

2018-2019 Demand Response Auction Mechanism (“DRAM 3”)



Pre-Bid (Bidders) Web Conference

March 21, 2017

Presentation will begin at 10:00 a.m. (PDT)

Safety Moment

Evan Bierman
San Diego Gas & Electric
Origination & Portfolio Design

Agenda

- Introduction & Overview: 10:00 am – 10:20 am
 - Evan Bierman, SDG&E
- Bid Valuation and Selection: 10:20 am – 11:10 am
 - Neda Oreizy, PG&E
- DRAM Request for Offer (RFO) Bid Materials: 11:10 am – 11:30 am
 - Anna Chung, SCE
- Walk-Through of IOU Offer Forms: 11:30 am – 11:55 am
 - Neda Oreizy, Anna Chung, Evan Bierman
- Closing Remarks: 11:55 am – Noon
 - Evan Bierman

Introduction & Overview

Conference Scope/Logistics

Scope: Focus on DRAM 3 Pilot Request For Offers (RFO)

Out of Scope: We will not discuss other DR programs or other utility procurement programs

Housekeeping Items:

- Please remain on mute
- Do not put place the call on hold. If you need to leave, please drop off the call
- This conference is being moderated by an operator. There will be opportunities for Q&A throughout this presentation. Please follow the operator's instructions to ask a question.

Legal Disclaimers: Anti-Trust Guidelines & Document Conflict

Anti-Trust Guidelines

All participants in today's meeting shall comply with anti-trust guidelines. These guidelines direct meeting participants to avoid discussions of topics or behavior that would result in anti-competitive behavior, including restraint of trade and conspiracy to create unfair or deceptive business practices or discrimination, allocation of production, imposition of boycotts and exclusive dealing arrangements.

Document Conflict

This presentation is intended to be a summary level discussion of the information and requirements established in the DRAM Materials. To the extent that there are any inconsistencies between the information provided in this presentation and the requirements in the RFO Materials, the RFO Materials shall govern.

General Q&A Guidance

- We have posted (and will continue to post) questions and answers on the DRAM RFO websites:
 - [PG&E: http://www.pge.com/dram](http://www.pge.com/dram)
 - [SCE: http://www.on.sce.com/DRAM](http://www.on.sce.com/DRAM)
 - [SDG&E: http://www.sdge.com/2018DRAMRFO](http://www.sdge.com/2018DRAMRFO)
- Q&A's that apply to all three IOUs are included on all three sites, but IOU-specific questions are only on the associated IOU's site.
- Questions and answers from today's conference will be documented on the sites.
- Questions can be submitted via email at any time until the question submittal deadline as follows:
 - DRAMRFO@pge.com
 - DRAMRFO@sce.com
 - DRAMRFO@semprautilities.comand **MUST** cc the Independent Evaluator (IE):
 - waynejoliver@aol.com
- Questions received (and answers) will be posted to the website periodically
- **Deadline to submit questions: Monday, April 3, 2017, and we will post the final set of answers no later than April 6, 2017 (offers are due on April 10, 2017).**

Overview

Evan Bierman
San Diego Gas & Electric
Origination & Portfolio Design

What is the DRAM RFO Pilot?

Originated as a California Public Utility Commission (CPUC) staff proposal in the demand response (DR) OIR (R.13-09-011); changed to a pilot by D.14-12-024.

Envisioned as new supply-side DR approach for third-parties

- Provides a capacity, also referred to as **resource adequacy (RA)**, payment for DR aggregators
- DR aggregators participate directly in the California Independent Operator System (CAISO) markets with customers in the IOU service area
- An alternative to bilateral Aggregator Managed Portfolio (AMP) contracts and other Investor Owned Utility (IOU) DR offerings
- A vehicle to encourage new participants in the DR market
- Standard contract for RA; no bilateral negotiations of the contract
- Capacity may vary by month for delivery during one or more months from Jan 2018 to Dec 2019
- Budget: \$12 million each for SCE and PG&E, \$3 million for SDG&E
- At least 20 percent of the total procured DRAM bids by each IOU must be residential (in MW terms)

What is **NEW** in the DRAM 3 Pilot for 2018-2019?

