting in good faith within the scope of employment. SDCP employees are prohibited from working for another power supplier, CCA or utility in a related position while they are simultaneously employed by SDCP unless an exception is authorized by



the Board. For clarity, this prohibition is not intended to prevent SDCP staff from performing non-CCA activities on behalf of SDCP in the normal course of its business.

### **3.4 System of Records**

SDCP will maintain a set of records for all transactions executed in association with SDCP's procurement activities. The records will be maintained in US dollars and transactions will be separately recorded and categorized by type of transaction. This system of record shall be auditable.

## **4.0 Definitions of Market Risks**

The term "market risks," as used herein, refers specifically to those categories of risk which relate to SDCP's participation in wholesale and retail markets as a Load Serving Entity (LSE) as well as SDCP's interests in certain long-term contracting opportunities. Market risks include market price risk, counterparty credit and performance risk, load and generation volumetric risk, operational risk and liquidity risk, as well as regulatory and legislative risk. These categories are defined and explained as follows.

### **4.1 Market Price Risk**

Market price risk is defined as exposure to changes in wholesale energy prices. Market price risk is a function of price volatility and the volume of energy that is contracted at fixed prices over a defined period of time. Prices in electricity markets exhibit high volatility, and appropriate forward procurement and hedging approaches are necessary to manage exposure to pricing volatility within the CAISO or bilateral energy markets.

Market price risk is also impacted by market liquidity, which may be an issue for certain energy or capacity products that SDCP procures. Illiquid markets are characterized by relatively few buyers or sellers, making it more difficult to buy or sell a commodity and often resulting in higher premiums on purchases or deeper discounts on sales.

Another dimension of market price risk is congestion or "basis" risk. Congestion risks arise from the locational differences in prices between the point of delivery of SDCP's load (meaning, power consumed by customers) and its contracted supply.

For SDCP, market price risk manifests in two types of exposure. The first type of market price risk exposure is the potential for variations in power costs that are related to SDCP's "open positions", meaning the volume of energy that will ultimately be required for delivery to SDCP customers but that has not yet been purchased. Increases in market prices will increase SDCP's costs when those open positions are eventually filled at the higher prices. Incurrence of higher than anticipated power costs can reduce funds available for financial reserves or other planned uses and can lead to the need for rate increases. Market price risk exposure related to open positions are monitored through net open position valuations and value at risk metrics as described in Section 6.1 of this Policy.

The second type of market price risk exposure is the potential for wholesale trading positions, long-term supply contracts and generation resources to move "out of the money," that is, become less valuable when compared to similar positions, contracts or resources obtainable at present prices. These same positions can also be "in the money" if such positions become more valuable when compared to similar positions, contracts or resources obtainable at present market prices. This valuation methodology is

commonly referred to as “Mark to Market.” Transaction valuation and reporting of positions shall be based on objective, market observed prices. If SDCP is “out of the money” on a substantial portion of its contracts, it may have to charge higher retail rates relative to competitors. Such a situation could erode SDCP’s competitive position and market share if other market participants (e.g., Direct Access providers or SDG&E) are able to procure power at a lower cost and offer lower retail electric rates.

## **4.2 Counterparty Credit and Performance Risk**

Performance and credit risk refer to the inability or unwillingness of a counterparty to perform according to its contractual obligations. Failure to perform may arise if an energy supplier fails to deliver energy as agreed. There are four general performance and credit risk scenarios:

- [1] counterparties and wholesale suppliers may fail to deliver energy or environmental attributes, requiring SDCP to purchase replacement products elsewhere, possibly at higher costs;
- [2] counterparties may fail to take delivery of energy or environmental attributes sold to them, necessitating a quick resale of the product elsewhere, possibly at a lower price;
- [3] counterparties may fail to pay for delivered energy or environmental attributes; and
- [4] counterparties and suppliers may refuse to extend credit to SDCP, possibly resulting in higher collateral posting costs, which could impact SDCP’s cash position and/or bank lines of credit.

An important subcategory of credit risk is concentration risk. When a portfolio of positions and resources is concentrated with one or a very small number of counterparties, generating resources, or geographic locations, it becomes more likely that major losses will be sustained in the event of non-performance by a counterparty/supplier or as a result of unexpected price fluctuations at one location.

## **4.3 Load and Generation Volumetric Risk**

Energy deliveries must be planned in consideration of forecasted load. SDCP forecasts load over the long and short term and enters into long- and short-term fixed price energy contracts to hedge its load consistent with the provisions of its Integrated Resource Plan (IRP).

Load forecasting risk arises from inaccurate load forecasts and may result in the over- or under-procurement of energy and/or customer rate revenues that deviate from approved budgets. Energy delivery risk occurs if a generator fails to deliver expected or forecasted energy volumes. Variations in wind speed and cloud cover, for example, can also impact the respective amount of electricity generated by wind and solar resources. Furthermore, the occasional oversupply of power on California’s electric grid can lead to curtailment of energy deliveries or reduced revenue resulting from low or negative prices at certain energy delivery points. In general, weather is an important variable that can result in higher or lower electricity usage due to its impact of customer electricity usage (heating and cooling needs, for example) as well as energy production (by generators that are commonly impacted by ambient weather conditions).

In the CAISO markets this situation can result from both the oversupply and undersupply of electricity relative to SDCP’s load as well as the over- or under-scheduling of generation or load into the day ahead market (relative to actual energy consumed or delivered in the real-time market). Load and generation volumetric risk may result in unanticipated open positions and imbalance energy costs, which are assessed

when actual and scheduled loads do not align. More specifically, imbalance energy costs result from temporal pricing differences that often exist in the day-ahead and real-time energy markets during discrete scheduling intervals. For example, if SDCP's actual load is higher than scheduled in the day-ahead market, and real-time prices are comparatively high during such instances, then SDCP bears the risk of higher-than-anticipated energy costs due to such variation. .

#### **4.4 Operational Risk**

Operational risk consists of the potential for failure to execute and control business activities relative to plan. Operational risk includes the potential for:

- [1] organizational structure that proves to be ineffective in addressing risk, i.e., the lack of sufficient authority to make and execute decisions, inadequate supervision, ineffective internal checks and balances, incomplete, inaccurate and untimely forecasts or reporting, failure to separate incompatible functions, etc.;
- [2] absence, shortage or loss of key personnel or lack of cross-functional training;
- [3] lack or failure of facilities, equipment, systems and tools, such as computers, software, communications links and data services;
- [4] exposure to litigation or sanctions resulting from violating laws and regulations, not meeting contractual obligations, failure to address legal issues and/or receive competent legal advice, not drafting and analyzing contracts effectively, etc.; and
- [5] errors or omissions in the conduct of business, including failure to execute transactions, violation of guidelines and directives, etc.

#### **4.5 Liquidity Risk**

Liquidity Risk is the risk that SDCP will be unable to meet its financial obligations. This can be caused by unexpected financial events and/or inaccurate pro forma calculations, rate analyses, and debt analyses. Some unexpected financial events impacting liquidity could include:

- [1] breach of SDCP credit covenants or thresholds – SDCP has credit covenants included in its banking agreements and may, eventually, have similar covenants within its energy contracts. Breach of credit covenants or thresholds could result in the withdrawal of SDCP's line of credit or may trigger the requirement to post collateral;
- [2] contractual requirements to post collateral (with counterparties) due to a decline in market prices below the contract price; and
- [3] from time to time SDCP may be the subject of legal or other claims arising from the normal course of business. Payment of a claim by SDCP could reduce SDCP's liquidity if the cause of loss is not covered by SDCP's insurance policies.

#### **4.6 Regulatory/Legislative Risk**





Regulatory risk encompasses market structure and operational risks associated with shifting state and federal regulatory policies, rules, and requirements that could negatively impact SDCP. An example is the potential increase in exit fees for customers served by Community Choice Aggregators that could result in higher overall electricity costs for SDCP customers (relative to SDG&E or DA service options).

Legislative risk is associated with actions by federal and state legislative bodies, which may impose adverse changes or requirements that could infringe upon SDCP's autonomy, increase its costs, or otherwise negatively impact SDCP's ability to fulfill its goals and objectives.

## **5.0 Internal Control Principles**

Internal controls are based on proven principles that meet or exceed the requirements of financial institutions and credit rating agencies while also being considerate of good utility practice. The required controls shall include all customary and usual business practices designed to prevent errors and improprieties, ensure accurate and timely reporting of results of operations as well as information pertinent to management, and facilitate attainment of business objectives. These controls shall remain fully integrated in all activities of the business and shall be consistent with stated objectives. There shall be active participation by senior management in risk management processes.

The required controls include the following:

[1] Segregation of duties and functions between front, middle, and back office activities. In general terms, the designation of responsibilities shall be organized as follows:

- Front office is responsible for planning (e.g. preparation of the IRP and other planning activities) and procurement (e.g. solicitation management, contract negotiation, structuring and pricing as well as contract execution), contract management, compliance and oversight of scheduling coordinator functions with the CAISO;
- Middle office is responsible for controls and reporting (e.g., risk monitoring, risk measurement, risk reporting, procurement compliance, counterparty credit review, approval and monitoring); and
- Back office is responsible for settlements and processing (e.g., verification, validation, reconciliation and analysis of transactions, tracking, processing and settlement of transactions).

[2] Delegation of authority as defined in section 6.5 (below) that is commensurate with responsibility and capability, and relevant training to ensure adequate knowledge to operate in and comply with rules associated with the markets in which such personnel may transact (e.g., CAISO). Contract origination, commercial approval, legal review, invoice validation, and transaction auditing shall be performed by separate staff or contractors for each transaction. No individual staff member shall perform all of these functions on a single transaction.

[3] Defining authorized products and transactions. In general terms, authorized and prohibited transactions are defined as follows:

- Authorized transactions are those transactions directly related to the procurement and/or administration of electric energy, reserve capacity, transmission and distribution service, ancillary services, congestion revenue rights, renewable energy, renewable energy credits, scheduling

activities, tolling agreements, and bilateral purchases of energy products. All transactions must be consistent with this Policy and the Board approved IRP.

- It is the expressed intent of this Policy to prohibit the acquisition of risk beyond that encountered in the efficient optimization of SDCP's generation portfolio and execution of procurement strategies. Prohibited transactions are those transactions that are not related to serving retail electric load and/or reducing financial exposure. Speculative buying and selling of energy products or maintenance of open positions that do not conform with agreed upon thresholds is prohibited. Speculation is defined as buying energy in excess of forecasted load plus reasonable planning reserves, intentionally under procuring energy relative to minimum load hedging targets or selling energy or environmental attributes that are not yet owned by SDCP. In no event shall speculative transactions be permitted. Any financial derivatives transaction including, but not limited to futures, swaps, options, and swap options are also prohibited. If any questions arise as to whether a proposed transaction(s) constitutes speculation, SDCP shall conduct an analysis of the transaction and the Board shall review the transaction(s) to determine whether the transaction(s) would constitute speculation and document its finding in the meeting minutes.

[4] Defining proper process for executing power supply contracts. SDCP will ensure power supply contracts are approved by pertinent technical personnel. Legal review will be required of various forms of agreement used by SDCP.

[5] Accurately capturing transactions and other data, with standardization of electronic and hard copy documentation.

[6] Summarizing and reporting of transactions and other activity at regular intervals.

[7] Measuring risk and performance in a timely manner and at regular intervals.

[8] Regularly reviewing compliance to ensure that this Policy and related risk management guidelines are adhered to, with specific guidelines for resolving instances of noncompliance.

[9] Ensuring active participation by senior management in risk management processes.

## **6.0 Risk Management Business Practices**

### **6.1 Risk Measurement Metrics and Reporting**

A vital element of this Policy is the regular identification, measurement and communication of risk. To effectively communicate risk, all risk management activities must be monitored on a frequent basis using risk measurement methodologies that quantify the risks associated with SDCP's procurement-related business activities and performance relative to stated goals.

SDCP measures and updates its risks using a variety of tools that model programmatic financial projections, market exposure and risk metrics, as well as through short-term budget updates. The following items are measured, monitored and reported:

[1] Mark-to-Market Valuation – marking to market is the process of determining the current value of contracted supply. A mark-to-market valuation shall be performed at least once per quarter.

[2] Exposure Reporting – calculates the notional dollar risk exposure and value at risk of open portfolio positions at current market prices. The exposure risk calculations shall be performed at least once per quarter.

