BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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Order Instituting Rulemaking to Continue Oversight of Electric Integrated Resource Planning and Related Procurement Processes	R.25-06-019

SHELL ENERGY NORTH AMERICA (US), L.P. 2026 INTEGRATED RESOURCE PLAN

PUBLIC VERSION

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Date: August 10, 2026

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (Commission) and with the Administrative Law Judge's (ALJ) January 16, 2026 Ruling Setting Requirement for Individual Integrated Resource Plans (IRP) Due June 1, 2026, as extended by ALJ Fitch's March 9, 2026 ruling granting all load serving entities an extension to file their individual IRPs no later than August 10, 2026, Shell Energy North America (US), L.P., (Shell Energy) submits its 2026 IRP pursuant to Public Utilities Code Section 454.52.

Shell Energy concurrently submits a motion requesting confidential treatment of portions of its IRP Narrative and the entirety of its RDT and CSP Calculator workpapers, which have been submitted directly to Energy Division staff via Kiteworks.

Respectfully submitted,

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VERIFICATION

I am an officer of Shell Energy North America (US), L.P., and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 10, 2026, at San Diego, California.



Resmi Surendran
General Manager, Regulatory Affairs
Shell Energy North America (US), L.P.

Standard LSE Plan



Shell Energy North America (US), L.P.

2026 INTEGRATED RESOURCE PLAN

AUGUST 10, 2026

PUBLIC VERSION

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I. Executive Summary

Shell Energy submits this Integrated Resource Planning (IRP) Narrative, together with the Resource Data Template (RDT) and Clean System Power Plan (CSP) Calculator, pursuant to both Public Utilities Code Section 454.52 and the Administrative Law Judge's (ALJ) January 16, 2026 *Ruling Setting Requirement for Individual Integrated Resource Plans Due June 1, 2026* (ALJ Ruling), as extended by Administrative Law Judge Fitch's March 9, 2026 ruling granting all load serving entities an extension to file their individual IRPs no later than August 10, 2026.

Shell Energy North America (US), L.P. (Shell Energy) is a registered Electric Service Provider (ESP) in California. Shell Energy has actively served large commercial and industrial customers since California restructured its wholesale and retail energy markets. Shell Energy does not serve residential customers. Shell Energy serves customers in the service territories of Pacific Gas & Electric Company (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric Company (SDG&E).

As directed under the ALJ Ruling, Shell Energy presents a Conforming Portfolio in this Integrated Resource Plan that addresses how Shell Energy would achieve its proportional share of the 25 MMT emissions target by 2035 and the 8 MMT emissions target by 2045. Shell Energy does not present an additional or "alternate" portfolio. Therefore, Shell Energy's "preferred" portfolio is consistent with the Conforming Portfolio set by the Commission.

Overview of Shell Energy's IRP Plan

As further detailed in the sections below, and consistent with the numbering in the template provided by Commission staff (dated January 16, 2026), Shell Energy includes in Section (II) a description of its "Study Design," with an overview of the inputs, methodologies, and tools Shell Energy used to analyze its procurement and emissions targets. Since most of Shell Energy's customers execute contracts for one to three years in length, Shell Energy does not utilize models to develop load forecasts or supply portfolios. Instead, Shell Energy utilizes historical final meter data for customer load currently under contract. For new customers under contract, Shell Energy utilizes estimates based on prior usage from customer profiles. Shell Energy procures energy and capacity, including renewable energy pursuant to the Renewable Portfolio Standard (RPS), based on its projections over the term of existing contracts with Shell Energy's customers. Shell Energy assumes its existing, contracted customer load will be maintained unless it has been otherwise expressly notified. For purposes of this IRP Plan, however, Shell Energy utilizes the Energy Division's designated load forecast that was confidentially transmitted to Shell Energy, as extended over the entire forecast period (i.e., through 2045). Shell Energy has reviewed the California Energy Commission's (CEC) Final 2024 Integrated Energy Policy Report (IEPR), issued in October 2025, which continues to show increasing electricity demand forecasts, particularly due to substantial load growth projects due to data center load, in addition to ongoing transportation electrification, particularly in the medium and heavy duty vehicle sector.[1] Shell Energy strongly encourages the Commission to grant the

[1] California Energy Commission, Final 2024 Integrated Energy Policy Report Update, pp. 2-3 (October 2025), https://www.energy.ca.gov/publications/2024/2024-integrated-energy-policy-report-update.

pending Petition for Modification filed in Rulemaking 19-03-009 to enable ESPs to meet this growing demand.[2] Shell Energy is fully prepared to leverage its market capability and expertise to develop solutions to meet such increased demand, beyond the requirements of the IRP and RPS procurement planning process.

In Section (III) we present the "Study Results," including Shell Energy's Conforming Portfolio and GHG Emissions Results, and describe how we plan to address local air pollutant minimization in disadvantaged communities (DACs), customer cost and rate analysis, reliability analysis, an analysis of risks to generation due to ongoing climate change and drought conditions, long-duration storage planning, clean firm generation planning, wind planning (both in state and out-of-state), and transmission planning.

Shell Energy also includes in Section (IV) its "Action Plan" for achieving the Conforming Portfolio. This plan consists of Shell Energy executing transmission agreements, power purchase agreements (PPAs), and contracts for storage with third-party developers and providers to meet the State's procurement goals, as well as procurement directives from the California Public Utilities Commission (Commission), all while also meeting the needs and interests of Shell Energy's retail sales customers. In this Section, Shell Energy describes its proposed procurement activities and addresses potential barriers, its goals for minimizing negative impacts on DACs, possible Commission actions for improving the IRP process, and lessons learned. Shell Energy considers the impact to DACs in its energy and capacity procurement decisions. Shell Energy supports efforts to bring renewable energy development and jobs to DACs.

As part of Shell Energy's procurement strategy, Shell Energy intends to meet all Commission-adopted Resource Adequacy (RA) requirements. Shell Energy also intends to continue executing contracts to ensure that it meets the long-term RPS contract requirement established under Senate Bill (SB) 350 and D.17-06-026 (June 29, 2017), in addition to its mid-term reliability (MTR) procurement requirements under D.21-06-035 and D.23-02-040, and related MTR decisions.

Overall, Shell Energy is committed to achieving the State's and the Commission's procurement goals, to providing clean and reliable energy sources, and to meeting the needs of Shell Energy's retail energy customers, all while also working to incrementally grow Shell Energy's market share in the currently capped direct access market.

II. Study Design

In this Section, Shell Energy describes how it approached the process of developing its IRP.

Load Forecasting

[2] Petition for Modification of Decision 21-06-033 by the Alliance for Retail Energy Markets, California Coalition of Large Energy Users, Direct Access Customer Coalition, Regents of the University of California, Shell Energy North America (US), L.P. and Western Power Trading Forum (April 6, 2026), available at https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M604/K025/604025685.PDF.

Pursuant to the ALJ Ruling, Shell Energy uses as the basis for its individual IRP planning horizon the load forecast that Commission staff provided, on a confidential basis, to ESPs earlier this year. As set forth in the chart below, Shell Energy uses this load forecast for all years through 2045.

Service Area	Forecast Period	Final IRP Sales Forecast (GWH annually)
PG&E	2027-2045	[redacted]
SCE	2027-2045	
SDG&E	2027-2045	

Shell Energy notes, however, that its assigned load forecast does not accurately capture Shell Energy's retail customer load. This is because, at its core, the assigned load forecasts over-simplify the nature of an ESP's business. The IRP planning approach to load forecasting, which is based on a straight-line calculation, is not the load forecasting approach employed by Shell Energy.

Shell Energy does not provide its own unique load or load modifier shapes in the CSP calculator due to the aforementioned challenge of Shell Energy's short-term customer load and the existing cap on DA load. For its conforming portfolio, the total annual energy volumes for both load and load modifiers reflect Shell Energy's assigned forecast. The only consideration is that Shell Energy serves only commercial, industrial, and agricultural load; Shell Energy does not serve residential customers.

Conforming Portfolio

Pursuant to the ALJ Ruling, Shell Energy submits its "Conforming Portfolio" to project emissions that are equal to or less than Shell Energy's proportional share of the 8 MMT Conforming Portfolio. Shell Energy does not provide an alternate portfolio with this filing.

Shell Energy's portfolio consists of RPS energy, zero GHG emission energy, system energy, and energy storage designed to meet the State's mandates, in addition to specified source energy procurement upon individual customer request. Shell Energy's supply portfolio is comprised primarily of CAISO system supplies, energy storage, and RPS-eligible resources— predominantly wind, solar, geothermal and battery (including hybrid battery) resources, in addition to some limited small hydro resources.

Shell Energy's conforming portfolio also accounts for resources subject to the cost allocation mechanism (CAM) and those obtained through the Voluntary Allocation Market Offer (VAMO) process. Shell Energy applies its CAM allocation from the September 2026 CAM allocations and extends those allocations for the time period contemplated under the CPUC-provided allocations. Shell Energy assumes its future RA obligations are reduced by its proportional share of the RA capacity value reflected in the year-ahead CAM list. Shell Energy uses the same methodology for estimating other costs and benefits associated with those resources. Shell Energy notes, however, that the requirement to include CAM resources in Shell Energy's portfolio reduces Shell Energy's procurement flexibility and imposes unnecessary additional costs on Shell Energy's direct access customers. These CAM costs, as with AB 1373 centralized procurement costs, are likely substantially higher than the costs that would be incurred if Shell Energy were to perform this capacity procurement on behalf of its customers. Imposing CAM resources and other

centralized procurement resources (and their costs) on non-investor-owned utility (IOU) LSEs, and their customers, makes it more difficult for non-IOU LSEs such as Shell Energy to create a unique supply portfolio and minimize costs to match its' customers' needs. A portfolio that includes a substantial share of CAM or AB 1373 resources diminishes LSE individuality and makes it extremely difficult for ESPs to participate in a competitive market. For these reasons, Shell Energy's Conforming Portfolio declines to include the optional AB 1373 allocation assigned to Shell Energy for purposes of this IRP Plan.