Items	2018 DRAM	2017 DRAM
RA (Capacity) Products	System, Local and Flexible Capacity Categories 1, 2, 3	System, Local and Flexible Capacity Categories (1), 2 & 3
Showing (Operating) Months	Two years (2018-2019); January – December	January – December 2017
Budget	\$12 million each for PG&E and SCE; \$3 million for SDG&E	\$6 million each for PG&E and SCE; \$1.5 million for SDG&E
Rule 24/32 Registration Cap	None - Pending funding approvals of Tier 1 filing (SCE) and Tier 3 (PG&E, SDG&E)	SCE – 42,000; PG&E 40,000; SDG&E 30,000
Demonstrated Capacity (Agreement Articles 1.6, 3.3)	Order of fulfillment for each Showing Month: <ol style="list-style-type: none"> 1. Results of actual Full Dispatch; if none, then 2. Results of Seller capacity test before end of month (excludes August). 3. If Showing Month is not subject to mandatory capacity testing, then average monthly bid amount can be used. 	Seller choice of: Average monthly bid during Showing Month hours in compliance with CAISO MOO, maximum hourly load reduction, Seller capacity test, or maximum hourly load reduction during actual Dispatch.
Prohibited Resources (Agreement Article 7)	Attestations, default adjustment value added to BUGS prohibition Final provisions subject to change, pending CPUC final resolution	BUGS prohibition
Ability to set Capacity to zero based on RA rule Changes	Yes	Not applicable

This is not meant to be an exhaustive list of changes. Bidders are encouraged to do their own review of the DRAM 3 Purchase Agreement.

Capacity Product Definitions

System Capacity: IOU-wide, can be bid into market as PDR or RDRR resource. Must bid per CAISO must-offer obligation in day ahead and/or real-time market.

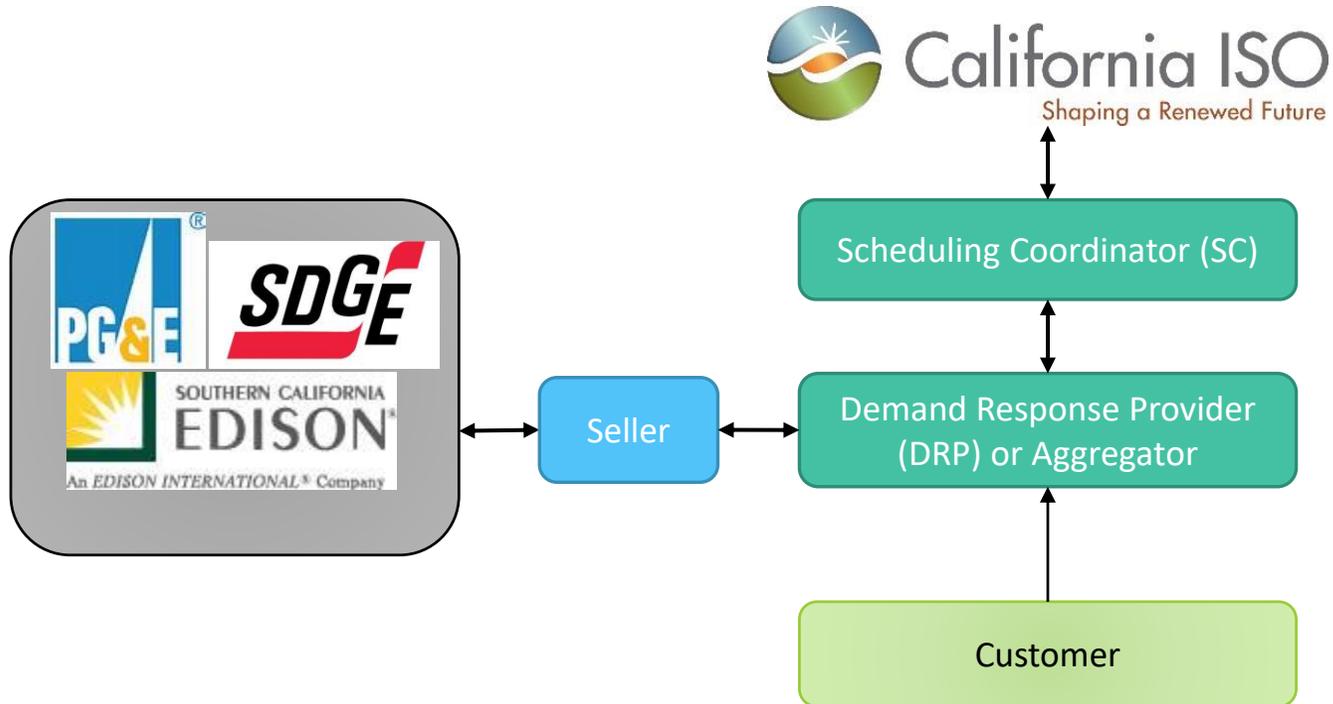
Local Capacity: Must be located in Local Capacity Areas (LCAs). For SCE, covers the LA Basin and Big Creek/Ventura Substations; for PGE, Local Capacity Product must be within one of PG&E's seven LCAs listed in Appendix A - Offer Form, and Exhibit F of the Purchase Agreement; SDG&E, entire service area. Same must-offer obligation (MOO) as System.