[3] Open Position Monitoring – on a monthly basis, SDCP shall calculate/monitor its open positions for all energy and capacity products. If energy open positions for the month following the then current month (prompt month) exceed 10% of load, SDCP will solicit market energy to close open positions and make a commercial decision to close the position. Open positions for terms beyond the prompt month will be monitored monthly and addressed in accordance with SDCP's planning models and related policies.

[4] Counterparty Credit Exposure – calculates the notional and mark-to-market exposure to each SDCP counterparty by deal and in aggregate. Counterparty credit exposure shall be reported on a quarterly basis. Counterparty exposure reporting includes contingent collateral posting risks arising from changes in market prices and other factors.

[5] Reserve Requirement Targets – no less than once per year, SDCP staff will monitor SDCP's reserves to ensure that they meet the targeted thresholds.

Consistent with the above, the Middle Office will develop reports and provide feedback to the Risk Oversight Committee. If a limit or control established by this Policy is violated, the Middle Office will send notification to the responsible party and the Risk Oversight Committee. The Risk Oversight Committee will discuss the cause and potential remediation of any violation to determine next steps for curing the violation.

Risk measurement methodologies shall be re-evaluated on a periodic basis to ensure SDCP adjusts its methods to reflect the evolving competitive landscape.

## **6.2 Market Price Risk**

SDCP manages market price risk using its planning models which define forecasted load, energy under contract and SDCP's open positions across various energy product types including renewable energy (Portfolio Content Category I, II and III), carbon-free energy and system power relative to SDCP's procurement targets.

SDCP determines the quantity of energy it intends to place under contract each year through the use of its planning models and in consideration of stated procurement targets. The planning models include an outline of the delivery term and quantity of each energy product that SDCP intends to fill in the upcoming year. The planning models inform SDCP's solicitation planning, including solicitation timing and strategy as well as the person/team responsible for related solicitations.

In general, SDCP will seek to purchase some long-term renewable energy each year for purposes of diversifying market exposure while also avoiding potential "planning cliffs", which can occur when a significant portion of long-term contracts expire at or near the same point in time.

For products generally purchased through short- and medium-term contracts, SDCP follows a similar temporal diversification strategy, with multiple procurement cycles occurring throughout the year.

Congestion risk is managed through the contracting process with a preference for day-ahead energy delivery at the SP 15 trading hub. Once energy is procured, SDCP manages congestion risks through the application of CRRs consistent with its Congestion Revenue Rights Risk Management Guidelines. CRRs are financial instruments used to hedge against transmission congestion costs encountered in the CAISO day-ahead market. SDCP uses a third-party scheduling coordinator to manage its CRR portfolio. SDCP primarily uses CRRs to reduce its exposure to congestion charges.

### **6.3 Counterparty Credit and Performance Risk**

SDCP shall evaluate and monitor the financial strength of its suppliers in consideration of adopted Credit Guidelines. Generally, SDCP manages its exposure to energy suppliers by exhibiting a preference for counterparties with Investment Grade Credit ratings as determined by Moody's or Standard and Poor's and through the use of security requirements in the form of cash and letters of credit. SDCP measures its mark-to-market counterparty credit exposure consistent with industry best practices.

### **6.4 Load and Generation Volumetric Risk**

SDCP manages energy delivery risks by ensuring that contracts include appropriate contractual penalties for non-delivery, acquiring energy from a geographically and technologically diverse portfolio of generating assets (with a range of generation profiles that are generally complementary to the manner in which SDCP's customers use electric power). Due to known production variability and supply uncertainty related to renewable and other carbon-free energy products, SDCP includes planning margins in its procurement of such products to ensure that related targets/mandates are achieved.

SDCP manages load forecasting and related weather risks by contracting with qualified data management and scheduling coordinators, which independently or jointly provide the systems and data necessary to forecast and schedule load using good utility practice. Load variability is also considered in establishing appropriate planning margins for renewable and other carbon free energy sources.

SDCP's load scheduling strategy, as executed by its scheduling coordinator, shall be in accordance with adopted Load Bidding/Scheduling Guidelines. This strategy shall ensure that price risk in the day-ahead and real-time CAISO markets is managed effectively and is consistent with good utility practice.

### **6.5 Operational Risk**

Operational risks are managed through:

- Adherence to this Policy, and oversight of procurement activity including delegation of authority;
- Conformance with applicable human resources policies and guidelines;
- Staff resources, expertise and/or training reinforcing a culture of compliance;
- Use of qualified, highly experienced contractors on an as-needed basis in the event that necessary expertise does not exist within SDCP's own organization;
- Ongoing and timely internal and external audits; and
- Cross-training amongst staff

In order to ensure proper controls for executing energy transactions and to facilitate the efficient operation of SDCP in its ordinary course of business, the Board delegates transactional authority that is commensurate with responsibility and capability. Accordingly, by approving this Policy, the Board



delegates the following energy procurement authority by product type, tenor, volume, and notional value to its Chief Executive Officer:

Delegation of Authority per Transaction by Position/Title	Product Type	Tenor Limit	Volumetric Limit	Notional Value Limit
Chief Executive Officer	System Power	3 years	1,500,000 MWh	\$ 50,000,000
	Resource Adequacy	3 years	10,000 MW	\$ 50,000,000
	Renewables	3 years	2,500,000 MWh	\$ 50,000,000
	GHG-free	3 years	5,000,000 MWh	\$ 50,000,000
Risk Oversight Committee*				
SDCP Board	All Products	Any	Unlimited	Unlimited

\* Limits delegated to the Risk Oversight Committee will be adopted following its formation.

The Board further delegates to the Chief Executive Officer all necessary and proper authority to negotiate and approve an administrative amendment to an existing Board approved contract where such amendment (a) does not exceed the Chief Executive Officer's delegated authority as set forth in the table above, and (b) further reduces SDCP's risk in furtherance of this Policy. An administrative amendment must be reported to the SDCP Board and at the next ROC meeting.

Any changes to the delegation of authority will require Board approval.

## 6.6 Liquidity Risk

SDCP manages liquidity risk through adherence to its loan and power purchase agreement credit covenants; limiting commitments to provide security consistent with adopted Credit Guidelines; ensuring it has adequate loan facilities, prudent cash and investment management; and adherence to any applicable reserve policies. SDCP monitors its liquidity (defined as unrestricted cash, investments, and unused bank lines of credit) no less than weekly. SDCP utilizes scenario and sensitivity analyses while preparing budget, rate, and pro forma analyses to identify potential financial outcomes and ensure sufficient liquidity under adverse conditions.

## 6.7 Regulatory/Legislative Risk

SDCP manages its regulatory and legislative risk through active participation in working groups and advocacy coalitions such as the California Community Choice Association. SDCP regularly participates in regulatory rulemaking proceedings and legislative affairs to protect SDCP's interests.

## 7.0 Risk Management Policy Governance

### 7.1 SDCP Board of Directors

The SDCP Board is responsible for adopting this Policy. The Board also approves SDCP's annual budget, contracting authorities and delegated responsibilities for the management of SDCP's operations to its Chief Executive Officer and staff.

### 7.2 Finance and Risk Management Committee

The FRMC is responsible for reviewing and recommending approval of substantive changes to this Policy, as needed, and for initiating and overseeing a review of the implementation of this Policy as it deems



necessary. The Chief Executive Officer and Risk Oversight Committee may make reports and seek approval for any substantive changes to this Policy from the FRMC, which will recommend changes to the Board.

### **7.3 Risk Oversight Committee (ROC)**

To ensure with implementation and compliance with this Policy, the Chief Executive Officer will establish a Risk Oversight Committee prior to the commencement of retail electric service by SDCP. The members of the ROC will be selected by the Chief Executive Officer. The ROC will have authority to:

- Meet once per quarter, or as otherwise called to order by the Chair of the ROC.
- No less than once per quarter, provide a report to the FRMC regarding its meetings, deliberations and any other areas of concern.
- From time to time, adopt and/or adapt risk management guidelines defining internal controls, strategies and processes for managing market risks incurred through or attendant upon wholesale trading, retail marketing, long-term contracting, CRR trading and load and generation scheduling.
- Specify the categories of permitted transactions and set risk limits for wholesale trading. The ROC will receive and review information and reports regarding risk management, wholesale trading transactions, and the administration of supply contracts.
- Have direct responsibility for enforcing compliance with this Policy. Any gross violations to this Policy, as determined by the Chair of the ROC, shall be reported to the FRMC for appropriate action.

## **Addendum 1 to San Diego Clean Power's Energy Risk Management Policy: Methodology for Evaluating and Mitigating Congestion Risk**

### **I. Transmission Costs**

The CAISO has assumed operational control of all 66 kV and above voltage transmission of all Participating Transmission Owners (PTO) including private firms (such as Citizens Energy) that have turned their operating rights over to the CAISO. The CAISO operates this transmission to minimize daily transmission costs for the entire system.<sup>1</sup>

Each PTO utility charges the CAISO the total cost of its transmission plus a rate of return on any owned transmission assets. The charge is called a utilities Transmission Revenue Requirement (TRR). The CAISO aggregates the TRRs of all PTOs and then divides this amount by the forecasted energy use on its system for the year in order to develop a transmission wheeling rate, or Transmission Access Charge (TAC) that is paid based upon the total metered load of the LSE. This rate is a "postage stamp" rate paid by the Load Serving Entity (LSE) that takes final delivery of the energy. It is called a postage stamp rate because every entity pays the same amount regardless of the voltage or how far energy is wheeled across the system.

Each LSE pays the Locational Marginal Price (LMP) for energy that it withdraws at its delivery point(s). The LMP has three components – 1) the marginal energy price that is the same for all LSEs in the CAISO for that period and market (day-ahead market, 5 and 15-minute market; 2) marginal transmission losses and 3) congestion costs.

Any generator or load can use the CAISO transmission system. To manage the use of the transmission system, the CAISO uses congestion pricing. In effect, if entities schedule more energy over a transmission path than the path's capacity, the CAISO begins increasing congestion charge to encourage entities to either move energy to other transmission paths or to back generation down that uses that path. The congestion charge will keep increasing until generation is reduced to the transmission limits over a specific path<sup>2</sup>.

Congestion charges can be quite high over some constrained paths, sometimes more than the price of energy.

These rights to receive congestion charges are known as congestion revenue rights (CRRs). The CRR is a tradable commodity with entities being allowed to purchase and trade the rights to receive congestion charges over a specific transmission line segment. There are two ways LSE's acquire congestion rights; first, through a CAISO allocation process and, secondly, a CRR auction process.

The CAISO uses a three-stage process to allocate CRRs. First, an annual allocation process that is tied to generating resource ownership or control, then a monthly allocation process and finally a CRR auction process.

Congestion costs are charged on all paths so congestion payments at the end of a period should roughly equal congestion payments for the allocated CRRs. The CRRs created in the auction process are outside

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<sup>1</sup>In PG&E and SDG&E's service territory, the CAISO controls transmission lines equal to 66 kV or larger while in SCE's service territory the CAISO controls line 115 kV or greater.

<sup>2</sup> This is done by a mathematical algorithm approach that creates a large enough congestion charge to push higher priced resources out of the dispatch order.



the scope of the CAISO and those can result in significantly larger or smaller congestion payments than the congestion costs<sup>3</sup>

Load serving entities that use a specific transmission path are eligible to receive an allocation of free CRRs tied to the length of their ownership or power sales purchases from specific generators. Generally, only about two-thirds of the available transmission capacity in a path is allocated to LSEs requesting CRRs with the utility (or LSE) subject to congestion charges for the remaining generation. If the LSE wants to protect itself against congestion charges for all its generation, it will need to participate in the CRR monthly allocation process and CRR auctions and bid against other entities for the right to recover any potential congestion charges.

The CAISO allocates its transmission capacity to LSE's based upon existing unit specific generation contracts. If an LSE has a power purchase agreement (PPA) or generator entitlement, it can request CRRs from the CAISO through an annual or monthly allocation process. Because the revenues that the CAISO receives in congestion charges should approximately equal payments to CRR owners, the CAISO is indifferent to congestion revenues paid on a specific line so long as it does not allocate more transmission capacity than available on a specific path.

Entities requesting CRRs on a specific path will only receive their full request if the path has excess capacity after all existing CRR holders and LSE's without rights on a particular path have applied to the CAISO for transmission right during the annual allocation process. If the CAISO has already allocated all the CRRs on a path, the requesting entity may not receive any CRRs or only a portion of their request in the allocation process.