The Commission should take reasonable steps to ensure that when new procurement is required for reliability, LSEs have the ability to procure their own resources to meet the Commission's procurement target. The Central Procurement Entity (CPE) framework exemplifies this point, as the framework did not achieve the intended result of increasing reliability and led to many unanticipated market consequences (CPEs continued to fall short of their procurement obligations of local RA, for example), and Shell Energy is concerned that overreliance on a centralized procurement framework (e.g., as contemplated under AB 1373 for procurement by the Department of Water Resources). While Shell Energy appreciates the goal of enabling the development of substantial and costly resources—most notably in the context of off-shore wind development— such procurement can lead to unintended consequences and increase costs while also limiting LSEs ability to maximize procurement to meet respective customer needs. Shell Energy notes that it has experienced success in procuring long-duration energy storage resources, including geothermal and battery storage resources, indicating that centralized procurement may be premature. The Commission should allow LSEs to procure their own share of any necessary new system, flexible, and local RA capacity.

GHG Emissions Benchmarks

Like other ESPs, Shell Energy was directed to calculate its own confidential GHG Emissions Benchmarks based on its 2030, 2035, 2040, and 2045 load shares in each of the IOU service territories. As described above, Shell Energy operates in PG&E, SCE, and SDG&E service territories. Shell Energy performs this calculation using the "ESP GHG Benchmark" tab in the CSP calculator provided by Commission staff.

8 MMT Portfolio

	2030	2035	2040	2045
LSEs within Utility Territory	ESP 2030 benchmark for each IOU territory (MMT)	ESP 2035 benchmark for each IOU territory (MMT)	ESP 2040 benchmark for each IOU territory (MMT)	ESP 2045 benchmark for each IOU territory (MMT)
Pacific Gas & Electric Company (Direct Access)	[redacted]			
Southern California Edison Company (Direct Access)				
San Diego Gas & Electric Company (Direct Access)				
TOTAL				

a. Objectives

Through its IRP analysis, Shell Energy sought to meet all statutory and Commission-imposed requirements for system planning through 2045. Shell Energy also sought to inform its own future procurement decisions to meet the projected needs of Shell Energy's retail customers. Shell Energy is committed to meeting all State-mandated requirements for RPS, RA, and GHG emission reductions, while maintaining the flexibility required to meet its customers' demands. In some instances, Shell Energy's retail customers have RPS requirements that are more ambitious than the RPS procurement obligations the State imposes upon LSEs.

Shell Energy also sought to reflect upon load projections and trends over the planning horizon. However, as the California Energy Commission's (CEC) 2024 IEPR projects, the load forecast is higher primarily due to data center load growth to support Artificial Intelligence (AI) technology development and deployment, most of which Shell Energy cannot serve under the existing DA cap.[3] Data center load continues to be an area of focus in the 2025 IEPR forecast, despite the uncertainty of the reported data center forecast in the 2024 IEPR, because the forecast is based on applications received by the utilities.[4] Overall, Shell Energy's IRP serves to inform the Commission of Shell Energy's existing resources, its projection of how statewide policies will impact Shell Energy's future procurement needs, and actions that may be undertaken by Shell Energy to meet these needs. Forecasting over a long period, as required here, can be challenging for Shell Energy and other ESPs, however, given direct access customers often execute contracts for one to three years in length. Shell Energy's actual retail load changes on a monthly basis and is influenced by several factors, including: whether Shell Energy gains, or loses, market share (within the current Direct Access cap); potential changes to the Direct Access cap in the future, subject to the SB 237 rulemaking or other prospective legislation; seasonal peak demand and year-over-year fluctuations in demand; and other regulatory requirements or procurement directives that may result in market shifts.

Notwithstanding this underlying uncertainty, Shell Energy has found the IRP process to be a beneficial exercise because it provides a point of reference for Shell Energy's potential need for new or alternative resource procurement to meet projected GHG emissions targets, RPS procurement goals, and RA requirements. The overall objective of Shell Energy's procurement is to provide energy products that meet both its customers' retail energy needs and the State's required procurement targets through clean energy technology, while working to expand its market—and market share—in an open, unrestricted future direct access environment.

[3] California Energy Commission, Final 2024 Integrated Energy Policy Report Update, p. 3 (October 2025), https://www.energy.ca.gov/publications/2024/2024-integrated-energy-policy-report-update.

[4] California Energy Commission, Final 2025 Integrated Energy Policy Report Update (July 2026), https://www.energy.ca.gov/publications/2026/2025-integrated-energy-policy-report.

b. Methodology

i. Modeling Tool(s)

Shell Energy relied on the modeling tools and templates provided by Commission staff. Specifically, Shell Energy utilized the RDT and CSP calculator in excel workbook formats to develop Shell Energy's Conforming Portfolio and reliability projections. Shell Energy did not utilize its own modeling software or modeling tools to develop its IRP.

ii. Modeling Approach

As described above, since most of Shell Energy's customers execute contracts for a shorter term (e.g., one to three years in length), Shell Energy does not utilize models to develop load forecasts or supply portfolios on a long-term basis.

To meet its 2045 GHG emission reduction in addition to its RPS requirements, and to meet ongoing reliability, and cost-minimization objectives, Shell Energy prioritizes procurement as follows: a) RPS-eligible energy and other zero- and low-carbon- emitting resources; b) reliable resources; and c) cost-competitive resources. For purposes of forecasting in this IRP Plan, Shell Energy determined that to meet the ambitious GHG emissions target of 8 MMT for the conforming portfolio in 2045, Shell Energy must procure RPS energy in greater proportions beyond the quantities necessary to meet the statutory RPS procurement target of achieving 60 percent RPS procurement for 2030 and 100% RPS procurement through 2045 under SB 100. As noted above, however, a significant deficiency in this IRP process is the Commission staff's projection of Shell Energy's (and all other ESPs') retail sales load through 2045, particularly in light of the existing cap on DA load in the face of increasing data center and electrification needs. Shell Energy's load forecast reflected in the Conforming Portfolio represents an artificial extrapolation of the Commission staff's assigned load forecast. This unreliable assumption concerning Shell Energy's future load (through 2045) is compounded by the Commission staff's assumption that every ESP will serve a proportionate share of the IEPR Forecast, which includes substantial growth in demand due to data centers and other new customers—notwithstanding the existing cap for direct access service under SB 237. The Commission should understand the results of this exercise as directional rather than definitive, particularly where each ESP's assigned load forecast depends on assumptions about how, and by whom, future direct access load will be served.

iii. Alternative Assumptions

Shell Energy did not prepare an alternative portfolio for purposes of this IRP.

III. Study Results

This section presents the results of Shell Energy's analysis based on the modeling tools and criteria discussed above. Shell Energy's reliability results are reflected in the RDT, whereas its GHG and other emissions results are included in the CSP workbook. In addition to those quantitative reports, Shell Energy provides its narrative analysis below for additional context.

a. Conforming and Alternative Portfolios

Shell Energy provides its Conforming Portfolio designed to meet its proportionate share of the GHG emissions benchmarks assigned under the 8 MMT Conforming Portfolio. Shell Energy did not elect to provide an alternative portfolio. Therefore, Shell Energy's "Preferred" Portfolio is also the "Conforming Portfolio."

Shell Energy's Existing Resource Portfolio

For assessing Shell Energy's resource portfolio, Shell Energy generally relies on existing and new RPS-eligible resources under contract for the term of the respective contract. This includes but is not limited to long-term RPS contracts. Shell Energy's existing resource portfolio includes a diverse supply of resources including battery storage (both stand-alone and hybrid), solar, wind (both in-state and out of state), and geothermal resources, in addition to RPS resources Shell Energy procured through the VAMO process. Shell Energy's conforming portfolio is designed to comply with the RPS procurement target and GHG emissions target for that portfolio. The portfolio includes additional RPS-eligible resources, focused on wind, solar, and geothermal resources. In addition, to the extent that Shell Energy's planned RPS procurement, in combination with its other procurement, does not meet the applicable GHG emissions target, Shell Energy includes additional battery storage (particularly hybrid) resources. Shell Energy coordinates its RPS procurement planning with its RA capacity planning and MTR obligations. Combined with its energy storage procurement, Shell Energy's RPS and RA capacity procurement provide an integrated and flexible portfolio to meet customer needs at the lowest possible cost. Shell Energy is an active participant in the purchase of and investment in RPS resources. Shell Energy has outstanding credit; developers and ESPs are regularly canvassing the market for the purchase and sale of energy and capacity, including RPS supplies.