Flexible Capacity (Category 1, 2 or 3): Bids in to Day Ahead and Real Time Energy market, able to ramp and sustain energy output for a minimum of three hours, must be a PDR resource. Addresses variability and unpredictability created by intermittent resources. Must bid per CAISO must-offer obligation for flexible resources.

What is the DRAM RFO Pilot? (Cont'd)

- To qualify as Residential bid, DRAM resource must be composed of at least 90% residential customers and no more than 10% small commercial customers (based on registrations)
- General bid can have any type of customer included
- Customers can use onsite renewable generation or energy storage to provide load reductions
- Customers can have back-up fossil generation, but cannot use it for DRAM load reductions. Seller is responsible for enforcing this requirement (see Article 7 of Pro Forma). Please note that this language is subject to change pursuant to Commission resolution on prohibited resources.
- If Seller offers a Proxy Demand Resource (PDR) product, it must deliver a PDR product; if Seller offers a Reliability Demand Response Resource (RDRR) product, it may substitute it with a PDR product.

Direct Participation and Resource Adequacy Illustration



Third Party Direct Participation

- Seller aggregates customers for DRAM Resource
- Seller participates (bids) directly in the CAISO market through SC
- Dispatches and settlements are between the CAISO and Seller's SC
- All earnings in the CAISO markets go to Seller and Seller's customers; no IOU involvement

RA

- Seller provides Supply Plan to IOU roughly 60 days prior to month
- Seller provides demonstrated capacity through SC to IOU at end of the month

Roles & Responsibilities

CAISO

- Receives product registration from DRP
- Receives bidding and scheduling activity from SC
- Operates market and dispatches resources
- Determines performance and settlement in conjunction with SC

Scheduling Coordinator (SC)

- Can act as a DRP
- To bid PDR or RDRR into the CAISO market, Sellers will be required to use a CAISO-qualified SC to conduct market and business transactions with the CAISO
 - Facilitates DRP scheduling and bidding activity with CAISO
 - Facilitates settlement and calculation of baselines and performance
 - The SC will handle business relationships and transactions with CAISO
- Provides information should there be an IOU audit of demonstrated capacity
- SC Request for Information (RFI) information is posted at <http://www.pge.com/scrfi> and on IOU DRAM RFO websites.

Roles & Responsibilities (Cont'd)

Wholesale Demand Response Provider (DRP) or Aggregator

- Submits resource registration to CAISO consisting of unique customers
- Submits Customer Information Service Request/Demand Response Provider (CISR-DRP) for each service account to authorize IOU to release customer data
- Meets CAISO's minimum per PDR or RDRR

Roles & Responsibilities (Cont'd)

Seller

- Abides by all provisions of the DRAM Purchase Agreement
- Provides required security posting to Buyer per contract
- Submits Supply Plan roughly 60 days prior to delivery month
- Works with SC to provide demonstrated capacity
- Works with SC if there is an audit of demonstrated capacity
- Provides required registration data for Residential DRAM resource
- Familiar with CAISO Market Rules (Demand Response Registration System and Resource Adequacy), CPUC RA Rules, Rule 24 Tariff
- Works with customers or Aggregators to provide load reduction
- Works with SC to bid DRAM resources via appropriate CAISO product and market and comply with the CAISO Must Offer Obligation
- Receives meter data for settlement from IOU (per authorization provided in CISR-DRP)
- Settles with customers and SC and retains earnings from market participation