If an entity does not receive the desired allocation of CRRs, it can enter the CRR auction process. In the auction process, any (creditworthy) entity can offer to "buy or sell" CRR revenues for a price determined in a monthly auction along a specific transmission path. If an entity sells CRRs, it is responsible for paying the CRR costs to the purchasing entity.

The risk of a CRR is that if a LSE has CRRs over a particular path and the congestion changes to the opposite direction or has low congestion prices during the month, the owner of the CRRs could lose money. That is, acquiring CRRs is not a risk-free proposition. Generally, congestion costs are high for energy imported from the east into California and low for entities exporting from the basin.

SDCP will not acquire more CRRs on a particular path than what is needed to hedge existing power purchase agreements.

## **II. Evaluating SDCP Congestion Risk**

SDCP does not currently have any generation resources although it has been allocated CRRs on some paths from SDG&E as part of the CCA creation process. SDCP does not know what CRRs SDG&E will initially allocate to it.

SDCP will begin evaluating the risk associated with each CRR as they take ownership. SDCP will use the following methodology for evaluating the risk of a unit CRR:

1. SDCP will calculate the monthly congestion on each path by calculating the average congestion cost for the past three (3) years.

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<sup>3</sup> For the past few years, payments to CRR holders has significantly exceeded revenues from congestion. As a result, the CAISO is redesigning the way payments are made to reduce payments on smaller lines with high congestion.



2. SDCP will calculate the mean on and off-peak congestion on each path and the standard deviation of the congestion pricing.
3. Using the mean and the standard deviation along each path, SCP will estimate the expected range of congestion costs along each path.
  - a. SDCP will attempt to determine if any paths are expected to be out of service or constrained for any month based upon available planned outage data. Planned outages will affect historic averages.
4. The expected congestion cost will be used to estimate SDCP's monthly congestion exposure and confidence interval of the results.

An example of the calculations to determine monthly risk and standard deviation is shown in Appendix 1.

SDCP will always participate in the annual and monthly allocation process as a no-cost means of reducing congestion risk. Participation in the auction process will depend upon the potential exposure along a path and how the congestion risk affects SDCP's total power supply costs as outlined in SDCP's Risk Management Plan.



# APPENDIX 1

## ON-PEAK PRICES - SOURCE

	HE	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
DLAP_SCE-APND	LMP	43.18403	40.28119	38.57468	46.09412	50.6772	58.01111	60.90404	65.99279	75.91678	76.3893	80.31054	79.95	71.68975	74.60823	64.91684	57.84471
DLAP_SCE-APND	Congestion	-2.07689	-3.25414	-3.90184	-1.81225	-0.77486	-0.84766	-0.89555	-1.24285	5.05917	1.79758	-0.48208	0.66649	0.55295	-0.46645	0.02281	-0.20466
DLAP_SCE-APND	Energy	46.31221	44.45102	43.25511	48.70019	52.15617	59.54955	62.26659	67.55313	71.88557	74.76368	80.85731	79.11737	71.16526	74.99968	64.86808	58.15405
DLAP_SCE-APND	Loss	-1.05129	-0.91569	-0.77859	-0.79381	-0.70411	-0.69077	-0.467	-0.3175	-1.02796	-0.17196	-0.06469	0.16615	-0.02847	0.075	0.02595	-0.10468
DLAP_SCE-APND	LMP	43.57497	40.38846	44.36164	45.30174	51.65808	55.65562	61.61487	67.0462	66.39689	71.61613	79.45259	73.94	64.67875	68.44079	57.9906	52.05282
DLAP_SCE-APND	Congestion	-2.40891	-3.9802	-1.4323	-2.25589	-0.69395	-0.53608	-0.83848	1.21816	0.36812	3.26648	2.66359	1.92521	2.41619	1.85647	0.74053	0
DLAP_SCE-APND	Energy	46.87449	45.12679	46.37831	47.95083	52.48323	56.56502	62.7735	66.11232	66.50762	68.9217	77.49419	72.28949	62.36234	66.77127	57.46268	52.08928
DLAP_SCE-APND	Loss	-0.89062	-0.75813	-0.58437	-0.3932	-0.13121	-0.37333	-0.32014	-0.28428	-0.47885	-0.57205	-0.7052	-0.2747	-0.09978	-0.18696	-0.21261	-0.03646
DLAP_SCE-APND	LMP	34.65918	33.29437	37.48165	39.1623	43.03665	49.32403	48.92526	52.17591	53.2988	60.72	67.16787	62.10618	58.91149	67.48	56.70201	50.61771
DLAP_SCE-APND	Congestion	-2.83371	-4.13205	-3.44957	-4.6336	-2.68578	0.15467	0.06345	1.82976	1.76689	2.24095	3.24702	-0.04612	1.37767	1.98071	0	-1.06214
DLAP_SCE-APND	Energy	38.32454	38.15518	41.673	44.52161	46.39516	49.76152	49.40028	50.78801	52.14725	58.93877	64.15824	62.33307	57.75907	65.67661	56.92973	51.90825
DLAP_SCE-APND	Loss	-0.83164	-0.72876	-0.74178	-0.7257	-0.67273	-0.59216	-0.53846	-0.44186	-0.61534	-0.45972	-0.23739	-0.18077	-0.22526	-0.17733	-0.22772	-0.2284
DLAP_SCE-APND	LMP	34.88954	34.0261	32.46561	37.9506	38.1953	43.21423	43.71907	41.4924	45.9065	46.81072	51.50231	54.93199	57.08072	70.17042	58.28962	50
DLAP_SCE-APND	Congestion	0	-1.82798	-2.433	-6.06648	-0.91658	0	0	0	0	0	0	1.1247	0.24122	0.41925	0	0
DLAP_SCE-APND	Energy	35.43524	36.74326	35.79345	44.98424	39.9223	44.10066	44.40287	42.07727	46.55831	47.03177	51.69357	53.76428	56.9477	69.90496	58.24885	50.47956
DLAP_SCE-APND	Loss	-0.5457	-0.88919	-0.89484	-0.96716	-0.81042	-0.88642	-0.6838	-0.58487	-0.65182	-0.22105	-0.19127	0.04301	-0.1082	-0.15379	0.04077	-0.47956
DLAP_SCE-APND	LMP	61.96261	54.96314	53.6593	72.92635	47.76865	44.69385	47.78569	49.13955	47.18729	52.13359	56.19	59.84087	64.8249	69.02448	61.9196	51.33444
DLAP_SCE-APND	Congestion	-0.26643	0.68473	1.14323	8.61006	-0.23014	-0.41184	-0.0661	0.33747	-0.46964	0.21485	-2.63041	0.08462	-0.15151	-0.47869	-0.50229	-0.05576
DLAP_SCE-APND	Energy	63.07423	54.97104	53.24014	65.09087	48.25453	45.20061	48.05361	48.77769	47.69508	51.98112	59.01516	59.64293	64.39684	69.02688	62.15463	51.57587
DLAP_SCE-APND	Loss	-0.84519	-0.69264	-0.72407	-0.77458	-0.25575	-0.09492	-0.20183	0.02439	-0.03816	-0.06238	-0.19475	0.11332	0.57957	0.47629	0.26726	-0.18567
DLAP_SCE-APND	LMP	57.63586	48.39803	40.96954	45.61003	42.99	38.89551	39.41073	39.54657	39.48051	41.53097	44.89	51.75305	56.14999	65.43457	57.78329	49.45122
DLAP_SCE-APND	Congestion	-0.56191	-0.53767	-2.22697	0.00998	-0.23421	-1.80481	-3.85196	-3.70474	-2.95357	-2.63382	-1.13905	-0.51647	1.2799	1.97107	0	0
DLAP_SCE-APND	Energy	59.1922	49.7972	43.93909	46.35565	43.87354	41.24057	43.94828	43.93672	43.16355	44.89661	46.50338	52.35328	54.83719	63.40011	58.05033	49.87013
DLAP_SCE-APND	Loss	-0.99443	-0.86149	-0.74257	-0.7556	-0.64933	-0.54025	-0.68559	-0.68541	-0.72946	-0.73181	-0.47433	-0.08377	0.0329	0.0634	-0.26703	-0.41891
DLAP_SCE-APND	LMP	62.63504	47.69597	44.55764	45.41664	47.85625	49.54437	52.56629	60.02325	47.96278	49.11906	49.74925	58.00414	60.84502	77.14325	65.25503	47.23535
DLAP_SCE-APND	Congestion	-0.74326	-0.48636	-0.50394	-0.46199	1.3061	0.99942	2.38624	4.70411	0.69504	-0.07349	-0.69792	-0.5073	0.52294	5.02978	0	0
DLAP_SCE-APND	Energy	63.40367	48.65919	45.81291	46.54421	47.07742	48.95125	51.01673	55.72594	47.90487	49.62929	50.68539	58.42964	59.9802	71.3712	65.02743	47.88175
DLAP_SCE-APND	Loss	-0.02536	-0.47686	-0.75133	-0.66558	-0.52727	-0.4063	-0.83667	-0.4068	-0.63713	-0.43674	-0.23822	0.0818	0.34189	0.74226	0.2276	-0.6464
DLAP_SCE-APND	LMP	54.18111	49.93122	55.64	57.60207	55.14249	66.31	51.45987	53.04862	50.31741	47.98937	47.16	54.22542	57.6045	64.04614	59.02621	46.12588
DLAP_SCE-APND	Congestion	0.28552	1.00992	4.64694	4.28706	3.51958	8.6325	0.68019	1.46385	0.60194	0.55883	-1.01891	-0.63819	-0.57729	1.052	-0.65693	0
DLAP_SCE-APND	Energy	54.19366	49.50045	51.62808	53.95164	52.15489	58.40168	51.23568	51.95364	50.34988	48.08937	48.69508	55.22811	58.35686	63.13936	60.36527	47.1442
DLAP_SCE-APND	Loss	-0.29807	-0.57916	-0.63503	-0.63663	-0.53198	-0.72418	-0.456	-0.36887	-0.63441	-0.65882	-0.51617	-0.36451	-0.17507	-0.14522	-0.68213	-1.01831
DLAP_SCE-APND	LMP	50.27399	41.73922	45.49035	40.65937	39.81748	39.99733	45.68465	48.75253	46.27142	43.10925	41.19185	47.47901	49.83797	61.50051	55.27511	49.34643
DLAP_SCE-APND	Congestion	-0.36699	-0.55594	0.91579	-3.06235	-2.92262	-0.95702	1.17416	4.74968	3.47528	2.14435	0.34606	0.82058	0	2.08521	0	0
DLAP_SCE-APND	Energy	51.51152	43.2687	45.67066	44.73726	43.72836	41.89704	45.43278	44.91462	43.53626	41.5592	41.29173	47.21558	50.1994	59.67188	55.79962	50.21004
DLAP_SCE-APND	Loss	-0.87054	-0.97355	-1.0961	-1.01554	-0.98826	-0.94268	-0.92229	-0.91177	-0.74012	-0.5943	-0.44595	-0.55714	-0.36144	-0.25659	-0.52452	-0.86361
DLAP_SCE-APND	LMP	31.94307	32.94238	33.97829	33.31383	35.07601	38.38273	37.19201	38.30097	40.51873	41.63435	46.5149	50.83783	58.41454	65.96	57.68	48.37276
DLAP_SCE-APND	Congestion	-3.35107	-3.13035	-1.50892	-1.8115	-4.49811	-4.10579	-2.87882	-1.04549	0	0	0	0	0	0	0	-0.16885
DLAP_SCE-APND	Energy	36.25489	36.95597	36.3524	35.89345	40.37763	43.31144	40.82612	40.09626	41.18176	42.21266	47.18014	51.13956	58.38534	66.04586	57.7898	49.44647
DLAP_SCE-APND	Loss	-0.96075	-0.88325	-0.86519	-0.76812	-0.80351	-0.82292	-0.75528	-0.7498	-0.66303	-0.57831	-0.66524	-0.30172	0.02919	-0.08586	-0.1098	-0.90487
DLAP_SCE-APND	LMP	31.2046	31.79731	39.12833	36.91883	44.62888	43.03584	40.99643	43.28192	44.14474	45.7101	47.34337	56.1171	58.42333	73.26	59.83743	56.04535
DLAP_SCE-APND	Congestion	-1.96609	-2.17849	-0.46745	-1.41278	-0.2616	-0.72718	-0.8212	0	0	0	0	0	0	0	0	0