Because Shell Energy's individual procurement is not subject to Commission approval, Shell Energy pursues resources through informal solicitations, bilateral negotiations, and contracting. The streamlined procurement process employed by Shell Energy results in flexible and efficient procurement to meet customer demand. The resources included in Shell Energy's respective Conforming Portfolio are set forth in the "Supply Inputs" Tab of the CSP Calculator and the "Unique Contracts" Tab of the Resource Data Template. In the table below, Shell Energy provides its long-term contracts.

Project Name	**Contract Start Date**	**Delivery Term**	**MW/Approx. Annual MWh**
Voyager Wind	12/19/2018	12 years	[redacted]
Coachella Wind	4/14/2021	12 years	
Maverick 4 (Palen) Solar	12/11/2020	15 years	
Sandrini Solar	12/31/2024	15 years	

Maverick 7 (Palen) Solar	12/22/2021	15 years	[redacted]
Willow Creek	1/1/2024	10 years	
SunZia (North)	6/1/2026	12 years	
SunZia (South)	6/1/2026	12 years	
Enterprise Solar	3/3/2023	11 years	
VAMO (PG&E)	1/1/2023	20 years	
VAMO (SCE)	1/1/2023	17 years	
VAMO (SDG&E)	1/1/2023	19 years	
Solar Blue	7/1/2025	10 years	
Westlands Cherry Battery	3/26/2026	10 years	
Cape Station	[redacted]	15 years	
Westlands Grape	[redacted]	15 years	
Westland 110 Battery	[redacted]	15 years	
AYPADirac Battery	[redacted]	15 years	

The procurement described above evinces Shell Energy's commitment to and progress toward meeting its RPS procurement targets, including its 65 percent long-term contract requirement. Shell Energy will continue to pursue opportunities to procure RPS-eligible energy, including through long-term contracts, to meet its RPS and IRP procurement obligations.

Shell Energy's Planned New Resource Procurement

With respect to new resource procurement, Shell Energy's Conforming Portfolio contemplates approximately [redacted] GWh of incremental capacity by 2045. Shell Energy is also obligated to meet its ongoing MTR procurement obligations. Shell Energy notes that this substantial procurement quantity is largely driven by the clean resource, rather than reliability, requirements set by the Commission. Accordingly, Shell Energy plans to procure qualifying resources that may include battery storage, solar-paired storage, and geothermal, to the extent such supplies are available and prove to be a good fit within Shell Energy's portfolio. Shell Energy's forecasted supply of resources tracks the preferred supply outlined in the least-cost portfolio identified by the Resolve Model and listed in Table 1 of the Ruling. In particular,

Shell Energy projects increasing supplies of solar and wind resources, in addition to long-duration storage supply.

Comparison to Shell Energy's 2022 Conforming Portfolio and the Resulting 2026-2027 Portfolio

Shell Energy's planned procurement is generally consistent with the resource mix reflected in its 2022 Conforming Portfolio and the Commission-adopted 2026-2027 Transmission Planning Process base case portfolio, with the most notable changes arising from anticipated changes in wind resource development (decrease in offshore and increase in out-of-state). In this 2026 filing, Shell Energy continues to prioritize solar, storage, wind (including a shift toward out-of-state wind), and geothermal resources, but reflects Shell Energy's specific customer and load profile as an ESP serving only commercial, industrial, and agricultural direct access customers. Shell Energy's procurement choices prioritize increased resource and locational diversity, including a greater reliance on out-of-state wind, to complement its existing solar and battery storage positions and to hedge against in-state development, interconnection, and permitting constraints. Shell Energy's updated portfolio also reflects an increasing amount of procurement through the MTR process, including the more recent technology-specific procurement directives. Shell Energy's procurement approach also reflects least-cost selection criteria consistent with the Commission's RESOLVE-informed least-cost comparison portfolio, tempered by the practical realities of Shell Energy's short-term, one-to-three-year retail contracting model, which limits Shell Energy's ability to lock in resources as far in advance as the IOUs or CCAs represented in the Commission's statewide portfolios.

b. Preferred Conforming Portfolio

As previously noted, Shell Energy does not include an alternative portfolio. Therefore, Shell Energy's "Preferred" procurement portfolio is the Conforming Portfolio (8 MMT). This portfolio is designed to comply with the RPS procurement target, as well as the GHG emissions target for that portfolio, while meeting the objectives of its retail sales customers and the Commission's procurement directives. Shell Energy is prepared to meet the State's RPS procurement target, even as it increases substantially through 2045 pursuant to SB 100. Shell Energy is also prepared to meet the State's GHG emissions target, as established by this Commission (or otherwise by the California Air Resources Board (CARB)). Shell Energy is an active participant in the wholesale and retail energy market in the State. Shell Energy will negotiate the contracts necessary to meet its RPS procurement and GHG emissions obligations. As the RPS procurement obligation increases, the GHG emissions target becomes more ambitious, and as other resource procurement requirements are imposed or otherwise increase, the costs of procurement increase as well, particularly in an increasingly constrained market. Since the inception of the RPS requirement, the ratepayers have funded major clean energy accomplishments.[5] This specialized

[5] *See "CPUC Response to Executive Order N-5-24" (Feb. 18, 2025) available at https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/reports/cpuc-response-to-executive-order-n-5-24.pdf.*

procurement increases costs for California consumers and contributes to the "affordability crisis" the Commission is working to address through the Affordability Rulemaking (R.) proceeding R.18-07-006.[6]

In its supply portfolio, Shell Energy plans to replace CAISO system resources with RPS-eligible solar and wind energy, as necessary to meet the State's procurement targets. At this time, RPS-eligible solar and wind resources appear to provide the least-cost pathway to achieve the State's RPS and GHG emissions targets. To the extent that other GHG-free resources can be developed and procured at a competitive cost, Shell Energy will consider including those resources in its portfolio in future IRPs.

As described below, Shell Energy's procurement planning and selections are consistent with relevant requirements as set forth in Public Utilities Code Section 454.52(a)(1), and as implemented in Commission decisions.

GHG Reduction Goals

Shell Energy's Conforming Portfolio satisfies the Section 454.52(a)(1)(A) goal of meeting the Commission's applicable GHG reduction benchmarks. As described above, Shell Energy's 8 MMT Conforming Portfolio meets the emissions targets for Shell Energy's proportional share of the Commission-established GHG emissions benchmarks, thereby complying with the projected GHG reduction targets established under the Ruling and Section 454.52(a)(1)(A).

RPS Energy Procurement

Shell Energy's Conforming Portfolio achieves results and performance characteristics consistent with the Section 454.52(a)(1)(B) goal of ensuring that portfolios are composed of at least 60 percent eligible RPS resources by 2030. In 2030, Shell Energy's portfolio will consist of an increasing proportion of RPS-eligible solar, wind, and geothermal resources. Additionally, Shell Energy's Conforming Portfolio consists of 100 percent RPS-eligible supplies by 2045.

Public Utilities Code Section 454.52(a)(1)(C) is not applicable to Shell Energy, as Shell Energy is not an electrical corporation.

Shell Energy's Conforming Portfolio also achieves the Section 454.52(a)(1)(F) goal of ensuring that at least 65 percent of the procurement of an LSE counts toward the RPS requirement of each compliance period shall be from long-term RPS contracts.

[6] *See also* "Commission Report to the Governor and Legislature on Actions to Limit Utility Cost and Rate Increases Pursuant to Public Utilities Code Section 913.1" (May 2022), *available at* https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/electric-costs/sb-695-reports/2022-sb-695-report-final-w-links.pdf; California Executive Order (EO) N-5-24 (Oct. 30, 2024) *available at https://www.gov.ca.gov/wp-content/uploads/2024/10/energy-EO-10-30-24.pdf*.

Minimizing Bill Impact

Shell Energy's Conforming Portfolio achieves the Public Utilities Code Section 454.52(a)(1)(D) goal of minimizing the impact of planned procurement on ratepayers' bills. Cost-effectiveness was one of Shell Energy's driving considerations in selecting resources for its Conforming Portfolio. Shell Energy's Conforming Portfolio includes RPS-eligible resources that have benefitted from increasing economies of scale over the past several years. Absent external factors that have recently affected the solar industry, such as the solar panel investigation before the United States Department of Commerce and the expiration of federal tax credit incentives, in Shell Energy's experience, solar and wind remain the leading renewable resources with price projections that continue to drop in the foreseeable future. Consistent with its past practice, Shell Energy will negotiate its procurement contracts with a focus on cost-effectiveness for its retail customers.

To meet its 2045 GHG emission reduction in addition to its RPS requirements, and to meet ongoing reliability, and cost-minimization objectives, Shell Energy prioritizes procurement as follows: a) RPS-eligible energy and other zero- and low-carbon- emitting resources; b) reliable resources; and c) cost-competitive resources. Shell Energy anticipates that bill impacts will be minimized, because new solar generation projects generally have lower net costs than the prices paid in the short-term renewable energy markets. However, Shell Energy is mindful of shifting policy changes that impact a resource's affordability, for example through tariffs, changes in tax policy, or changes in government priorities (e.g., as seen through offshore wind leasing). Shell Energy's Conforming Portfolio, diverse resource mix, and its hedging strategies, minimize customers' exposure to policy volatility and to volatile natural gas and electricity prices and the resulting bill impacts.