Roles & Responsibilities (Cont'd)

Buyer (IOU) abides by the provisions of the DRAM Purchase Agreement

- Claims RA credit for DR resource provided by Seller
- Not involved in the CAISO market settlements
- Pays Seller for DR capacity after delivery month upon receipt of demonstrated capacity by Seller
- Right to audit capacity delivered under “demonstrated capacity” contract provisions
- Receives product registration from Seller if it is bidding a DRAM Residential resource

Customer Data Provision by IOU (firewalled from Buyer)

- Validates customer eligibility upon receipt of CISR-DRP from Aggregator/DRP
- Provides meter data to Aggregator/DRP per conditions of CISR-DRP and Rule 24/32

Independent Evaluator (IE)

- Merrimack Energy Group is the IE for this solicitation
 - Wayne Oliver – lead and key contact -
- Role of the IE is to ensure reasonable and uniform treatment of all potential counterparties by :
 - Monitoring IOU solicitation and discussion processes
 - Monitoring IOU valuation methodologies and selection processes
 - Reviewing bids to assure competitive process and no market collusion or market manipulation by some Sellers
 - Reporting to the Commission on the auction process
- The IE is privy to all offers, invited to participate in all discussions, reviews all bids, reviews bid scoring and selection, and must be copied on all correspondence between each IOU and their bidders

Bidders MUST cc waynejoliver@aol.com on all emails and correspondences with the IOUs

Questions



Valuation and Selection

Neda Oreizy
Pacific Gas & Electric
Demand Response Policy

Supplier Diversity

The IOUs encourage Women, Minority, Disabled Veteran, Lesbian, Gay, Bisexual and Transgender Business Enterprises (“Diverse Business Enterprises” or “DBE”s) to participate in the DRAM RFO

General Order (GO) 156

- Adopted by the CPUC in 1986, with electric procurement added in 2012
- Promote greater competition among utility suppliers by expanding the available supplier base and to encourage greater economic opportunity for Diverse Business Enterprises historically left out of utility procurement.
- Sets the rules governing the development of programs to increase participation of DBEs in procurement of contracts from utilities as required by CPUC Code

For additional information, please visit or contact:

- PG&E: www.pge.com/supplierdiversity.
- SCE: www.sce.com/SD; guidance is also available at www.sce.com/EnergyProcurement under the heading “Help & Guidance”
- SDG&E: <http://www.sempra.com/about/supplier-diversity> or Erica Beale, Program Manager, Supplier Diversity & Supplier Relations SDG&E, EBeale@semprautilities.com, 858-636-5538

Valuation and Selection Processes

Bids MUST comply with all the requirements of the RFO

- Any bids with conformance issues will be discussed with the IE
- The goal is to ensure all bidders are treated in a fair manner
- There will be a “cure”
 - During this period bidders will only be allowed to change fields that the IOU has stated require revision(s). No changes will be allowed to any other fields.
 - Bidders will not be allowed to correct pricing level unless specifically requested by the IOU during the cure period. It is the responsibility and duty of the Seller to accept full risk for pricing and developing their project.
 - Failure to respond to inquiries by the IOUs regarding incomplete or incorrect information could result in disqualification from the RFO.

The IE will review and validate methods of processing the bid information and evaluating offers to ensure that the evaluation is done fairly with no preferential treatment to any bidder.

Affiliate bids, if any, will be closely examined during the evaluation offer process to ensure the offer is evaluated in the same manner as the other offers.

All communications and negotiations will be closely monitored and assessed by the IE to ensure no preferential terms and conditions are included in the offer.

Valuation and Selection Processes (Cont'd)

The California Public Utilities Commission has prescribed a different valuation and selection process than the normal IOU RFO process of “Least-Cost Best-Fit.” The DRAM valuation is entirely quantitative with unique requirements for taking Residential bids. The following are the factors that will be considered:

- Residential or Non-residential bid
- System, Local, or Flex Capacity
- Capacity price (\$ per kW-month)
- Monthly weighting of the value of capacity
- Debt equivalence (SCE only)
- Qualitative Scoring Matrix (PG&E and SDG&E; see next slide)

The IOUs will select the bids with the best value, up to their budget. Bids may be rejected if they are “clear outliers.”