DLAP_SCE-APND	Energy	34.03868	34.8077	40.53207	39.13785	45.62503	44.54705	42.57547	43.93211	44.78971	46.42504	48.3145	56.99482	58.95987	73.80617	60.44185	56.81231
DLAP_SCE-APND	Loss	-0.86799	-0.8319	-0.93629	-0.80624	-0.73456	-0.78403	-0.75784	-0.6502	-0.64497	-0.71495	-0.97112	-0.87772	-0.53653	-0.54617	-0.60442	-0.76697
DLAP_SCE-APND	LMP	49.31527	46.5573	47.48214	51.81082	50.87667	54.63996	57.045	57.14452	59.30523	63.54657	73.78781	70.58636	72.59	80.31571	64.69	56.95
DLAP_SCE-APND	Congestion	0	0	0	0	0.3434	0.9783	0.86584	-0.21862	-0.5651	0.09363	1.99962	1.33456	1.73541	1.58784	0	0
DLAP_SCE-APND	Energy	49.41905	46.79126	47.78799	52.15505	50.94594	53.88799	56.11744	57.24293	60.0987	63.58648	71.87445	68.99651	70.11141	78.00245	64.31696	56.96709
DLAP_SCE-APND	Loss	-0.10378	-0.23396	-0.30584	-0.34422	-0.41266	-0.22633	0.06173	0.12021	-0.22838	-0.13353	-0.08625	0.25529	0.74318	0.72542	0.37304	-0.01709
DLAP_SCE-APND	LMP	48.0829	43.73147	40.71845	45.66149	51.95099	54.89033	58.70908	59.64654	64.28223	66.80472	72.67835	73.84514	72.51807	76.58105	68.71332	56.66017
DLAP_SCE-APND	Congestion	0	-2.14767	-2.82467	-2.88352	-0.51982	-1.17275	-1.19263	-1.24237	-1.54061	-1.69393	-2.0244	-0.50262	0	-0.38492	-0.82757	-1.10737
DLAP_SCE-APND	Energy	48.76562	46.91118	44.48167	49.46002	53.32942	56.57794	60.50678	61.61598	66.64254	69.24652	75.50308	74.94734	72.75817	77.07387	69.9677	58.16891
DLAP_SCE-APND	Loss	-0.68272	-1.03205	-0.93856	-0.91501	-0.8586	-0.51486	-0.60507	-0.72707	-0.8197	-0.74786	-0.80033	-0.59958	-0.2401	-0.1079	-0.4268	-0.40137
DLAP_SCE-APND	LMP	49.1733	50.66145	48.7873	52.34482	57.12557	59.62166	64.64483	69.05025	74.66584	80.78192	90.91	89.63278	83.98863	84.64259	72.44744	60.70169
DLAP_SCE-APND	Congestion	0	0	-0.31932	-0.37568	-1.01285	-0.80605	-0.42232	-0.81654	0.09665	0.6106	-0.18627	0	0	0	0	-0.27962
DLAP_SCE-APND	Energy	49.56486	51.19387	49.71816	53.44738	58.43057	61.3417	66.3612	71.2127	75.98246	81.41701	92.36162	90.76738	84.89703	85.4803	73.00225	61.64086
DLAP_SCE-APND	Loss	-0.39156	-0.53242	-0.61153	-0.72688	-0.29215	-0.91399	-1.29404	-1.34592	-1.41327	-1.24568	-1.26535	-1.13459	-0.9084	-0.83771	-0.55482	-0.65956
DLAP_SCE-APND	LMP	49.48516	51.02284	53.3374	56.718	61.15705	64.41829	73.635	76.03546	91.15819	93.94091	95.78346	91.34179	74.11547	78.72251	65.57971	57.72563
DLAP_SCE-APND	Congestion	-0.40671	-0.56856	-1.04666	-1.25171	-1.17027	-2.01265	-1.72794	-1.02643	1.41881	0.32254	-2.15167	-2.75267	-1.7647	1.07526	-1.07104	-0.76187
DLAP_SCE-APND	Energy	50.64651	52.23917	54.67933	58.18499	62.81096	66.3447	75.00293	76.93111	89.99135	93.71208	97.97432	93.82238	75.81951	77.46135	66.78431	58.45243
DLAP_SCE-APND	Loss	-0.75463	-0.64777	-0.29527	-0.21528	-0.48364	0.08625	0.36001	0.13078	-0.25198	-0.09371	-0.03919	0.27208	0.06066	0.18591	-0.13357	0.03507
DLAP_SCE-APND	LMP	43.63143	44.18582	49.83709	50.84137	56.56222	57.76816	60.74171	70.05083	79.54432	85.23831	78.39851	72.77683	69.41474	64.8911	60.85474	54.45037
DLAP_SCE-APND	Congestion	0	0	0.88313	0.63278	0.91874	2.3149	1.22343	4.58224	6.28016	6.18715	2.2722	1.53122	1.80944	1.10666	1.25079	1.15
DLAP_SCE-APND	Energy	43.99661	44.40786	48.83675	50.52183	56.08656	55.50321	59.26345	65.39012	73.09605	78.8855	76.41669	71.01126	67.17537	63.42923	59.5444	53.39113
DLAP_SCE-APND	Loss	-0.36517	-0.22204	0.11721	-0.31324	-0.44308	-0.04995	0.25483	0.07847	0.16812	0.16566	-0.29038	0.23434	0.42992	0.3552	0.05954	-0.09076
DLAP_SCE-APND	LMP	31.83507	29.12302	32.82599	36.86583	45.00606	48.592	47.469	51.26211	52.90485	57.36487	59.13562	63.28891	63.78635	64.07	56.03302	49.02494
DLAP_SCE-APND	Congestion	-3.05566	-5.38025	-4.60162	-4.79833	-0.54277	0.08696	0.61396	2.18925	0.91946	1.14087	1.22221	0.90155	1.12689	1.4241	0.81916	0
DLAP_SCE-APND	Energy	35.75969	35.31915	38.08651	42.04678	46.05078	48.97025	47.24243	49.34921	52.35186	56.68314	58.07019	62.44356	62.79761	62.94805	55.60308	49.29111
DLAP_SCE-APND	Loss	-0.86896	-0.81587	-0.6589	-0.38263	-0.50195	-0.46522	-0.38739	-0.27636	-0.36646	-0.45913	-0.15679	-0.0562	-0.13815	-0.30215	-0.38922	-0.26617
DLAP_SCE-APND	LMP	24.62	25.48744	25.60797	27.70317	29.77	30.82404	32.46414	34.58445	36.77482	41.86388	44.65048	51.75796	54.75458	63.40951	53.21821	48.47923
DLAP_SCE-APND	Congestion	0	-2.45775	-6.24159	-6.95099	-7.01549	-5.76702	-3.76706	-2.88563	-0.83693	0	0	0	0	0	0	0
DLAP_SCE-APND	Energy	25.29799	28.7887	32.68632	35.51359	37.65147	37.4563	37.05	38.2973	38.32069	42.69211	45.31203	52.3866	55.25742	63.74737	53.90277	49.64591
DLAP_SCE-APND	Loss	-0.67799	-0.84351	-0.83677	-0.85943	-0.86598	-0.86524	-0.81881	-0.82722	-0.70893	-0.82823	-0.66156	-0.62864	-0.50284	-0.33786	-0.68457	-1.16668
DLAP_SCE-APND	LMP	45.67511	46.58825	53.38	43.92441	43.69886	47.75101	50.51104	54.94334	54.5602	48.02007	51.39364	54.80923	59.75237	62.77881	55.42496	49.56549
DLAP_SCE-APND	Congestion	0	1.4264	3.41782	-1.87841	-2.07936	-1.34968	1.93697	4.2777	6.11391	0.36741	2.82504	2.11017	2.30323	0	0	0
DLAP_SCE-APND	Energy	46.35185	46.01309	51.07562	46.57598	46.56043	49.78776	49.08455	51.19293	48.84683	48.07574	48.94549	52.97452	57.76105	62.77254	55.56944	50.01563
DLAP_SCE-APND	Loss	-0.67674	-0.85124	-1.11345	-0.77316	-0.78222	-0.68707	-0.51048	-0.52729	-0.40054	-0.42307	-0.37688	-0.27547	-0.31191	0.00628	-0.14448	-0.45014
DLAP_SCE-APND	LMP	50	39.99762	36.53343	37.11427	40.53798	40.66506	41.16866	44.08599	43.4194	44.38558	48.3303	55.60246	64.95636	70.39	58.95317	50.99
DLAP_SCE-APND	Congestion	0	-2.27304	-5.10142	-4.69788	-3.66803	-3.60174	-1.35415	0	-0.91874	0	1.47861	2.25379	3.4595	0.23768	0	-0.01712
DLAP_SCE-APND	Energy	50.76658	43.08057	42.24315	42.13661	44.87464	44.82259	42.96102	44.58535	44.786	45.00211	47.32016	53.88755	61.9179	70.36341	59.20182	52.00563
DLAP_SCE-APND	Loss	-0.76658	-0.80991	-0.6083	-0.32445	-0.66863	-0.5558	-0.4382	-0.49936	-0.44786	-0.61653	-0.46847	-0.53888	-0.42104	-0.21109	-0.24865	-0.99851
DLAP_SCE-APND	LMP	50.68647	41.04826	36.49025	36.94065	36.68302	38.44786	39.12362	39.09959	38.78289	41.76367	44.01199	46.08	55.85899	66.45552	62	46.70873
DLAP_SCE-APND	Congestion	0	-1.7204	-3.75063	-3.10419	-5.10351	-2.86001	-2.50002	-2.75761	-3.91167	-0.758	0	0	0	0	0	0
DLAP_SCE-APND	Energy	51.26059	43.42436	40.94097	40.7208	42.50054	42.0522	42.31334	42.62444	43.50816	43.37176	44.64143	46.80549	56.04956	66.26996	62.26775	47.37674
DLAP_SCE-APND	Loss	-0.57412	-0.65571	-0.70009	-0.67597	-0.71401	-0.74432	-0.68971	-0.76724	-0.8136	-0.85009	-0.62944	-0.72549	-0.19057	0.18556	-0.26775	-0.66801
DLAP_SCE-APND	LMP	50	46.15813	46.0138	45.83756	48.20225	48.92061	49.73596	47.48272	50.15128	50.86864	51.09806	52.17926	60.23205	65.75504	55.42475	44.98391
DLAP_SCE-APND	Congestion	-0.68192	0.05092	0.14495	-0.67406	-1.26546	-1.23475	-1.39234	-1.38771	-1.54307	-1.19935	-1.08505	-0.42664	-0.0352	-0.80955	-0.70854	0
DLAP_SCE-APND	Energy	50.87524	46.48373	46.25275	47.01943	50.08881	50.6671	51.58223	49.57438	52.50822	52.96845	53.12339	53.54836	60.98689	66.79838	56.56317	45.86451
DLAP_SCE-APND	Loss	-0.19333	-0.37652	-0.3839	-0.50781	-0.6211	-0.51174	-0.45392	-0.70396	-0.81388	-0.90046	-0.94028	-0.94245	-0.71965	-0.23379	-0.42988	-0.8806