Strengthening Diversity, Sustainability, and Resilience of Transmission and Distribution Systems, and Local Communities

Shell Energy does not own, manage, or operate bulk transmission or distribution systems in California, and therefore this criterion under Section 454.52(a)(1)(G) is largely not applicable to Shell Energy's own operations. With respect to Shell Energy's impact on local communities, Shell Energy serves only commercial, industrial, and agricultural direct access customers, and Shell Energy believes that the communities in which those customers are located are indirect beneficiaries of the competitive pricing, resource diversity, and reliability that Shell Energy's Conforming Portfolio is designed to provide. Shell Energy's increasing reliance on a diverse mix of RPS-eligible resources, including in-state and out-of-state wind, solar, geothermal, and battery storage, is intended to strengthen the resilience of the resources serving Shell Energy's customers and, in turn, the communities those customers serve.

Ensuring System and Local Reliability through Resource Diversity

Shell Energy's Conforming Portfolio achieves the Public Utilities Code Section 454.52(a)(1)(E) goal of ensuring system and local reliability, in addition to providing sufficient, predictable resource procurement and development to mitigate any unplanned energy supply shortfalls due to climate change, increased electrification, and other factors. In addition to including all currently contracted capacity and applicable

effective load carrying capacity (ELCC) values for contracted and planned procurement, the RDT has been populated with expected future capacity procurement to meet Shell Energy's anticipated RA capacity procurement obligations.

Shell Energy's Conforming Portfolio meets its system RA capacity procurement requirements, as well as its local capacity procurement requirement for the SDG&E transmission access charge (TAC) area. Local RA capacity procurement in the PG&E and SCE service territories is supposed to be met by the CPE beginning with the 2023 RA compliance year. Some of the planned capacity-only contracts in Shell Energy's Conforming Portfolio will be displaced by local RA procured by the CPE.

As discussed above, Shell Energy's portfolio assumes no CAM allocations or CAM resources beyond what has already been allocated to Shell Energy for the time periods contracted under the CAM resource list and allocations.

Demand-Side Energy Management

Shell Energy's Conforming Portfolio meets the Section 454.52(a)(1)(H) goal of enhancing demand-side energy management. Although Shell Energy does not have a formal demand response (DR) program (e.g., formal rate or tariff options), Shell Energy works with individual commercial, industrial, and agricultural customers to develop price structures with built-in incentives for customers to shift energy usage from hours when wholesale market prices are high to hours when prices are lower. Information on recent hourly price trends is provided on a regular basis to existing and potential direct access customers, to inform customer behavior and reduce costs.

Shell Energy is open to working with customers to participate in a variety of DR and energy efficiency programs, and to develop behind the meter (BTM) energy storage and hybrid solar and storage resiliency projects that will incentivize customer-sited battery storage to help provide backup generation in the event of power outages. These efforts will also shift load away from peak periods through aggregated dispatch functionality. Shell Energy's Conforming Portfolio also incorporates some DR programs through its assigned CAM allocations.

Minimizing Localized Air Pollutants with Emphasis on DACs

Shell Energy's Conforming Portfolio achieves the Section 454.52(a)(1)(I) goal of minimizing localized air pollutants and other GHG emissions with early priority on DACs. Shell Energy's Conforming Portfolio relies on RPS-eligible generation, zero-emission resources, and CAISO system power, and thus have very low localized GHG and air pollution emissions.

Shell Energy plans to reduce its reliance on CAISO system power by increasing its procurement of RPS-eligible wind and solar energy from existing and planned resources under contract, and from future planned and contracted resources. Shell Energy's Conforming Portfolio does not include any energy contracts with gas generators. While Shell Energy retains some combined-cycle and peaker resources for reliability purposes (particularly local reliability) through 2045, none of those resources is located in a DAC area. Shell Energy's increasing reliance on RPS-eligible supplies and zero emission (hydro) supplies

minimizes Shell Energy's reliance on unspecified system power, which may include power from generators within DACs.

Shell Energy's Conforming Portfolio minimizes local air pollutants with particular benefits to DACs by minimizing instances of over procurement and prioritizing resources that meet RPS requirements and not including contracts with fossil-fueled resources, which may be more likely to be situated in DACs. Shell Energy's procurement of fossil-fueled resources only occurs through its procurement of CAISO system power, which should decline over time as Shell Energy procures more of its supply from RPS-eligible resources.

Shell Energy appreciates the importance of working to reduce air pollution in DACs. Shell Energy does not own any generation assets in DACs. Also, a comparison of the zip code for each of the RPS-eligible facilities with which Shell Energy has a long-term RPS contract shows that none of those facilities are located in DACs.

Finally, and as discussed throughout this IRP, Shell Energy prioritizes a diverse portfolio of resources consistent with 454.52(a)(1)(J), but does not model for centralized procurement under AB 1373. Shell Energy coordinates its RPS procurement planning with its RA capacity planning and MTR planning. Shell Energy's RPS, MTR, and RA capacity procurement is intended to provide an integrated and flexible portfolio to meet customer needs at the lowest possible cost.

c. GHG Emissions Results

Applying the CSP calculator to Shell Energy's conforming portfolio shows that Shell Energy's projected procurement meets the GHG emissions target under the 8 MMT scenario. As noted above, to meet the GHG target for each portfolio, Shell Energy overarchingly replaced system resources with wind, solar, hybrid battery resource procurement.

- 8 MMT Conforming Portfolio. Shell Energy's 2045 GHG emissions target under the 8 MMT GHG target is [redacted] MMT. In the CSP calculator, Shell Energy's projected 2045 GHG emissions under the 8 MMT GHG targe [redacted] MMT.

d. Local Air Pollutant Minimization and Disadvantaged Communities

i. Local Air Pollutants

The table below summarizes expected NOx, SO2, and PM2.5 emissions under Shell Energy's Conforming Portfolio. Shell Energy does not contract directly with any fossil-fueled generation to meet its energy needs and has no plans to do so in the forecast period. All gas-fired generation in each portfolio is from CAISO system power. The projected emissions are provided through the CSP calculator.

8 MMT

Emissions Total	Unit	2028	2030	2035	2040	2045
CO_2	*MMt/yr*	[redacted]				
PM2.5	*tonnes/yr*					
SO_2	*tonnes/yr*					
NOx	*tonnes/yr*					

Shell Energy plans to reduce its reliance on CAISO system power by increasing its procurement of RPS eligible wind and solar energy from existing and planned resources under contract, and from future planned and contracted resources. Shell Energy actively seeks out power supply technologies that minimize air pollutants, including fully renewable technologies as well as natural gas/battery hybrid technologies. Shell Energy's increased procurement of RPS-eligible supplies and zero emission resources is changing the resources from which Shell Energy procures electric energy and capacity. Over time, Shell Energy's increased procurement of RPS-eligible energy will reduce reliance on fossil-fueled power plants, including those that are located within DACs.

ii. Focus on Disadvantaged Communities

Public Utilities Code Section 454.52(a)(1)(I) requires LSE portfolios to minimize local air pollutants with an emphasis on disadvantaged communities. Shell Energy must compete with the IOUs, other ESPs, and, in some cases, Community Choice Aggregators (CCAs), to serve direct access-eligible retail commercial, industrial, and agricultural customers. Shell Energy recognizes that all LSEs can have an impact on DACs, even if indirectly. Shell Energy seeks to lessen this impact by reducing its reliance on system power and directly procuring a greater amount of RPS-eligible energy resources, as shown in its Conforming Portfolio and procured resources. The developers with whom Shell Energy partners on its long-term PPAs conduct outreach to impacted DACs and look for opportunities during the design and development of the project to reduce emissions. Shell Energy also supports its customers' efforts to increase reliance on local self-generation by using solar PV and fuel cells and moving away from system power procurement. In addition, direct access customers pay for numerous IOU programs for DACs through non-bypassable charges (NBCs), including through distribution rates and Public Purpose Program (PPP) charges.

Coupled with Shell Energy's efforts to mitigate local air pollutants, Shell Energy is developing strategies that are designed to improve both the air quality and the economic vitality of DACs and low-income demographics of DACs by providing jobs, and by providing behind-the-meter infrastructure where needed for customers located in DACs. Shell Energy supports all efforts undertaken by its commercial, industrial, and agricultural customers to reduce emissions in the communities in which they reside, and the broader communities they serve.

Consistent with the directives in the Ruling, Shell Energy reports that it serves commercial, industrial, and agricultural customers in 150 zip codes designated as DACs under CalEnviroScreen 3.0, 11 zip codes in CalEnviroScreen 4.0, and 334 zip codes in CalEnvironScreen 4.0 Top 25%, as shown in the table below.

DAC Category	**Number of Zip Codes**
CalEnviroScreen 3.0 Disadvantaged Communities	150
CalEnviroScreen 4.0 High Pollution Burden Score, Low Population Count	11
CalEnviroScreen 4.0 Top 25%	334
Total Unique Zip Codes	374

Shell Energy notes that the total of 374 unique zip codes reflects the de-duplicated zip codes captured across all three CalEnviroScreen-based categories above, since a given zip code may satisfy more than one DAC designation criterion. Each of these 374 zip codes corresponds to a census tract identified in CalEPA's 2022 SB 535 Disadvantaged Communities designation, confirming that Shell Energy's zip-code-based methodology is consistent with the census-tract-based DAC designation methodology used by the Commission and other LSEs.

Shell Energy compared the zip codes associated with identified DACs to the service accounts that Shell Energy currently serves. Because industrial areas tend to have higher local pollution than exclusively residential neighborhoods, and because Shell Energy serves only commercial, industrial, and agricultural customers, Shell Energy's customers are more likely to be located in industrial sections of California.