The IOUs will also consider the available MW room under the CPUC approved 2% reliability cap, if any, when selecting RDRR bids.

- RDRR bids above the reliability cap have no RA value under current CPUC rules

PG&E Reliability Cap Valuation and Selection Process

PG&E will only be able to procure a limited amount of RDRR in this RFO, because PG&E has met its Reliability DR cap pursuant to D. 10-06-034. PG&E estimates up to 30 MW of available room under this Reliability DR cap for 2018 and 2019. This headroom is subject to change. The Commission has instructed PG&E to give preference to customers that are part of an RDRR Product in the 2017 DRAM. PG&E reserves the right to add a rider to the contract and/or a letter of agreement, when and if applicable, based on implementation of this policy.

Energy Division's First Come, First Serve Principles – Interim Solution for 2018-2019 DRAM Valuation (in order of priority):

- Category 1: PG&E BIP customers (Direct Enrolled or Aggregator Customers) *
 - Category 2: PG&E 2017 DRAM customers in an RDRR contract *
 - Category 3: PG&E customers (Direct Enrolled or Aggregator Customers) currently on the BIP waitlist *
 - Category 4: Category 2 customers increasing their DR MW *
 - Category 5: PG&E 2018-2019 DRAM customers not currently participating in BIP or a 2017 DRAM RDRR contract
- * Category designations will be defined by participation as of the beginning of the bid valuation period)

Bidders are instructed to self-identify which category of customers they are bidding with for RDRR offers, using the offer name field of the offer form. PG&E recommends splitting bids accordingly. Bidders submitting Category 2 and 4 bids will be required to submit additional materials directly to the Rule 24 team secure ESFT system, outside of Power Advocate, in order to maintain the firewall between PG&E's DRAM team and the Rule 24 team: list of customer identifiers (UUID, SAID, CAISO Location ID), associated 2017 and 2018/2019 August MW load reduction for each ID (based on which years bids are provided for), and CAISO Resource ID and Registration ID. PG&E's has the right to verify bids labeled with Category 2 and Category 4 customers.

Qualitative Scoring Matrix (SDG&E, PG&E only)

Criteria	Answer	Score		Weight			Weighted Score (Score x Weight)
		Yes	No	SDG&E	SCE	PG&E	
Will your DRAM Resource require any permits, interconnection agreements, environmental studies, or additional land rights prior to operation?	Yes/No	1	0	3%	0%	0%	
Is there any ongoing investigation or an investigation that has occurred within the last five years with respect to any alleged violation of any rule, regulation, or law associated with any commodity, securities, environmental, or financial market regarding any DR services you were/are providing?	Yes/No	1	0	3%	0%	0%	
Small Business							
Are you a certified small business?*	Yes/No	1	0	0%	0%	-1%	
*For information about Small Business standards, please refer to one of the following sites: (1) California Department of General Services (2) Small Business Administration							
Project Diversity							
Are you going to use Enabling Technology with at least 90% of the customers comprising your PDR customers?	Yes/No	0	1	3%	0%	0%	
Do you expect a majority of your resource/customers to emit GHG emissions (batteries charging from the grid are not 100% efficient and so they need more charging energy then discharged energy thereby causing GHG emissions as opposed to digital thermostats that do not materially cause GHG emissions)?	Yes/No	1	0	3%	0%	0%	

Qualitative Scoring Matrix (SDG&E, PG&E only – Cont'd)

	Answer	Score		Weight			Weighted Score
		Yes	No	SDG&E	SCE	PG&E	(Score x Weight)
Have you willfully terminated or defaulted on a past DRAM PA, or submitted offers that demonstrated bidding behavior providing clear evidence of market manipulation or collusion? Apply this criterion to specific 2018-2019 DRAM bidders only if Energy Division and the Independent Evaluator agree.”	Yes/No	1	0	30%	0%	15%	
Have you not signed a DRAM PA when extended a shortlist offer, or delivered Supply Plans to the IOUs for DRAM totaling, in aggregate, less than 50% of the contracted capacity for <u>all</u> months in 2017 that the IOUs have received Supply Plans for, at the time of offer submittal? If you don't have a 2017 DRAM PA, have you delivered Supply Plans to the IOUs for DRAM totaling, in aggregate, less than 50% of the contracted capacity for <u>both</u> August and September 2016?	Yes/No	1	0	3%	0%	5%	

Procurement Review Group (PRG) and IE Report

The PRG includes the CPUC Energy Division, ORA, TURN, and other interveners.