DLAP_SCE-APND	LMP	42.64538	42.0219	42.7695	43.91753	45.00069	45.50709	46.07823	43.59438	46.13583	45.4441	45.17946	45.60373	51.15944	56.02054	47.84922	43.80902
DLAP_SCE-APND	Congestion	-0.58314	1.37037	0.67908	0.30254	1.01176	0.26213	0.56779	0.01281	0.04319	-0.22317	-0.94863	-1.27366	1.67294	-1.02493	-0.57066	0
DLAP_SCE-APND	Energy	43.9627	41.44732	42.83577	44.4824	45.03371	46.22493	46.31164	44.81856	47.37167	47.05541	47.4862	48.15345	50.65667	58.06155	49.12731	44.39504
DLAP_SCE-APND	Loss	-0.73418	-0.79579	-0.74534	-0.86741	-1.04478	-0.97997	-0.80119	-1.23699	-1.27904	-1.38813	-1.35811	-1.27607	-1.17017	-1.01608	-0.70743	-0.58601
DLAP_SCE-APND	LMP	26.43	27.64	32.1902	36.0801	39.56884	39.29072	39.65136	41.10023	41.1929	42.69	44.07695	50.5555	58.7675	68.37798	50.99274	45.62589
DLAP_SCE-APND	Congestion	0	-0.01137	-0.67659	-1.08369	-1.44016	-1.2966	-1.37677	-1.01243	-1.51915	-0.69769	-0.50478	-0.35792	0.82878	3.76627	0	0
DLAP_SCE-APND	Energy	27.0273	28.41867	33.81705	38.3053	42.18165	41.56408	42.04994	43.1438	43.81622	44.36823	45.678	51.96307	58.72564	65.21165	51.60686	46.23152
DLAP_SCE-APND	Loss	-0.5973	-0.7673	-0.95026	-1.1415	-1.17265	-0.97676	-1.02181	-1.03114	-1.10417	-0.98054	-1.09627	-1.04965	-0.78692	-0.59995	-0.61412	-0.60563
DLAP_SCE-APND	LMP	23.97	25.97	34.34512	38.53477	39.99973	41.81383	41.64588	44.06611	45.71914	45.40209	54.18138	58.27725	59.52169	62.78829	52.68663	43.41904
DLAP_SCE-APND	Congestion	0	0	0	0	0	0	0	-0.06605	0	0	-0.30543	0	0	0	0	0
DLAP_SCE-APND	Energy	24.37462	26.54334	35.23661	39.58374	41.05484	42.97855	42.80152	45.44554	47.3381	46.91268	56.42209	59.83905	60.62507	63.67335	53.09547	44.28706
DLAP_SCE-APND	Loss	-0.40462	-0.57334	-0.89149	-1.04897	-1.05511	-1.16472	-1.15564	-1.31338	-1.61896	-1.51059	-1.93528	-1.5618	-1.10338	-0.88506	-0.40884	-0.86803
DLAP_SCE-APND	LMP	31.59957	31.67928	39.38758	42.2636	41.63724	43.56805	43.89732	44.05692	45.63565	45.06767	56.1875	54.05195	60.01741	62.07397	51.13753	44.16577
DLAP_SCE-APND	Congestion	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04972	0	0
DLAP_SCE-APND	Energy	32.13624	32.3225	40.3396	43.32951	42.448	44.23601	44.64286	44.74146	46.46742	45.70294	56.81818	54.38916	60.34933	62.04286	50.96933	44.49503
DLAP_SCE-APND	Loss	-0.53668	-0.64322	-0.95201	-1.06591	-0.81076	-0.66796	-0.74554	-0.68454	-0.83177	-0.63527	-0.63068	-0.33721	-0.33192	-0.01861	0.1682	-0.32926
DLAP_SCE-APND	LMP	43.51196	42.71041	44.47769	47.17423	46.6896	47.58992	49.47075	52.07935	55.56365	59.40773	62.35614	62.87962	61.24093	68.98818	57.01296	44.75676
DLAP_SCE-APND	Congestion	-0.1449	-0.21788	0.09378	0.41672	-1.06124	-0.78939	-0.95577	-0.0566	1.25994	2.5787	2.80972	2.55932	2.66741	4.26546	2.62469	0
DLAP_SCE-APND	Energy	44.26775	43.28758	44.75538	47.06817	48.00043	48.53462	50.67992	52.41374	54.79688	57.27578	59.80958	60.68441	58.85603	64.95656	54.82688	45.04505
DLAP_SCE-APND	Loss	-0.61089	-0.35929	-0.37147	-0.31065	-0.2496	-0.15531	-0.2534	-0.27779	-0.49317	-0.44675	-0.26316	-0.36411	-0.28251	-0.23384	-0.43862	-0.28829
DLAP_SCE-APND	LMP	41.50589	39.74753	40.26941	44.44158	46.42103	47.6425	49.94847	53.13657	54.62098	56.98847	56.88	57.14887	59.13723	68.10369	55.70035	48.35
DLAP_SCE-APND	Congestion	0	-0.04031	-0.27653	0.04885	0.34913	1.82757	2.07982	1.68577	1.94168	2.05414	1.53084	1.26634	1.72528	4.11884	2.24209	0
DLAP_SCE-APND	Energy	42.04405	40.25887	40.82355	44.58893	46.18737	45.98969	47.99824	51.6315	52.85372	55.03338	55.61053	55.93847	57.62516	64.33224	53.8351	48.73501
DLAP_SCE-APND	Loss	-0.53816	-0.47103	-0.2776	-0.19619	-0.11547	-0.17476	-0.1296	-0.18071	-0.17442	-0.09906	-0.26137	-0.05594	-0.21321	-0.34739	-0.37685	-0.38501
DLAP_SCE-APND	LMP	49.16292	42.7356	47.59083	48.14532	52.03942	56.78976	58.25144	59.36125	60.05606	64.99241	65.58	61.24662	58.05602	62.85306	57.88391	50.51414
DLAP_SCE-APND	Congestion	0	-0.3709	0.97356	-0.11053	-0.52687	1.77637	1.09884	-0.06535	1.91482	3.41206	0.56537	0	0.10728	2.96475	2.1412	0
DLAP_SCE-APND	Energy	49.47959	43.34926	46.706	48.02056	52.38817	54.79967	56.91356	59.30207	58.18197	61.4513	65.24299	61.33249	58.00674	59.95426	55.87122	50.51414
DLAP_SCE-APND	Loss	-0.31667	-0.24276	-0.08874	0.2353	0.17812	0.21372	0.23904	0.12453	-0.04073	0.12905	-0.22835	-0.08587	-0.05801	-0.06595	-0.1285	0
DLAP_SCE-APND	LMP	46.466	43.94942	44.49124	43.89961	49.03525	48.18555	50.90044	55.99659	58.43413	60.65904	60.25721	59.55875	56.17054	55.56723	53.70876	47.75831
DLAP_SCE-APND	Congestion	-0.05638	-0.37701	-0.65139	-0.61677	-0.80947	-0.78414	-0.91615	-0.9417	-1.14603	-1.0184	-0.23841	0	0	0	-0.12518	0
DLAP_SCE-APND	Energy	46.91175	44.52233	45.26031	44.52529	49.7999	48.69214	51.38496	56.21313	58.90861	60.89194	59.99168	59.06848	55.80779	55.33483	53.75331	48.13861
DLAP_SCE-APND	Loss	-0.38937	-0.1959	-0.11768	-0.00891	0.04482	0.27755	0.43163	0.72515	0.67156	0.78551	0.50393	0.49027	0.36275	0.23241	0.08063	-0.3803
DLAP_SCE-APND	LMP	39.21823	39.75842	43.52746	44.00176	46.09603	46.00541	46.46433	48.86135	50.24515	59.1144	58.98	61.66142	63.95963	61.96741	55.2534	47.9319
DLAP_SCE-APND	Congestion	-0.26528	-0.32114	-0.56202	-0.62948	-0.72684	-0.49138	-0.49201	-0.72217	-0.8005	-1.21645	-1.10807	-0.42538	-0.36344	-0.51132	-0.79133	-0.33506
DLAP_SCE-APND	Energy	40.40887	40.85999	44.73819	45.15961	47.31494	46.77745	47.17334	49.62819	51.28669	60.48205	60.47511	62.46157	64.6398	62.7927	56.34334	48.72498
DLAP_SCE-APND	Loss	-0.92536	-0.78043	-0.6487	-0.52837	-0.49208	-0.28066	-0.217	-0.04467	-0.24105	-0.15121	-0.38704	-0.37477	-0.31674	-0.31396	-0.29862	-0.45801

#### OFF-PEAK PRICES - SINK

	HE	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
VICTORVL_5_N101	LMP	42.21611	39.2677	37.39814	33.71199	35.5998	37.42533	40.0343	38.86049	39.54423	37.64879	51.78506	56.03494	51.02331	50.97621	41.16692	44.36168
VICTORVL_5_N101	Congestion	-2.07689	-3.25414	-3.90184	-12.72363	-14.1624	-19.39685	-19.62955	-25.97025	-29.04179	-34.28882	-26.25841	-20.66935	-17.94295	-21.81098	-21.83944	-12.12335
VICTORVL_5_N101	Energy	46.31221	44.45102	43.25511	48.70019	52.15617	59.54955	62.26659	67.55313	71.88557	74.76368	80.85731	79.11737	71.16526	74.99968	64.86808	58.15405
VICTORVL_5_N101	Loss	-2.01921	-1.92917	-1.95513	-2.26456	-2.39397	-2.72737	-2.60274	-2.72239	-3.29955	-2.82607	-2.81383	-2.41308	-2.19901	-2.21249	-1.86171	-1.66902
VICTORVL_5_N101	LMP	42.65623	39.38213	35.39678	37.21606	37.54635	37.43585	37.87	49.2931	37.11049	45.99667	59.65026	58.99524	45.78129	53.60258	51.49947	50.74017
VICTORVL_5_N101	Congestion	-2.40891	-3.9802	-9.17278	-8.92223	-13.13146	-16.91182	-22.51811	-14.32017	-26.78338	-20.16127	-14.71317	-10.78581	-14.72266	-11.13884	-4.31978	0