Shell Energy has no specific information on how NOx, SO2, and PM2.5 emissions impact DACs. Because gas generation represents a slice of the entire CAISO system, these emissions should be spread over all gas generation in the system. As noted above, Shell Energy has no plans to contract for energy from specific gas generation in the future. Nevertheless, if Shell Energy is required to procure energy from specific gas-fired generation resources located in a DAC, Shell Energy will consider the impact upon the DAC and potential emission mitigation measures.

Shell Energy's Conforming Portfolio is intended to minimize the use of fossil-based resources and unspecified system power, reducing reliance on gas generators that may have an impact on DACs. Shell Energy actively seeks out power supply technologies that minimize air pollutants, including fully renewable technologies as well as natural gas/battery hybrid technologies. Shell Energy's increased procurement of RPS-eligible supplies and zero emission resources is changing the resources from which Shell Energy procures electric energy and capacity. Over time, Shell Energy's increased procurement of RPS-eligible energy will reduce reliance on fossil-fueled power plants, including those that are located within DACs.

Shell Energy and its affiliates are also involved in transitioning the fuels used in the transportation sector, including in DACs. Transportation is a major contributor of harmful air pollutants in DACs. Transportation electrification and increased reliance on renewable natural gas (RNG) and hydrogen can minimize these emissions. Shell Energy and its affiliates are participating in electric vehicle (EV) charging programs and other innovative transportation programs to reduce emissions in DACs and other areas.

Shell Energy is committed to reducing pollution impacts and encouraging the development, health, and prosperity of DACs. If the Commission were to lift the cap on direct access is lifted, and more customers become eligible to participate in the direct access program, it is possible that Shell Energy could provide retail service to a greater share of retail commercial, industrial, and agricultural customers in a DAC. Shell Energy carefully considers the impact of its resource planning and procurement on DACs. Shell Energy works with individual customers in DACs to promote strategies to reduce energy usage and develop BTM resources, including zero- or low-GHG-emitting resources, to minimize customers' reliance on CAISO system power. In any event, the increased procurement of RPS-eligible supplies is changing the resource mix from which Shell Energy and all LSEs procure electric energy. Over time, the increased procurement of RPS-eligible energy will reduce reliance on fossil-fueled power plants, including those that are located within DACs.

e. Cost and Rate Analysis

Shell Energy prides itself on providing affordable rates for its customers by procuring lower cost resources and employing market strategies (such as hedging) to meet its customers' needs.

However, as the State requires higher levels of investment in clean energy technologies, the cost to consumers will necessarily increase. As an ESP, Shell Energy must be competitive with respect to the costs of products and services it offers its retail customers to maintain or grow its retail sales business. Shell Energy considers a disciplined, cost-driven procurement strategy essential to managing this trend, prioritizing RPS-eligible resources, such as solar, wind, and battery storage, that are broadly consistent with the resource types identified in the Commission's least-cost comparison portfolio developed using the RESOLVE model, while tailoring the timing, term, and volume of that procurement to the realities of Shell Energy's short-term retail contracting model. Shell Energy has not modeled or included in its Conforming Portfolio resources associated with centralized procurement under AB 1373, including offshore wind, long-duration storage, or geothermal resources that the Department of Water Resources may procure on a centralized basis. As noted previously and demonstrated through Shell Energy's MTR compliance filings, Shell Energy has experienced success procuring independently to meet the Commission's specialized procurement obligations.

The key drivers of Shell Energy's projected cost trajectory include: (1) the increasing proportion of RPS-eligible resources required to meet Shell Energy's rising RPS procurement target through 2045 under SB 100; (2) the cost of long-duration storage and other long lead-time resources procured to satisfy Shell Energy's MTR obligations under D.21-06-035 and D.23-02-040; (3) the incremental cost of out-of-state wind resources, including transmission-related costs, as Shell Energy diversifies its portfolio consistent with the discussion in Section (III(k)) above; and (4) CAM and any AB 1373 cost allocations imposed on Shell Energy's portfolio notwithstanding Shell Energy's preference to procure independently, as discussed in Section (II) above. Shell Energy's cost and rate analysis assumes that other LSEs procure in a manner consistent with the Commission's 2025-2026 TPP Portfolio, consistent with the Ruling.

f. System Reliability Analysis

In addition to meeting its RPS procurement target and GHG emissions target (under the Conforming Portfolio), Shell Energy seeks to meet its system reliability requirements through the procurement of system, flexible, and local RA (as required). Shell Energy provides its reliability need (effective MW), total supply (effective MW), and net capacity position (effective MW) in its RDT. In addition, Shell Energy provides the below table showing its capacity by resource type for each study year under its conforming portfolio. Shell Energy's portfolio is built based on the same resources currently under contract.

Reliability Portfolio

Table 1 (Source: RDT - Reliability Planning Tab)

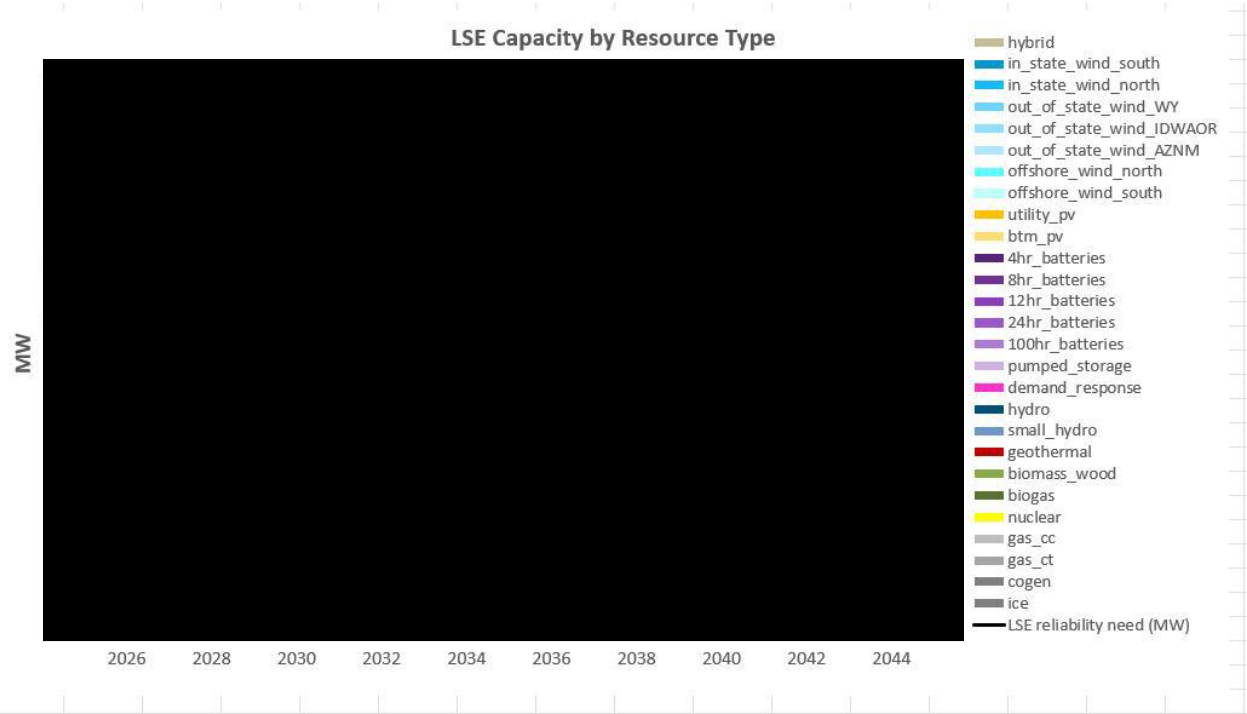
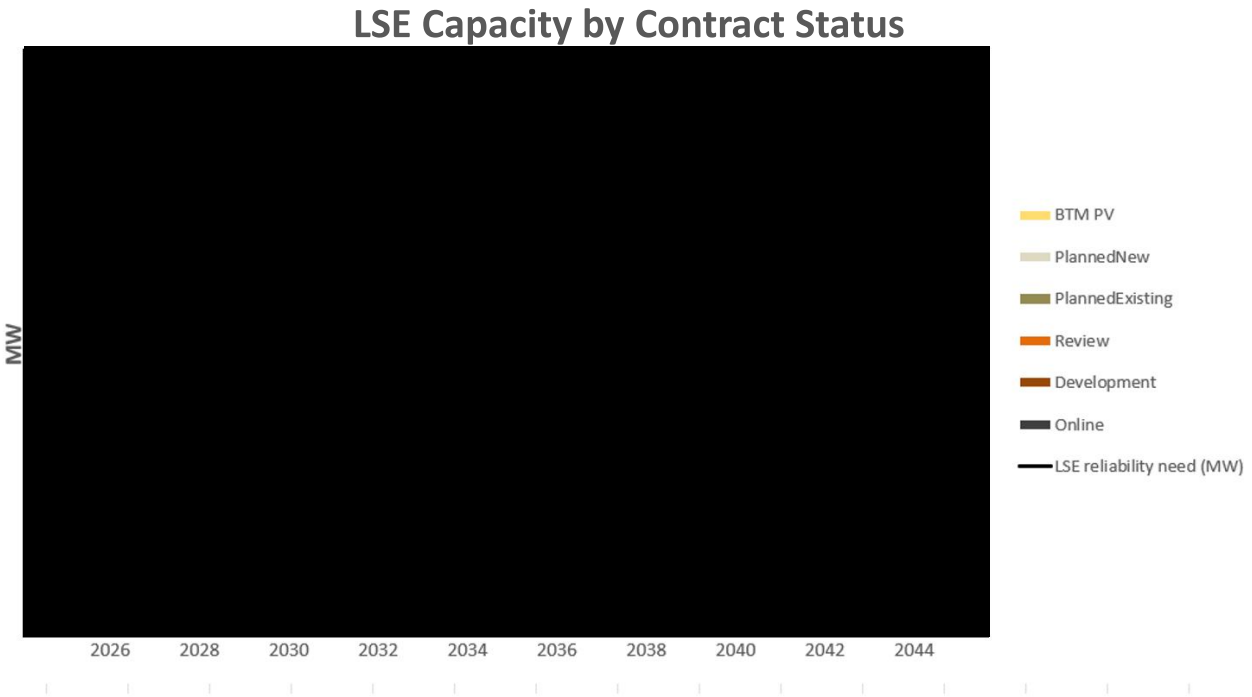