The PRG oversees the procurement process of all three IOUs.

During the course of this RFO, the IE will be reporting on the progress and any issues on this RFO to the PRG.

Public and confidential IE reports will follow the required IE template guidelines.

These reports are filed at the CPUC with the requests for contracts approval from the CPUC.

Questions



DRAM RFO Materials

Anna Chung
Southern California Edison
Large Demand Response Programs

DRAM RFO Schedule

Event	Day	Date
IOUs launch the 2018 DRAM RFO	Friday	3/10/17
2018 DRAM RFO Bidders' Web Conference	Tuesday	3/21/17
Deadline to submit any questions to the IOUs	Monday	4/3/17
Answers to all questions posted on the IOUs' DRAM websites	Thursday	4/6/17
Deadline for RFO bid submissions	Monday	4/10/17
IOUs notify non-conforming Bidders (request to "cure")	Monday	4/17/17
Bidder "cure" period concludes	Monday	4/24/17
Notice to Bidders of selection	Wednesday	5/24/17
Deadline for signed contracts from Sellers	Monday	6/5/17
IOUs file Tier 1 Advice Letter for CPUC contract approval	Friday	6/30/17
CPUC contract approval	Friday	8/4/17

Keys to a Successful Offer

- Read, understand, and follow instructions in each of the IOU's RFO Protocols
- Know deadlines and what is expected at each deadline
- Review all documents on each of the IOUs' DRAM RFO websites, as referenced in Slide 5
- Refer to the Frequently Asked Questions, which will be posted on each of the IOU's DRAM websites
- If you have any questions after fully reviewing the DRAM websites, email all three DRAM RFO teams at:
 - DRAMRFO@pge.com
 - DRAMRFO@sce.com
 - DRAMRFO@semprautilities.com

When emailing any of the DRAM RFO teams, also CC Wayne Oliver, the Independent Evaluator, at waynejoliver@aol.com

Purchase Agreement Highlights

Article 1 – Transaction

- Type of Products
 - Residential/Non-Residential
 - System, Local, Flexible Capacity
 - Demonstrated Capacity (diagram)

Article 3 – Seller Obligations

- Supply Plan (example in Exhibit D) – due 60 days prior to the delivery month
- RA Obligations
- Mandatory testing (diagram)

Article 4 – Payment and Billing

- Invoicing (include Demonstrated Capacity in a form similar to Exhibits C1, C2)

Article 5 – Credit and Collateral

- Due within 10 days after contract execution

Article 7 – Representations, Warranties and Covenant

- Prohibited Resources

Article 13.1 – Confidentiality

Exhibit C1 – Notice of Demonstrated Capacity (QC)

Exhibit C2 – Notice of Demonstrated Capacity (EFC)