VICTORVL_5_N101	Energy	46.87449	45.12679	46.37831	47.95083	52.48323	56.56502	62.7735	66.11232	66.50762	68.9217	77.49419	72.28949	62.36234	66.77127	57.46268	52.08928
VICTORVL_5_N101	Loss	-1.80936	-1.76446	-1.80875	-1.81254	-1.80542	-2.21735	-2.38539	-2.49905	-2.61375	-2.76376	-3.13077	-2.50845	-1.8584	-2.02985	-1.64343	-1.34911
VICTORVL_5_N101	LMP	34.01916	32.33513	35.55602	37.94955	41.8675	46.86955	47.06013	37.53469	38.92939	42.47289	42.27835	59.87494	47.99989	51.99322	55.35277	49.53283
VICTORVL_5_N101	Congestion	-2.83371	-4.36634	-4.49173	-4.82236	-2.68578	-0.9662	-0.40859	-11.37416	-11.15804	-14.37944	-19.87174	-0.70034	-8.17658	-11.9364	0	-1.06214
VICTORVL_5_N101	Energy	38.32454	38.15518	41.673	44.52161	46.39516	49.76152	49.40028	50.78801	52.14725	58.93877	64.15824	62.33307	57.75907	65.67661	56.92973	51.90825
VICTORVL_5_N101	Loss	-1.47166	-1.45371	-1.62525	-1.7497	-1.84189	-1.92577	-1.93155	-1.87916	-2.05982	-2.08643	-2.00815	-1.75779	-1.5826	-1.747	-1.57695	-1.31328
VICTORVL_5_N101	LMP	33.86546	32.85766	31.21642	37.03292	37.32899	42.21315	42.67116	40.46992	44.831	45.63963	50.2048	45.77574	54.17955	65.70774	56.9033	48.93993
VICTORVL_5_N101	Congestion	0	-1.82798	-2.433	-6.06648	-0.91658	0	0	0	0	0	0	-6.66056	-1.4071	-2.41464	0	0
VICTORVL_5_N101	Energy	35.43524	36.74326	35.79345	44.98424	39.9223	44.10066	44.40287	42.07727	46.55831	47.03177	51.69357	53.76428	56.9477	69.90496	58.24885	50.47956
VICTORVL_5_N101	Loss	-1.56978	-2.05762	-2.14403	-1.88484	-1.67674	-1.88751	-1.73171	-1.60735	-1.72731	-1.39214	-1.48877	-1.32798	-1.36105	-1.78258	-1.34555	-1.53963
VICTORVL_5_N101	LMP	60.74528	43.77399	37.8495	34.9967	46.51886	43.52316	45.43979	45.52416	45.88998	46.08408	46.55929	53.40231	51.10758	54.59603	59.61018	50.28229
VICTORVL_5_N101	Congestion	-0.26643	-9.3885	-13.53787	-27.92665	-0.23014	-0.41184	-1.13377	-1.94141	-0.46964	-4.41038	-10.76214	-4.94636	-12.31687	-13.2643	-1.46296	-0.05576
VICTORVL_5_N101	Energy	63.07423	54.97104	53.24014	65.09087	48.25453	45.20061	48.05361	48.77769	47.69508	51.98112	59.01516	59.64293	64.39684	69.02688	62.15463	51.57587
VICTORVL_5_N101	Loss	-2.06253	-1.80855	-1.85276	-2.16753	-1.50554	-1.26562	-1.48005	-1.31212	-1.33546	-1.48666	-1.69374	-1.29425	-0.97239	-1.16655	-1.08149	-1.23782
VICTORVL_5_N101	LMP	56.52305	47.2776	39.90182	40.3261	38.60856	37.79438	38.28565	38.42179	38.41005	40.41305	43.70416	50.49133	46.9848	51.45794	56.41331	48.4239
VICTORVL_5_N101	Congestion	-0.56191	-0.53767	-2.22697	-4.10579	-3.50126	-1.80481	-3.85196	-3.70474	-2.95357	-2.63382	-1.13905	-0.51647	-6.58017	-10.40154	0	0
VICTORVL_5_N101	Energy	59.1922	49.7972	43.93909	46.35565	43.87354	41.24057	43.94828	43.93672	43.16355	44.89661	46.50338	52.35328	54.83719	63.40011	58.05033	49.87013
VICTORVL_5_N101	Loss	-2.10724	-1.98193	-1.81029	-1.92376	-1.76372	-1.64137	-1.81067	-1.81019	-1.79992	-1.84974	-1.66017	-1.34548	-1.27222	-1.54062	-1.63702	-1.44623
VICTORVL_5_N101	LMP	61.24016	46.46976	43.31153	44.09013	41.98424	44.00979	42.29385	43.87279	42.5885	45.83466	48.61897	56.81217	59.53584	58.41431	63.87645	46.22504
VICTORVL_5_N101	Congestion	-0.74326	-0.48636	-0.50394	-0.46199	-3.14418	-3.11069	-6.6516	-9.99747	-3.52473	-2.18664	-0.69792	-0.5073	0.51532	-12.05048	0	0
VICTORVL_5_N101	Energy	63.40367	48.65919	45.81291	46.54421	47.07742	48.95125	51.01673	55.72594	47.90487	49.62929	50.68539	58.42964	59.9802	71.3712	65.02743	47.88175
VICTORVL_5_N101	Loss	-1.42024	-1.70307	-1.99744	-1.99209	-1.94901	-1.83078	-2.07128	-1.85567	-1.79164	-1.60799	-1.36851	-1.11016	-0.95968	-0.90641	-1.15099	-1.65671
VICTORVL_5_N101	LMP	52.61072	46.72516	43.99263	46.37088	45.56889	44.66722	45.873	46.34148	45.99118	43.82674	46.11793	53.12086	56.46071	55.63369	57.83701	45.16414
VICTORVL_5_N101	Congestion	-0.29313	-1.17148	-5.8388	-5.66548	-4.77622	-11.60863	-3.74363	-4.00679	-2.59646	-2.56989	-1.01891	-0.63819	-0.57729	-5.95245	-0.65693	0
VICTORVL_5_N101	Energy	54.19366	49.50045	51.62808	53.95164	52.15489	58.40168	51.23568	51.95364	50.34988	48.08937	48.69508	55.22811	58.35686	63.13936	60.36527	47.1442
VICTORVL_5_N101	Loss	-1.28981	-1.60381	-1.79666	-1.91528	-1.80977	-2.12582	-1.61905	-1.60537	-1.76225	-1.69275	-1.55824	-1.46907	-1.31887	-1.55323	-1.87132	-1.98006
VICTORVL_5_N101	LMP	49.27467	37.8814	34.02106	31.91663	31.03945	31.02477	30.93206	30.91542	30.95851	33.12611	37.90816	41.13877	48.77374	45.72843	54.14237	48.32717
VICTORVL_5_N101	Congestion	-0.36699	-3.43155	-9.4711	-10.69561	-10.59432	-8.8654	-12.37447	-11.91516	-10.71005	-6.7541	-1.9012	-4.44315	0	-12.37409	0	0
VICTORVL_5_N101	Energy	51.51152	43.2687	45.67066	44.73726	43.72836	41.89704	45.43278	44.91462	43.53626	41.5592	41.29173	47.21558	50.1994	59.67188	55.79962	50.21004
VICTORVL_5_N101	Loss	-1.86987	-1.95575	-2.17849	-2.12502	-2.09459	-2.00687	-2.12625	-2.08404	-1.86771	-1.67899	-1.48237	-1.63366	-1.42566	-1.56937	-1.65725	-1.88288
VICTORVL_5_N101	LMP	31.38112	32.29195	32.68727	32.423	34.17962	37.38657	36.17	37.18604	39.44644	40.63391	45.42976	49.68208	57.06	64.47397	56.36817	44.17297
VICTORVL_5_N101	Congestion	-3.35107	-3.13035	-2.0947	-1.91626	-4.49811	-4.10579	-2.96591	-1.24221	-0.1004	0	0	0	0	0	0	-3.35992
VICTORVL_5_N101	Energy	36.25489	36.95597	36.3524	35.89345	40.37763	43.31144	40.82612	40.09626	41.18176	42.21266	47.18014	51.13956	58.38534	66.04586	57.7898	49.44647
VICTORVL_5_N101	Loss	-1.52271	-1.53367	-1.57042	-1.55419	-1.6999	-1.81908	-1.6902	-1.668	-1.63492	-1.57875	-1.75038	-1.45748	-1.32535	-1.57189	-1.42163	-1.91358
VICTORVL_5_N101	LMP	30.76891	31.29956	38.29553	36.23	43.80763	42.1939	40.1875	42.4516	43.28925	44.83731	46.35776	55.0114	57.30312	71.74697	58.62255	55.01704
VICTORVL_5_N101	Congestion	-1.96609	-2.17849	-0.672	-1.41278	-0.2616	-0.72718	-0.8212	0	0	0	0	0	-0.04714	0	0	0
VICTORVL_5_N101	Energy	34.03868	34.8077	40.53207	39.13785	45.62503	44.54705	42.57547	43.93211	44.78971	46.42504	48.3145	56.99482	58.95987	73.80617	60.44185	56.81231
VICTORVL_5_N101	Loss	-1.30368	-1.32965	-1.56454	-1.49507	-1.55581	-1.62597	-1.56678	-1.48051	-1.50046	-1.58774	-1.95674	-1.98342	-1.6096	-2.05919	-1.8193	-1.79527
VICTORVL_5_N101	LMP	48.37137	45.25525	45.16453	46.67873	48.55116	46.67473	46.82589	43.57034	47.4181	52.42823	53.36751	56.64188	54.12511	59.48668	61.80146	55.63976
VICTORVL_5_N101	Congestion	0	-0.282	-1.15159	-3.73956	-0.49449	-5.34335	-7.53507	-11.9553	-10.69133	-9.2125	-16.48008	-10.85741	-14.94164	-17.22872	-1.34493	0
VICTORVL_5_N101	Energy	49.41905	46.79126	47.78799	52.15505	50.94594	53.88799	56.11744	57.24293	60.0987	63.58648	71.87445	68.99651	70.11141	78.00245	64.31696	56.96709
VICTORVL_5_N101	Loss	-1.04768	-1.25401	-1.47187	-1.73676	-1.90028	-1.86991	-1.75648	-1.71729	-1.98927	-1.94575	-2.02686	-1.49722	-1.04466	-1.28704	-1.17057	-1.32733
VICTORVL_5_N101	LMP	47.05882	41.26993	38.6395	41.56983	33.46004	33.37246	36.73411	36.81353	37.05	37.0332	38.46762	63.43747	69.69552	67.54959	53.27011	37.37712
VICTORVL_5_N101	Congestion	0	-3.48802	-3.69816	-5.52105	-17.43222	-20.88578	-21.17089	-22.06669	-26.6736	-29.41576	-34.15879	-8.98415	-1.0327	-7.49724	-14.60555	-19.02927
VICTORVL_5_N101	Energy	48.76562	46.91118	44.48167	49.46002	53.32942	56.57794	60.50678	61.61598	66.64254	69.24652	75.50308	74.94734	72.75817	77.07387	69.9677	58.16891
VICTORVL_5_N101	Loss	-1.7068	-2.15322	-2.14402	-2.36913	-2.43715	-2.3197	-2.60179	-2.73575	-2.91894	-2.79756	-2.87667	-2.52573	-2.02995	-2.02704	-2.09203	-1.76252