Table 2 - (Source: RDT - Reliability Planning Tab)



As discussed above, Shell Energy typically contracts with a retail customer for a term that is not greater than one to three years. With the possible exception of contracts to meet the three-year forward local RA procurement obligation that remains for the SDG&E service territory, Shell Energy generally procures capacity under contracts that extend for a period no longer than one year. Shell Energy remains committed, however, to meeting all RA procurement obligations imposed by the Commission, in addition to other procurement obligations such as MTR and RPS.

g. Existing Resource Planning

Shell Energy's Preferred Conforming Portfolio relies substantially on existing resources, defined for purposes of this response as resources reflected in the RDT with contract statuses of "online" and "planned existing." As shown in the long-term contract table in Section (III(a)) above, Shell Energy's online resource base consists of a diverse set of executed wind, solar, and battery storage contracts, including its VAMO allocations in the PG&E, SCE, and SDG&E service territories and its CAM allocation from the September 2026 CAM list, together with additional near-term capacity procured to close residual RA gaps that are layered in on a year-by-year basis as "planned existing" resources.

Shell Energy believes the amounts of existing resources reflected in its portfolio are appropriate because they are drawn directly from contracts Shell Energy has already executed to serve its current and anticipated retail load, rather than from a hypothetical or aspirational resource build. Because Shell Energy's retail contracts are generally one to three years in length, Shell Energy sizes its existing resource reliance to track its actual, contracted customer base and its RA, RPS, and MTR compliance obligations, rather than layering in speculative volumes of uncontracted existing supply. Shell Energy accordingly

strived to minimize, to the extent feasible, large volumes of uncontracted existing resources to meet its RPS or GHG targets; the clean-energy layer of the portfolio is met through Shell Energy's existing long-term RPS contracts (including wind, solar, geothermal, and battery), supplemented by planned new procurement as described in Section (III(a)) above.

Shell Energy believes its planned amounts of existing resources will continue to be available in the market because Shell Energy has demonstrated an established track record of successfully contracting for and renewing this resource mix, including through its recent MTR compliance filings and its history of procuring long-duration storage, geothermal, and battery resources. Shell Energy has strong market credibility, and regularly canvasses for the purchase and sale of energy and capacity, including RPS supplies, which supports Shell Energy's ability to maintain and, where needed, supplement its existing resource positions over the planning horizon.

Relative to the 25 MMT by 2035 Preferred Conforming Portfolio that Shell Energy submitted in its 2022 IRP, Shell Energy's existing resource base in this 2026 filing (8 MMT by 2045) reflects substantial continuity, with the majority of Shell Energy's 2022 online contracts remaining in place and under contract, supplemented by additional long-term contracts executed since 2022, such as Sandrini Solar, the SunZia (North) and SunZia (South) wind contracts, Solar Blue, Cape Station, and several new battery storage agreements. Shell Energy's reliance on planned existing (as opposed to online) capacity has grown substantially since 2022, particularly to meet more recent MTR obligations.

h. Hydro Generation Risk Management

The instructions direct each LSE to "[p]rovide a narrative analysis and discussion of the risk that in-state drought poses to the LSE's Preferred Conforming Portfolios, including the controls and strategies the LSE has in place to manage such risk." The instructions direct LSEs to use "quantitative analysis" to "identify whether and how the LSE's Preferred Conforming Portfolios differ[s] from the Reference System Portfolio in terms of the amount of hydro generation proposed, and the level of risk thus incurred."[7] The "risk" of an in-state drought for hydro generation is a matter that is addressed in Shell Energy's procurement contracts. In general, these contracts provide that the seller is required to deliver only as much as can be produced. The amount that can be produced is dependent on weather conditions and other conditions related to hydro generation generally. This is no difference, fundamentally, from addressing, in contracts, the intermittency of wind and solar resources. As an ESP, Shell Energy must manage around the variability of all intermittent resources. Shell Energy's Conforming Portfolio includes approximatel [redacted] MW of net qualifying capacity (NQC) of planned hydro generation, procured on an annual basis, which is substantially lower than the amount of hydro generation reflected in the Commission's Reference System Portfolio on a load-share basis, and therefore presents correspondingly lower in-state drought risk exposure for Shell Energy's portfolio. Otherwise, Shell Energy's supply portfolio (affirmatively procured by Shell Energy—

[7] Narrative Template, Standard LSE Plan, R.25-06-019, Jan. 16, 2026, p. 14 (https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/2024-27-irp-cycle-events-and-materials).

not CAM allocated resources) is limited to CAISO system supplies, energy storage, and RPS-eligible resources, predominantly wind and solar resources.

i. Long-Duration Storage Planning

The instructions direct an LSE to "discuss the approach that the LSE took to planning for long-duration storage that is able to discharge at maximum capacity over at least an eight-hour period from a single resource to meet medium- and long-term needs." The instructions direct an LSE to "discuss the potential it sees, how it arrived at the amounts included in its portfolios, the benefits and risks of including this resource in its portfolio mix, and whether the LSE plans to procure amounts additional to its ordered procurement requirements."

In D.21-06-035 (the Mid-Term Reliability Decision), the Commission ordered LSEs to include long lead time resources in their procurement, including long-duration storage originally required to be online by June 1, 2026. D.23-02-040 subsequently extended this deadline to June 1, 2028, and D.24-02-047 further authorized LSEs to request an extension of the long lead-time resource online date to no later than June 1, 2031, upon a showing of good faith procurement efforts.[8] The Commission acknowledged the substantial cost of such resources. While Shell Energy has demonstrated success in its meeting its procurement obligation of such resources, as shown in Shell Energy's recent MTR compliance filings, Shell Energy nonetheless urges the Commission to consider procurement and resource category flexibility to allow LSEs to include a breadth of options in the planning process for a cleaner energy future.

j. Clean Firm Power Planning

Shell Energy considers all potential resources, including firm power resources, consistent with customer preferences, regulatory requirements, and cost minimization. Shell Energy has experienced success in procuring zero-emitting and long-duration energy resources, such as those procured to replace Diablo Canyon capacity, as demonstrated in Shell Energy's workbooks and recent MTR compliance filings. This reflects substantial procurement progress as compared to Shell Energy's 2022 IRP Plan. As previously stated, however, Shell Energy has no fixed service territory and no guaranteed customer base. Shell Energy's retail customers (all of which are commercial/industrial customers) are located throughout the three IOUs' service territories; these customers can switch to (and away from) Shell Energy, based on the direct access rules and the terms of customers' existing retail sales contracts. Direct access customers generally make a short term commitments to an ESP, generally of no more than one to three years. The uncertainty of its future retail load means that Shell Energy's net load shape and total demand are constantly changing. Shell Energy modifies its resource portfolio and energy purchase decisions to fit its customers' evolving needs and to respond to procurement directives imposed by the State and/or this Commission. Overall, in its resource procurement, Shell Energy focuses on maximizing the value to the customer while minimizing cost.

[8] See Decision (D.) 21-06-035 (June 24, 2021); D.23-02-040 (February 23, 2023); D.24-02-047 (February 15, 2024).

k. Non-CAISO, Including Out-of-State Wind Planning

Shell Energy evaluates all options for satisfying its procurement obligations in the forecast period extending to 2045, including out-of-state wind. Shell Energy's Conforming Portfolio incorporates significant wind procurement and reflects a growing reliance on out-of-state wind resources, including Shell Energy's existing contracted New Mexico wind delivered via the SunZia transmission system, with an aim toward increasing locational diversity across additional out-of-state regions, including Wyoming and the Pacific Northwest, as transmission capacity becomes available. Shell Energy notes that this approach is directionally consistent with its planning in 2022 and the Commission's 2026-2027 TPP base case portfolio, which likewise reflects an increasing shift from in-state to out-of-state wind resources due to changing in-state wind resource potential and permitting constraints. Shell Energy notes, however, that out-of-state wind procurement offers significant benefits by adding resource diversity (i.e., the generation profile is not correlated to existing in-state wind), hedging against in-state capacity constraints, and offering complementary shape to solar and hybrid resources. However, out-of-state wind procurement also carries the risks of underdeveloped transmission infrastructure; new transmission must be approved and constructed on an expeditious timeline to support procurement of out-of-state wind resources.

Shell Energy's existing SunZia contracts benefit from SunZia Transmission, LLC's approximately 552-mile high-voltage direct current transmission system, which interconnects to the CAISO controlled grid at the Pinal Central substation in Arizona and utilizes approximately 2,131 MW of firm transmission entitlements across Arizona to deliver New Mexico wind resources to California. Shell Energy notes that the SunZia transmission system is expected to be of significant benefit in supporting delivery of Shell Energy's contracted New Mexico wind resources into the CAISO balancing authority area. In addition, as noted below, the planned TransWest Express transmission project, expected to enable delivery of Wyoming wind resources into the CAISO system via Nevada, offers Shell Energy a potential avenue to further diversify its out-of-state wind procurement in future IRP cycles, subject to the timely completion of that project and Shell Energy's ability to secure competitively priced transmission and generation capacity on it.

l. Offshore Wind Planning

Shell Energy is not presently planning for offshore wind development in its Conforming Portfolio given recent policy changes, development delays, and a changed outlook from the Commission's least-cost portfolio modeling. This reflects an updated outlook as compared to Shell Energy's 2022 IRP Plan, when offshore wind prospects were stronger. Over the longer term, Shell Energy views offshore wind as a potential future addition to its resource mix, provided that development, transmission, and cost hurdles can be overcome. Shell Energy notes that the Commission's recommended 2026-2027 TPP base case portfolio now assumes that Central Coast (Morro Bay) offshore wind resources will come online between 2032 and 2036, and that North Coast (Humboldt) offshore wind resources, together with their associated transmission, may be delayed until as late as 2041, reflecting continued uncertainty regarding offshore wind cost, transmission, and interconnection timelines statewide. Given Shell Energy's short-term retail contracting model and lack of a dedicated service territory, Shell Energy is not well positioned to

independently contract for offshore wind capacity of the scale currently under development, and would likely need to pursue any future offshore wind participation through a joint procurement vehicle or allocation mechanism, to the extent one becomes available on commercially reasonable terms. For example, offshore wind will require significant transmission and interconnection support that have yet to be fully developed, and it remains to be seen whether procurement of offshore wind will be price competitive with other renewable options. The continued operation of Diablo Canyon will likely create further challenges to obtaining transmission capacity for offshore wind. As previously stated, RPS-eligible solar and wind resources appear to provide the least-cost pathways to achieving the State's RPS and GHG emissions targets.

m. Transmission Planning

Shell Energy's transmission planning considerations are directly informed by its procurement strategy, which, as described in Section (III(j)) above, contemplates an increasing reliance on out-of-state wind resources to complement Shell Energy's existing solar and battery storage positions and to hedge against in-state development, interconnection, and permitting constraints. Consistent with this strategy, Shell Energy views the timely development of interregional transmission capacity connecting Wyoming and other out-of-state wind resource areas to the CAISO grid as a key enabler of its planned procurement approach. Shell Energy notes that this focus on new interregional transmission to unlock out-of-state wind is directionally consistent with the Commission's 2026-2027 TPP base case portfolio, which likewise identifies increased reliance on out-of-state wind, and associated transmission investment, as necessary to meet the State's RPS and GHG emissions targets in a least-cost manner.

Shell Energy does not have resource location information for new generation projects (including any RPS generation project) that is not already under contract and permitted. As noted above and in Shell Energy's recent compliance RPS and MTR filings, Shell Energy works with developers to communicate closely regarding transmission and development needs. At this time, Shell Energy is not aware of specific resource locations have been identified; however, Shell Energy is supportive of upgrading all key points of entry into the State to support renewable capacity growth, including the Southern California Desert, Arizona, and New Mexico resource areas generally. Shell Energy notes, however, with respect to transmission development, that microgrid development and other behind-the-meter solutions present the potential to ease the need for new transmission development (and new IOU distribution investment) to connect GHG-free resources to California customers and communities.

In light of Shell Energy's success with the SunZia project, Shell Energy is also tracking the planned 732-mile TransWest Express project, which is an interregional transmission system that will connect four major balancing authorities in the Western Interconnection to expand grid flexibility and efficiency. The TransWest Express project is designed to deliver up to 3,000 MW of Wyoming wind generation to California and other Desert Southwest markets via an interconnection with the CAISO controlled grid in Nevada, and is expected to reach commercial operation in the coming years. Shell Energy will continue to

monitor its development and track procurement opportunities as part of its ongoing evaluation of out-of-state wind procurement opportunities.[9]

Shell Energy's ability to execute on the out-of-state wind component of its procurement strategy, including any future contracting for Wyoming wind delivered via the TransWest Express project, is contingent upon the timely completion of that project and comparable interregional transmission upgrades. Shell Energy therefore encourages the Commission, CAISO, and other responsible agencies to prioritize the expeditious permitting, approval, and construction of the TransWest Express project and other transmission upgrades identified in the 2026-2027 TPP as necessary to accommodate increased out-of-state wind deliverability, including upgrades supporting the Southern California Desert, Arizona, New Mexico, and Nevada points of interconnection discussed above. Delays in the completion of this transmission infrastructure would directly constrain Shell Energy's ability to diversify its portfolio with cost-competitive, out-of-state wind resources and could increase the cost and difficulty of meeting the State's RPS procurement and GHG emissions targets over the planning horizon.

Information Sources Consulted

In preparing this section, Shell Energy reviewed at a high level the following materials: the CAISO Transmission Capability Estimates White Paper (August 2024); the most recent CAISO Transmission Plan (2024-2025); the busbar mapping results for the Base Case and Long Lead-Time Resource Sensitivity Portfolios for the 2025-2026 TPP; and CAISO Transmission Development Forum materials.

Transmission Upgrades Needed

Shell Energy is not aware of specific transmission upgrade needs for its contracted resources.

Planned Resources with Locations Specified in the RDT

Shell Energy's RDT does not specify planned, uncontracted resources with specific locations for purposes of this filing; Shell Energy's planned future procurement, as described in Section (III(a)) above, has not yet been assigned to specific resources or locations. Shell Energy's RDT preferences do not include resources that require relocation during the Commission's modeling or busbar mapping efforts. Shell Energy's resource procurement locations generally align with its 2022 IRP plan, with the exception of changes for offshore wind procurement and increased out-of-state wind, as discussed herein.

IV. Action Plan

Shell Energy's "Action Plan" consists of Shell Energy executing transmission agreements, PPAs, and contracts for storage with third-party developers and providers to meet the State's clean and reliable

[9] TransWest Express, *Critical Grid Infrastructure to Connect the West*, https://www.transwestexpress.net/, (last visited August 7, 2026).

procurement goals, as reflected in Shell Energy's Conforming Portfolio. In addition to the long-term RPS contracts that Shell Energy has already executed, Shell Energy plans to continue to enter into additional long-term RPS contracts to satisfy the 65 percent long-term contract requirement.[10] As described above, Shell Energy is an active participant in the wholesale market. Shell Energy is fully prepared to meet applicable State procurement targets. In addition to meeting its procurement obligation under D.19-11-016, Shell Energy has demonstrated substantial progress in procuring to meet its MTR and other Commission obligations. As noted above, Shell Energy has found the IRP process to be beneficial because it highlights the potential need for new or alternative resource procurement to meet projected GHG emissions targets and RPS procurement goals. For Shell Energy, the IRP process has shown that to meet the specified GHG emissions targets in 2045 (8 MMT), Shell Energy must procure RPS energy in greater proportions beyond the quantities necessary to meet its RPS procurement target for 2045.

a. Proposed Procurement Activities and Potential Barriers

As previously stated, Shell Energy is an active participant in the wholesale and retail energy market in California. Shell Energy is constantly seeking opportunities to procure and/or invest in GHG-free resources to contribute to its procurement obligations. Shell Energy will negotiate the contracts necessary to meet its RPS procurement and GHG emissions obligations, as well as its RA obligations.

Barriers

Regulatory inefficiency and administrative burden are the primary barriers to Shell Energy's fulfillment of the State's GHG emissions reduction targets. Multiple state agencies have developed burdensome and duplicative reporting and compliance requirements that make it more costly and difficult to provide retail sales service. Shell Energy is prepared to meet its statutory procurement targets and compliance obligations. The cumbersome reporting process adds needlessly, however, to the effort that is required to satisfy an LSE's compliance requirements. The lOUs recover the costs of compliance from their ratepayers. Non-IOU LSEs do not have the luxury of a guaranteed cost pass-through. Non-lOUs must invest in administrative reporting resources without the assurance that these costs can be recovered from customers. Lack of agency coordination respecting LSE reporting requirements adds to the administrative burden imposed on all LSEs, but especially those LSEs that do not have Commission-ensured cost recovery. In addition, delays in infrastructure development and bringing resources online—whether delays to new transmission line approval and construction, or backlogged interconnection queues—continue to hinder the industry.