VICTORVL_5_N101	LMP	48.14731	47.03218	41.85742	42.87907	38.64305	43.90846	55.19517	52.62663	59.37317	62.33585	83.95219	85.68701	81.28713	81.71317	70.15427	52.85301
VICTORVL_5_N101	Congestion	0	-2.32894	-5.78749	-8.27542	-17.58469	-14.61153	-7.80151	-14.98271	-12.80257	-15.40925	-4.53025	-1.64936	-0.63001	-0.81806	-0.54841	-6.71056
VICTORVL_5_N101	Energy	49.56486	51.19387	49.71816	53.44738	58.43057	61.3417	66.3612	71.2127	75.98246	81.41701	92.36162	90.76738	84.89703	85.4803	73.00225	61.64086
VICTORVL_5_N101	Loss	-1.41756	-1.83274	-2.07325	-2.29289	-2.20283	-2.82172	-3.36451	-3.60336	-3.80672	-3.67191	-3.87919	-3.43101	-2.97989	-2.94907	-2.29957	-2.0773
VICTORVL_5_N101	LMP	42.32589	39.71573	33.44728	32.86274	34.39169	26.79515	35.93228	28.89254	29.04917	29.34858	34.88586	42.0583	42.41906	55.93661	44.43084	42.23206
VICTORVL_5_N101	Congestion	-6.5176	-10.5697	-19.40029	-23.30324	-26.11411	-37.39334	-36.79056	-45.49984	-57.55851	-61.24289	-59.89449	-49.11829	-31.24718	-19.34033	-20.40337	-14.65385
VICTORVL_5_N101	Energy	50.64651	52.23917	54.67933	58.18499	62.81096	66.3447	75.00293	76.93111	89.99135	93.71208	97.97432	93.82238	75.81951	77.46135	66.78431	58.45243
VICTORVL_5_N101	Loss	-1.80302	-1.95374	-1.83176	-2.01902	-2.30516	-2.1562	-2.28009	-2.53873	-3.38367	-3.12061	-3.19396	-2.64579	-2.15327	-2.18441	-1.9501	-1.56653
VICTORVL_5_N101	LMP	42.59311	41.88199	44.18364	44.09385	41.5775	35.02541	46.44836	37.11978	36.79244	45.83251	51.31869	54.05317	49.17277	51.32554	46.18137	41.81601
VICTORVL_5_N101	Congestion	0	-1.07817	-3.23196	-4.51825	-12.38338	-18.48524	-10.98977	-25.81821	-33.74524	-30.47344	-22.48456	-15.126	-16.60535	-10.75264	-11.89229	-10.16026
VICTORVL_5_N101	Energy	43.99661	44.40786	48.83675	50.52183	56.08656	55.50321	59.26345	65.39012	73.09605	78.8855	76.41669	71.01126	67.17537	63.42923	59.5444	53.39113
VICTORVL_5_N101	Loss	-1.40349	-1.4477	-1.42115	-1.90973	-2.12568	-1.99257	-1.82531	-2.45213	-2.55836	-2.57956	-2.61345	-1.83209	-1.39725	-1.35104	-1.47075	-1.41487
VICTORVL_5_N101	LMP	31.22715	28.45196	31.95762	35.76	40.59115	41.88982	41.24335	43.00054	41.92209	44.11521	45.35541	53.01127	51.43675	48.93488	46.97103	47.93068
VICTORVL_5_N101	Congestion	-3.05566	-5.38025	-4.60162	-4.79833	-3.63602	-5.09224	-4.09993	-4.43886	-8.36187	-10.39696	-10.93203	-7.72759	-9.65905	-12.20656	-6.86944	0
VICTORVL_5_N101	Energy	35.75969	35.31915	38.08651	42.04678	46.05078	48.97025	47.24243	49.34921	52.35186	56.68314	58.07019	62.44356	62.79761	62.94805	55.60308	49.29111
VICTORVL_5_N101	Loss	-1.47688	-1.48694	-1.52727	-1.48846	-1.82361	-1.98819	-1.89915	-1.90981	-2.0679	-2.17096	-1.78275	-1.70471	-1.70182	-1.80661	-1.76262	-1.36043
VICTORVL_5_N101	LMP	24.28354	25.05561	25.04903	26.9929	29.00191	30.0412	31.65644	33.74957	35.89345	40.92039	43.63549	50.63164	53.63285	62.03894	52.15632	47.6005
VICTORVL_5_N101	Congestion	0	-2.45775	-6.24159	-6.95099	-7.01549	-5.76702	-3.76706	-2.88563	-0.83693	0	0	0	0	0	0	0
VICTORVL_5_N101	Energy	25.29799	28.7887	32.68632	35.51359	37.65147	37.4563	37.05	38.2973	38.32069	42.69211	45.31203	52.3866	55.25742	63.74737	53.90277	49.64591
VICTORVL_5_N101	Loss	-1.01445	-1.27534	-1.39571	-1.5697	-1.63407	-1.64808	-1.6265	-1.6621	-1.59031	-1.77172	-1.67655	-1.75495	-1.62457	-1.70843	-1.74645	-2.04541
VICTORVL_5_N101	LMP	44.59048	38.21487	30.90176	39.05567	37.95097	37.84194	35.76	34.28971	36.18716	36.38976	36.6896	42.43258	46.3434	61.28114	54.08574	48.45014
VICTORVL_5_N101	Congestion	0	-5.83347	-17.76309	-5.40111	-6.45837	-9.79997	-11.33172	-14.85038	-10.82304	-9.88795	-10.50364	-8.88384	-9.79456	-0.02252	0	0
VICTORVL_5_N101	Energy	46.35185	46.01309	51.07562	46.57598	46.56043	49.78776	49.08455	51.19293	48.84683	48.07574	48.94549	52.97452	57.76105	62.77254	55.56944	50.01563
VICTORVL_5_N101	Loss	-1.76137	-1.96476	-2.41077	-2.11921	-2.15109	-2.14585	-1.99283	-2.05284	-1.83664	-1.79803	-1.75225	-1.6581	-1.62309	-1.46888	-1.4837	-1.56549
VICTORVL_5_N101	LMP	48.2191	38.95076	35.44355	35.65866	39.0965	39.05542	39.76209	42.76343	41.97996	43.24703	39.64682	43.01916	45.75699	67.12236	57.76913	49.90308
VICTORVL_5_N101	Congestion	-0.58788	-2.27304	-5.10142	-5.02423	-3.8979	-3.97875	-1.58788	-0.10985	-1.15791	0	-6.07391	-9.21404	-14.49532	-1.5453	0	-0.01712
VICTORVL_5_N101	Energy	50.76658	43.08057	42.24315	42.13661	44.87464	44.82259	42.96102	44.58535	44.786	45.00211	47.32016	53.88755	61.9179	70.36341	59.20182	52.00563
VICTORVL_5_N101	Loss	-1.95959	-1.85677	-1.69817	-1.45371	-1.88025	-1.78842	-1.61104	-1.71208	-1.64812	-1.75508	-1.59942	-1.65435	-1.66559	-1.69576	-1.43268	-2.08543
VICTORVL_5_N101	LMP	49.52798	39.98002	35.45035	35.84526	35.53976	37.30825	37.97693	37.94447	37.72564	40.70974	43.02988	45.17197	54.68755	65.01746	60.74842	45.78488
VICTORVL_5_N101	Congestion	0	-1.7204	-3.75063	-3.10419	-5.10351	-2.86001	-2.50002	-2.75761	-3.91167	-0.758	0	0	0	0	0	0
VICTORVL_5_N101	Energy	51.26059	43.42436	40.94097	40.7208	42.50054	42.0522	42.31334	42.62444	43.50816	43.37176	44.64143	46.80549	56.04956	66.26996	62.26775	47.37674
VICTORVL_5_N101	Loss	-1.73261	-1.72395	-1.73999	-1.77136	-1.85727	-1.88394	-1.8364	-1.92236	-1.87085	-1.90402	-1.61156	-1.63351	-1.362	-1.2525	-1.51933	-1.59186
VICTORVL_5_N101	LMP	38.75574	33.71639	24.91604	22.22033	17.47621	19.71236	20.07777	29.8798	30.66719	35.4532	37.02984	45.68687	58.54142	51.94343	43.04574	44.14917
VICTORVL_5_N101	Congestion	-10.64413	-11.15435	-19.66236	-23.00295	-30.62909	-29.03952	-29.63203	-17.82562	-19.85097	-15.43889	-14.00049	-5.81594	-0.4695	-13.11819	-11.87145	0
VICTORVL_5_N101	Energy	50.87524	46.48373	46.25275	47.01943	50.08881	50.6671	51.58223	49.57438	52.50822	52.96845	53.12339	53.54836	60.98689	66.79838	56.56317	45.86451
VICTORVL_5_N101	Loss	-1.47538	-1.61299	-1.67435	-1.79614	-1.98352	-1.91522	-1.87243	-1.86895	-1.99006	-2.07636	-2.09306	-2.04555	-1.97598	-1.73676	-1.64599	-1.71533
VICTORVL_5_N101	LMP	31.33258	30.40535	15.70327	15.01595	8.6206	8.15726	8.32808	25.053	27.71128	30.85492	35.27825	38.21612	42.75173	37.49772	36.86162	42.94332
VICTORVL_5_N101	Congestion	-10.7705	-9.13126	-25.17062	-27.3313	-34.09387	-35.72406	-35.78375	-17.43499	-17.19706	-13.65949	-9.73392	-7.62115	-5.67098	-18.40394	-10.5315	0
VICTORVL_5_N101	Energy	43.9627	41.44732	42.83577	44.4824	45.03371	46.22493	46.31164	44.81856	47.37167	47.05541	47.4862	48.15345	50.65667	58.06155	49.12731	44.39504
VICTORVL_5_N101	Loss	-1.85962	-1.91072	-1.96188	-2.13515	-2.31924	-2.3436	-2.1998	-2.33057	-2.46333	-2.54099	-2.47403	-2.31618	-2.23396	-2.15989	-1.73419	-1.45172
VICTORVL_5_N101	LMP	26.0381	26.969	19.38096	15.85055	12.78813	16.4536	16.12041	23.9876	28.24947	30.85691	35.07	43.80672	44.22469	36.98913	49.96576	44.72437
VICTORVL_5_N101	Congestion	0	-0.2163	-12.87375	-20.61992	-27.40255	-23.30244	-24.09195	-17.26219	-13.58188	-11.56356	-8.5936	-6.09342	-12.55713	-26.25313	0	0
VICTORVL_5_N101	Energy	27.0273	28.41867	33.81705	38.3053	42.18165	41.56408	42.04994	43.1438	43.81622	44.36823	45.678	51.96307	58.72564	65.21165	51.60686	46.23152
VICTORVL_5_N101	Loss	-0.9892	-1.23337	-1.56235	-1.83482	-1.99097	-1.80804	-1.83758	-1.89401	-1.98487	-1.94777	-2.0144	-2.06293	-1.94382	-1.96939	-1.6411	-1.50715
VICTORVL_5_N101	LMP	23.58244	25.48957	33.60515	37.80247	39.16222	40.91128	40.72564	41.87904	44.69663	44.34656	52.96266	57.17023	58.35769	61.45752	51.43889	42.53772
VICTORVL_5_N101	Congestion	0	0	0	0	0	0	0	-1.33512	0	0	-0.30543	0	0	0	0	0



VICTORVL_5_N101	Energy	24.37462	26.54334	35.23661	39.58374	41.05484	42.97855	42.80152	45.44554	47.3381	46.91268	56.42209	59.83905	60.62507	63.67335	53.09547	44.28706
VICTORVL_5_N101	Loss	-0.79218	-1.05377	-1.63145	-1.78127	-1.89263	-2.06727	-2.07587	-2.23138	-2.64147	-2.56612	-3.15399	-2.66882	-2.26738	-2.21583	-1.65658	-1.74934
VICTORVL_5_N101	LMP	31.23321	31.23646	38.71794	41.48367	40.79677	42.63467	42.98661	43.11287	44.65519	44.04393	54.94886	52.9696	58.91906	60.4043	49.99072	43.27142
VICTORVL_5_N101	Congestion	0	0	0	0	0	0	0	0	0	0	0	0	0	-0.34806	0	0
VICTORVL_5_N101	Energy	32.13624	32.3225	40.3396	43.32951	42.448	44.23601	44.64286	44.74146	46.46742	45.70294	56.81818	54.38916	60.34933	62.04286	50.96933	44.49503
VICTORVL_5_N101	Loss	-0.90303	-1.08604	-1.62165	-1.84584	-1.65123	-1.60134	-1.65625	-1.62859	-1.81223	-1.65902	-1.86932	-1.41956	-1.43028	-1.29049	-0.97861	-1.22361
VICTORVL_5_N101	LMP	39.96739	37.63326	30.90665	29.73568	25.08726	24.82433	29.21564	29.38895	30.59115	35.74683	37.05777	40.53703	38.41263	33.07858	34.53376	43.77027
VICTORVL_5_N101	Congestion	-2.75099	-4.2518	-12.28677	-15.6898	-21.31476	-22.12806	-19.7665	-21.24272	-22.17276	-19.50139	-20.92163	-18.41181	-18.90726	-30.23458	-18.60445	0
VICTORVL_5_N101	Energy	44.26775	43.28758	44.75538	47.06817	48.00043	48.53462	50.67992	52.41374	54.79688	57.27578	59.80958	60.68441	58.85603	64.95656	54.82688	45.04505
VICTORVL_5_N101	Loss	-1.54937	-1.40252	-1.56196	-1.64268	-1.59841	-1.58223	-1.69778	-1.78207	-2.03296	-2.02756	-1.83017	-1.73557	-1.53614	-1.6434	-1.68867	-1.27477
VICTORVL_5_N101	LMP	40.5683	37.94802	33.85554	30.89366	30.83425	33.6676	34.21301	36.67859	35.87305	37.01726	42.2574	45.04606	43.52182	33.0357	36.18	47.20473
VICTORVL_5_N101	Congestion	0	-0.8092	-5.54326	-12.21937	-13.86126	-10.75844	-12.11969	-13.18711	-15.18893	-16.3321	-11.52911	-9.37088	-12.54747	-29.50811	-16.02928	0
VICTORVL_5_N101	Energy	42.04405	40.25887	40.82355	44.58893	46.18737	45.98969	47.99824	51.6315	52.85372	55.03338	55.61053	55.93847	57.62516	64.33224	53.8351	48.73501
VICTORVL_5_N101	Loss	-1.47575	-1.50166	-1.42474	-1.47589	-1.49185	-1.56365	-1.66554	-1.7658	-1.79174	-1.68402	-1.82403	-1.52153	-1.55588	-1.78844	-1.62582	-1.53028
VICTORVL_5_N101	LMP	48.10406	33.80916	30.69356	20.80707	16.69913	28.47826	27.2786	35.8728	33.32403	33.1379	59.08651	59.77464	55.84556	36.93856	38.84062	49.2917
VICTORVL_5_N101	Congestion	0	-8.10958	-14.4945	-25.91213	-34.26932	-24.81441	-28.03	-21.75102	-23.16484	-26.69108	-4.25791	0	-0.79223	-21.60677	-15.57235	0
VICTORVL_5_N101	Energy	49.47959	43.34926	46.706	48.02056	52.38817	54.79967	56.91356	59.30207	58.18197	61.4513	65.24299	61.33249	58.00674	59.95426	55.87122	50.51414
VICTORVL_5_N101	Loss	-1.37553	-1.43053	-1.51795	-1.30136	-1.41972	-1.50699	-1.60496	-1.67825	-1.6931	-1.62231	-1.89857	-1.55785	-1.36896	-1.40893	-1.45824	-1.22244
VICTORVL_5_N101	LMP	44.5685	35.74368	30.86924	30.91391	31.68949	30.78646	30.71677	35.02894	33.33225	37.35564	53.92506	58.1411	54.90371	54.30007	49.94835	46.72333
VICTORVL_5_N101	Congestion	-1.0391	-7.57209	-13.08304	-12.36913	-16.74091	-16.72246	-19.53771	-20.08242	-24.45121	-22.45243	-4.93278	0	0	0	-2.59014	0
VICTORVL_5_N101	Energy	46.91175	44.52233	45.26031	44.52529	49.7999	48.69214	51.38496	56.21313	58.90861	60.89194	59.99168	59.06848	55.80779	55.33483	53.75331	48.13861
VICTORVL_5_N101	Loss	-1.30415	-1.20656	-1.30802	-1.24226	-1.3695	-1.18322	-1.13047	-1.10178	-1.12515	-1.08388	-1.13384	-0.92738	-0.90409	-1.03476	-1.21482	-1.41528
VICTORVL_5_N101	LMP	33.85204	33.29639	32.16378	31.27546	31.41509	35.42184	35.80765	33.59106	33.4591	34.03186	37.36498	52.51158	55.89942	51.05181	39.60626	40.67658
VICTORVL_5_N101	Congestion	-5.11827	-6.18662	-11.13831	-12.47517	-14.4047	-10.02713	-10.04012	-14.73687	-16.33515	-24.82323	-21.31402	-8.18233	-7.00157	-10.13339	-15.22144	-6.64025
VICTORVL_5_N101	Energy	40.40887	40.85999	44.73819	45.15961	47.31494	46.77745	47.17334	49.62819	51.28669	60.48205	60.47511	62.46157	64.6398	62.7927	56.34334	48.72498
VICTORVL_5_N101	Loss	-1.43856	-1.37698	-1.4361	-1.40898	-1.49515	-1.32848	-1.32557	-1.30026	-1.49244	-1.62697	-1.79611	-1.76766	-1.73881	-1.60749	-1.51564	-1.40815