Resources to meet IRP mandated procurement requirements, including D.21-06-035 and D.23-02-040: Shell Energy has completed contracting to meet its procurement obligations set forth in D.21-06-035 and D.23-02-040 (as modified by D.24-02-047 and D.24-09-006), including the procurement of zero-emitting capacity and long lead-time resources. Accordingly, Shell Energy remains on track to meet its procurement obligations without the need for backstop procurement. Shell Energy continues to diligently evaluate resource procurement opportunities to remain proactive in the unlikely event that any of its contracts fall

[10] *See* Assigned Commissioner and Assigned Administrative Law Judge's Ruling Identifying issues and Schedule of Review for 2026 Renewables Portfolio Standard Procurement Plans, R.24-01-017, March 27, 2026.

through or its target resources appear to be imminently delayed beyond the three-year grace period.

i. Resources to meet IRP mandated procurement requirements, including D.21-06-035 and D.23-02-040

Shell Energy will meet, if not exceed, its remaining MTR and LLT procurement obligations under D.21-06-035 and D.23-02-0240, as shown in the accompanying RDT and Shell Energy's most recent IRP compliance filings. Shell Energy's procurement of geothermal and hybrid, long-duration battery resources and key inputs to this strong position. Despite this success, Shell Energy continues to canvas the market in the event of any delays or unanticipated barriers, and actively manages its resource portfolio.

ii. Plans for resources that are currently non-candidate in CPUC's IRPs not described above

N/A.

iii. Other renewable and/or zero carbon resources not described above

N/A.

iv. Other energy storage not described above

N/A.

v. Other demand response not described above

N/A.

vi. Other energy efficiency not described above

N/A.

vii. Other distributed generation not described above

N/A.

viii. Transportation electrification, including any investments that correspond to different levels than what is included in Integrated Energy Policy Report (IEPR)

As with data center load, Shell Energy will be better positioned to address transportation electrification load if the DA cap is lifted.

ix. Building electrification, including any investments that correspond to different levels than what is included in Integrated Energy Policy Report (IEPR)

Please see Section (III(g)) for a discussion of how Shell Energy will approach a highly electrified future, which includes consideration of the State's building electrification policies and goals.

x. Potential Centralized Procurement, pursuant to AB-1373

For reasons discussed above regarding the limitations of centralized procurement and Shell Energy's procurement progress with regard to long lead time resources, Shell Energy does not model for

centralized procurement under AB 1373 for purposes of this IRP Plan. As the Commission Ruling and Energy Division staff's directions recognize, such modeling is optional and, in Shell's view, speculative at this point. Shell Energy does not support centralized procurement, and therefore does not model with this assumption for purposes of IRP planning (or otherwise).

xi. Other

N/A.

b. Disadvantaged Communities (DACs)

As previously stated, Shell Energy does not have a dedicated service territory and its ability to serve customers in DACs is limited by the existing cap on direct access. If and when the Commission lifts this cap, Shell Energy is committed to developing procurement policies that would minimize negative impacts on DACs from the electricity sector. For example, Shell Energy seeks to reduce its reliance on system power and directly procure a greater amount of RPS-eligible energy resources. Shell Energy supports its customers' efforts to increase reliance on local self-generation by using solar PV and fuel cells and moving away from system power procurement.

Coupled with Shell Energy's efforts to mitigate local air pollutants, Shell Energy is developing strategies that are designed to improve both the air quality and the economic vitality of DACs and low-income demographics of DACs by providing jobs, and by providing BTM infrastructure where needed for customers located in DACs. Shell Energy supports all efforts undertaken by its commercial, industrial, and agricultural customers to reduce emissions in the communities in which they reside, and the broader communities they serve.

Shell Energy's planned procurement is intended to minimize the use of fossil-based resources and Unspecified system power, reducing reliance on gas generators that may have an impact on DACs. Shell Energy actively seeks out power supply technologies that minimize air pollutants, including fully renewable technologies as well as natural gas/battery hybrid technologies. Shell Energy's increased procurement of RPS-eligible supplies and zero emission resources is changing the resources from which Shell Energy procures electric energy and capacity. Over time, Shell Energy's increased procurement of RPS-eligible energy will reduce reliance on fossil-fueled power plants, including those that are located within DACs.

Shell Energy and its affiliates are also involved in transitioning the fuels used in the transportation sector, including in DACs. Transportation is a major contributor of harmful air pollutants in DACs. Transportation electrification and increased reliance on RNG and hydrogen can minimize these emissions. Shell Energy and its affiliates are participating in EV charging programs and other innovative transportation programs to reduce emissions in DACs and other areas.

If and when the cap on direct access is lifted, and more customers become eligible to participate in the direct access program, it is possible that Shell Energy could provide retail service to a greater share of retail commercial, industrial, and agricultural customers in a DAC. Shell Energy carefully considers the impact of its resource planning and procurement on DACs. Shell Energy works with individual customers in DACs to promote strategies to reduce energy usage and develop BTM resources, including zero- or low-GHG-emitting resources, to minimize customers' reliance on CAISO system power. In any event, the increased procurement of RPS-eligible supplies is changing the resource mix from which Shell Energy and

all LSEs procure electric energy. Over time, the increased procurement of RPS-eligible energy will reduce reliance on fossil-fueled power plants, including those that are located within DACs.

c. LSE's Tribal Customers

Shell Energy has demonstrated success in engaging with Tribal customers, and has served some Tribal customers since at least 2010. Shell Energy has engaged three Tribal customers across the service territories of San Diego Gas & Electric Company and Pacific Gas and Electric Company. Shell Energy is focused on supporting the Tribes' energy needs and business objectives through reliable electric service, transparent communication, and access to competitive retail energy products. Customer communications may include updates on California energy market conditions, resource adequacy requirements, renewable energy compliance programs, and other developments that may affect electricity costs and procurement decisions.

d. Procurement Products

Shell Energy procures a range of products, in addition to those used to construct its preferred conforming portfolio, including RA capacity attributes (system, local, flexible) and Renewable Energy Credit (REC) attributes. Further, Shell Energy may engage in fixed-price energy transactions and other commercially reasonable activities to hedge costs as a risk management tool designed to reduce exposure to wholesale market volatility and provide more cost certainty.

e. Commission Direction of Actions

As stated above, LSEs face multiple procurement barriers in the current regulatory and economic environment. Shell Energy appreciates the Commission's interest in working towards a more comprehensive procurement framework. While Shell Energy supports these efforts, we also encourage the Commission to consider instances where it can streamline, or reduce, the regulatory burden on LSEs. For example, LSEs are subject to myriad compliance and reporting requirements across state agencies and even across different rulemaking proceedings within the Commission. Improved coordination and communication across staff could eliminate duplicative reporting obligations. The agencies with responsibility for implementing the State's energy and climate policies should coordinate to allow each LSE to complete and submit one common template on an annual basis that provides all the information necessary to meet the requirements of the IRP, RPS compliance report, RPS procurement plan, multiple RA reports, and power source disclosure reports. For example, much of the information provided in the IRP templates is duplicative of information provided in the RPS procurement plan, which Shell Energy submitted approximately one month prior. There is no justification for the Commission to require LSEs to provide this same information, formatted differently, in two different proceedings. The added burden on LSEs is substantial and cannot be over-emphasized. Furthermore, in light of the obvious differences between the lOUs and non-IOU LSEs, Shell Energy recommends that the template for each LSE group should be tailored to the regulatory model associated with that LSE group.

Shell Energy appreciates that the Commission is undertaking a potential alignment of these proceedings in the proposed RCPPP, however, Shell Energy notes that the draft under consideration does not discuss

pathways to streamline the regulatory reporting processes. Shell Energy encourages the Commission to ensure regulatory efficiencies are in place to align some the overlapping and duplicative requests or internal protocols and data tracking measures to better share LSE information across various proceedings and Commission staff. Shell Energy supports the proposal to allow incremental resources to count towards their Mid-Term Reliability procurement obligations, adopting a grace period for MTR compliance deadlines in light of the ongoing procurement challenges discussed above that are outside of LSEs' and developers' direct control, and allowing import resources that are pseudo-tied or dynamically scheduled into the CAISO to count towards an LSE's compliance obligations regardless of the maximum import capability allocations.

V. Lessons Learned

Through its participation in and review of this IRP process, Shell Energy is confident that it is well-positioned to satisfy all existing state procurement requirements (RPS, RA, MTR, and energy storage procurement), while also recognizing the work that remains to procure additional RPS-eligible energy — beyond the quantities necessary to meet its existing RPS requirements— to comply with an 8 MMT conforming portfolio. However, the delayed resolution and implementation of the RCPPP adds to the uncertainty and risk that interferes with the procurement process. In the meantime, while the Commission develops and implements a standing procurement program through the RCPPP, LSEs are less certain of the resources they must procure in the long-term. As such, IRP planning and procurement will evolve. For example, resource mix may change because the RCPPP proposal considers binding procurement requirements to capacity, reliability, and potentially a clean energy standard. Though the RCPPP will establish a much more structured procurement obligation, the process of creating the new procurement system creates uncertainty because the RCPPP will fundamentally change how changes to the IRP translate into mandatory procurement obligations. Shell Energy hopes to see continued improvement in supply chain and other external impediments to project development over the relevant study period. Shell Energy's IRP analysis continues to support renewable resource procurement—in addition to battery-hybrid projects—to reflect the best pathway to achieving both the State's and Shell Energy's (on behalf of its customers) goals for least-cost procurement of clean, reliable resources. To support an increasingly electrified load, and increasing reliance on renewable, intermittent, resources, Shell Energy encourages the Commission and other state agencies to support transmission upgrades and reduce import constraints.

APPENDIX A

CONFIDENTIAL WORKSHEETS OF SHELL ENERGY
TRANSMITTED VIA KITEWORKS

- 8 MMT RDT [CONFIDENTIAL]
- 8 MMT CSP CALCULATOR [CONFIDENTIAL]