# ON-PEAK CONGESTION COST : SINK - SOURCE

Day	HE	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1		-	-	-	10.91	13.39	18.55	18.73	24.73	34.10	36.09	25.78	21.34	18.50	21.34	21.86	11.92
2		-	-	7.74	6.67	12.44	16.38	21.68	15.54	27.15	23.43	17.38	12.71	17.14	13.00	5.06	-
3		-	0.23	1.04	0.19	-	1.12	0.47	13.20	12.92	16.62	23.12	0.65	9.55	13.92	-	-
4		-	-	-	-	-	-	-	-	-	-	-	7.79	1.65	2.83	-	-
5		-	10.07	14.68	36.54	-	-	1.07	2.28	-	4.63	8.13	5.03	12.17	12.79	0.96	-
6		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7		-	-	-	-	4.45	4.11	9.04	14.70	4.22	2.11	-	-	0.01	17.08	-	-
8		0.58	2.18	10.49	9.95	8.30	20.24	4.42	5.47	3.20	3.13	-	-	-	7.00	-	-
9		-	2.88	10.39	7.63	7.67	7.91	13.55	16.66	14.19	8.90	2.25	5.26	-	14.46	-	-
10		-	-	0.59	0.10	-	-	0.09	0.20	0.10	-	-	-	-	-	-	3.19
11		-	-	0.20	-	-	-	-	-	-	-	-	-	-	-	-	-
12		-	0.28	1.15	3.74	0.84	6.32	8.40	11.74	10.13	9.31	18.48	12.19	16.68	18.82	1.34	-
13		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14		-	2.33	5.47	7.90	16.57	13.81	7.38	14.17	12.90	16.02	4.34	1.65	0.63	0.82	0.55	6.43
15		6.11	10.00	18.35	22.05	24.94	35.38	35.06	44.47	58.98	61.57	57.74	46.37	29.48	20.42	19.33	13.89
16		-	1.08	4.12	5.15	13.30	20.80	12.21	30.40	40.03	36.66	24.76	16.66	18.41	11.86	13.14	11.31



17	-	-	-	-	3.09	5.18	4.71	6.63	9.28	11.54	12.15	8.63	10.79	13.63	7.69	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	7.26	21.18	3.52	4.38	8.45	13.27	19.13	16.94	10.26	13.33	10.99	12.10	0.02	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9.96	11.21	19.81	22.33	29.36	27.80	28.24	16.44	18.31	14.24	12.92	5.39	0.43	12.31	11.16	-
23	10.19	10.50	25.85	27.63	35.11	35.99	36.35	17.45	17.24	13.44	8.79	6.35	7.34	17.38	9.96	-
24	-	0.20	12.20	19.54	25.96	22.01	22.72	16.25	12.06	10.87	8.09	5.74	13.39	30.02	-	-
25	-	-	-	-	-	-	-	1.27	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	0.77	5.27	12.27	14.21	12.59	14.20	14.87	17.13	18.39	13.06	10.64	14.27	33.63	18.27	-
29	-	7.74	15.47	25.80	33.74	26.59	29.13	21.69	25.08	30.10	4.82	-	0.90	24.57	17.71	-
30	0.98	7.20	12.43	11.75	15.93	15.94	18.62	19.14	23.31	21.43	4.69	-	-	-	2.46	-
31	4.85	5.87	10.58	11.85	13.68	9.54	9.55	14.01	15.53	23.61	20.21	7.76	6.64	9.62	14.43	6.31

Average hourly on-peak congestion 8.47  
Standard Deviation 10.60



## **Addendum 2 to San Diego Community Power's Energy Risk Management Policy: California Carbon Allowance and Carbon Offset Transactions and Obligations**

### **I. Carbon Compliance**

CARB's Cap-and-Trade Program is a key element of California's strategy to reduce greenhouse gas (GHG) emissions. The Cap-and-Trade Regulation establishes a declining limit on major sources of GHG emissions throughout the state and creates an economic incentive for investment in cleaner and more efficient technologies. Carbon allowances are permits issued by CARB that authorize an entity to emit one metric ton of CO<sub>2</sub>. While a carbon offset also represents one metric ton of CO<sub>2</sub>, offsets are generated by projects that reduce emissions or remove CO<sub>2</sub> from the atmosphere. Both carbon allowances and carbon offsets can be used to meet GHG emissions obligations.

Under the Cap-and-Trade Program, electrical distribution utilities receive allocations of free carbon allowances. The Investor-Owned-Utilities (IOUs) are required to sell these allowances and return the sale proceeds to customers via a credit on their bills, known as the California Climate Credits.

As the electric sector continues to generate electricity from fossil fuel power plants, GHG emissions are generated, and entities are required to purchase carbon allowances or carbon offsets to meet compliance obligations. Electric importers have a carbon allowance obligation based on the type of electricity and whether they can identify the specific source of the electricity. Specified source electric imports may carry an emissions rate based on the resource type, and unspecified source imports are assessed at a default emissions rate.

### **II. SDCP Carbon Obligations**

SDCP has worked to achieve carbon reductions by purchasing electricity generated from renewable sources like wind and solar, essentially offsetting the need for carbon-emitting power plants, which are the energy producing entities typically required to purchase carbon allowances under California's Cap-and-Trade Program. While minimal, there are instances where SDCP may be required to purchase carbon allowances to meet a GHG emissions obligation.

SDCP has been contracting for long-term renewable power generation to meet renewable energy targets and to build a diverse portfolio of clean resources to serve customers. SDCP also prioritizes meeting all grid reliability requirements through Resource Adequacy (RA) Program compliance. In the short-term, SDCP may rely on electric imports to meet RA requirements during periods of high demand. The

combination of traditional fossil fuel resource retirements and delays impacting the ability for new clean energy resources to connect to the grid, has limited the available RA supply in the short-term markets.

In these limited instances, SDCP will be assessed a carbon obligation based on the specific resource type, or in the case of an unspecified import, a default GHG emissions rate, and will need to procure carbon allowance and/or carbon offsets to comply with established regulation.

### **III. Procurement of California Carbon Allowances and Carbon Offsets**

California carbon allowances are available for trade in CARB's quarterly auctions, and secondary carbon offset and carbon allowance markets. Because CARB auctions are the primary mechanism for allowance purchases, delegation of authority is required for SDCP staff to submit bids and participate in procurement. The dynamic nature of allowance prices and transactions in the secondary market also precludes staff ability to effectively procure without formal delegation.

SDCP will consider the cost of carbon, renewable priorities, and overall benefit to SDCP rate payers when evaluating any import energy strategies. SDCP will only acquire carbon allowances or carbon offsets to meet forecasted obligations, consistent with established Energy Risk Management Policy principles prohibiting taking speculative positions and trading.

By approving this policy, the Board delegates to the Chief Executive Officer, the ability to procure California Carbon Allowance (CCA) and Carbon Offset (CO) at the following product volumetric and notional transaction limits:

<b>Delegation of Authority per Transaction by Position/Title</b>	<b>Product Type</b>	<b>Volumetric Limit (MTCO<sub>2</sub>e)</b>	<b>Notional Value Limit</b>
Chief Executive Officer	CCA/CO	20,000	\$1,000,000

Any changes to this delegation of authority will require Board approval.

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## **RESOLUTION NUMBER 2025-05**

### **A RESOLUTION OF THE BOARD OF DIRECTORS OF SAN DIEGO COMMUNITY POWER APPROVING ADDENDUM 2 TO SAN DIEGO COMMUNITY POWER'S ENERGY RISK MANAGEMENT POLICY: CALIFORNIA CARBON ALLOWANCE AND CARBON OFFSET TRANSACTIONS AND OBLIGATIONS.**

- A. San Diego Community Power ("Community Power") is a joint powers agency formed pursuant to the Joint Exercise of Powers Act, Cal. Gov. Code § 6500 *et seq.*, California Public Utilities Code § 366.2, and a Joint Powers Agreement first effective on October 1, 2019 ("JPA Agreement"), as amended from time to time.
- B. Pursuant to Section 4.6.16 of its JPA Agreement, the Community Power Board of Directors ("Board") has the responsibility to exercise the Specific Powers identified in Section 3.2 except those which the Board may elect to delegate to the Chief Executive Officer.
- C. Section 3.2.12 of the JPA Agreement authorizes Community Power to adopt rules, regulations, policies, bylaws and procedures governing the operation of Community Power and Section 4.5.5 identifies setting policy as a duty of the Board.
- D. The Board did adopt an Energy Risk Management Policy ("ERMP") on June 25, 2020, to provide processes for monitoring, measuring, reporting, and controlling market and credit risks for the purchase of energy and related products, and amended the ERMP on January 15, 2021, to include Addendum 1 to provide a methodology to evaluate and mitigate congestion risk.
- E. Section 7.2 of the ERMP identifies the Board may amend the Energy Risk Management Policy as it deems necessary.
- F. CARB's Cap-and-Trade Program is a key element of California's strategy to reduce greenhouse gas (GHG) emissions. The Cap-and-Trade Regulation establishes a declining limit on major sources of GHG emissions throughout the state and creates an economic incentive for investment in cleaner and more efficient technologies.
- G. Community Power may sometimes be assessed a carbon obligation under the Cap-and-Trade Program, for instance when Community Power relies on electric imports to meet resource adequacy requirements during periods of high demand.

- H. California carbon allowances are available for trade in CARB's quarterly auctions, and secondary carbon offset and carbon allowance markets. Because CARB auctions are the primary mechanism for allowance purchases, delegation of authority is required for Community Power staff to submit bids and participate in procurement. The dynamic nature of allowance prices and transactions in the secondary market also precludes staff ability to effectively procure without formal delegation.
- I. The Board seeks to amend the Energy Risk Management Policy to include Addendum 2: California Carbon Allowance and Carbon Offset Transactions and Obligations, to delegate to Community Power staff the ability to purchase carbon allowances and carbon offsets within certain parameters.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of Community Power as follows:

1. The Board of Directors has determined that the recitals herein are true and correct.
2. The Board of Directors hereby amends the Energy Risk Management Policy to include Addendum 2 to San Diego Community Power's Energy Risk Management Policy: California Carbon Allowance and Carbon Offset Transactions and Obligations, attached hereto as Exhibit A.
3. This resolution shall take effect immediately upon adoption.

**PASSED, APPROVED AND ADOPTED** at a meeting of the Board of Directors of San Diego Community Power held on June 26, 2025, with the following vote.

AYES:	Chair Aguirre, Vice Chair Lawson-Remer, Alternate Director Cazares, Directors Inzunza, San Antonio and Yamane
NOES:	None
ABSTAINED:	None
ABSENT:	Director Elo-Rivera

*Paloma Aguirre*

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Paloma Aguirre, Chair  
Board of Directors  
San Diego Community Power

ATTEST:

APPROVED AS TO FORM:

*Maricela Hernandez*

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Maricela Hernandez, MMC, CPMC  
Clerk of the Board/Secretary  
San Diego Community Power

*Veera Tyagi*

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Veera Tyagi, General Counsel  
San Diego Community Power



## **Addendum 2 to San Diego Community Power's Energy Risk Management Policy: California Carbon Allowance and Carbon Offset Transactions and Obligations**

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