Exhibit D – Notice of Showing Month Supply Plan

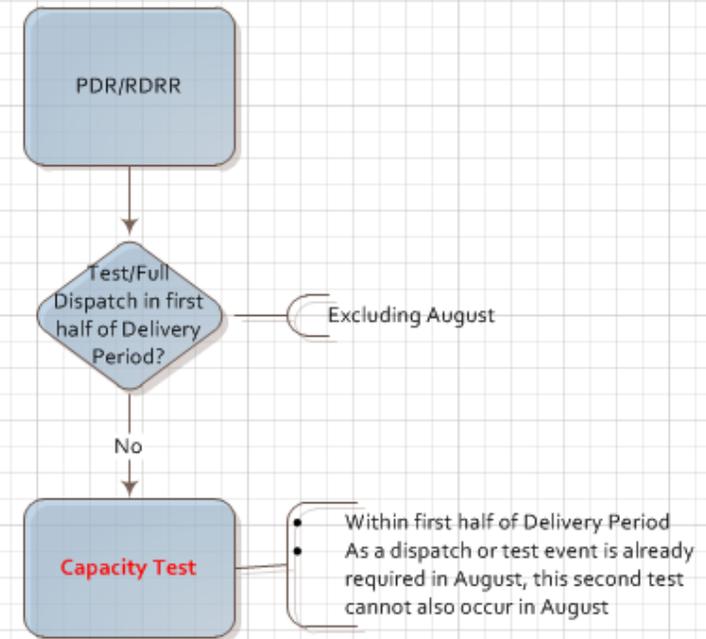
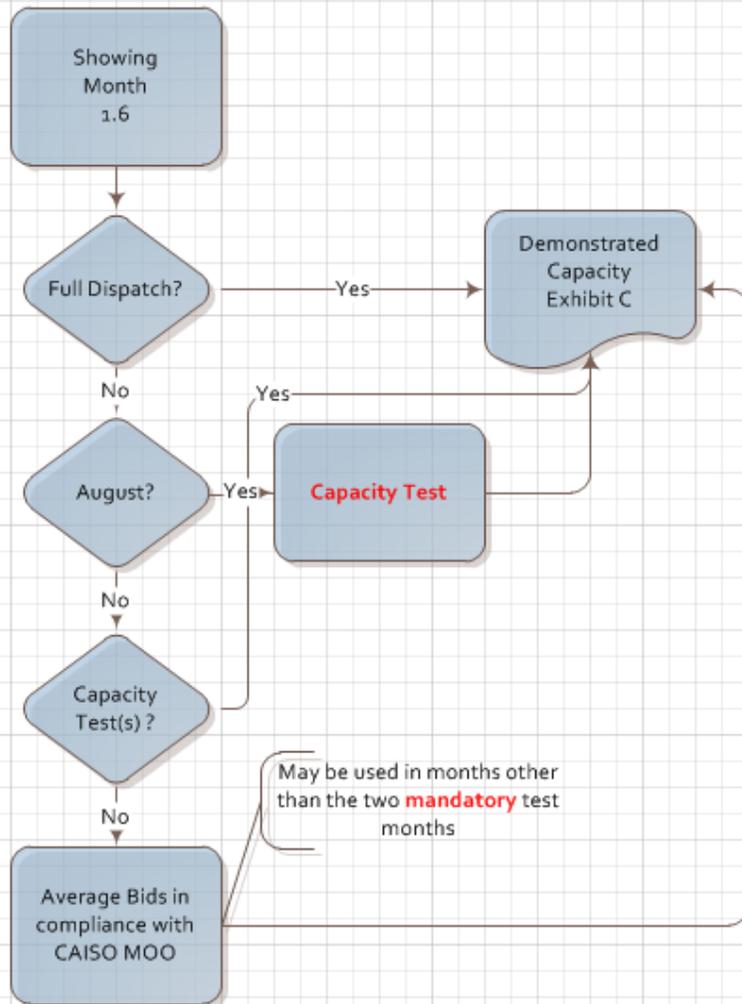
**Read and know the obligations you are taking on by being awarded a DRAM contract.
Read your Contract!!**

DEMONSTRATED CAPACITY AND MANDATORY TESTING

Monthly Demonstrated Capacity 1.6(a)

Testing 3.3(b) for Delivery Periods > 6 Months/Calendar Year

For illustrative purposes only; refer to 2018 Final Agreement for additional information



Prohibited Resources 7.2(b)(v):

Date	CPUC Milestones
2/29/17	Suspended IOU DRAM 3, Supplemental Advice Letter, in order to allow time to develop draft resolution restricting use of prohibited resources to reduce load during demand response events.
3/7/17	Direction to Proceed with DRAM III RFO with suggested contract language below
3/23/17	Draft resolution consolidating and addressing only the prohibited resources requirements contained in both AL 3466-E-A and AL 4991-E, et al.
4/26/17	Commission Meeting to vote on adoption of Prohibited Resources requirements

“By Commission Decision D.16-09-056, adopted on September 29, 2016, the California Public Utilities Commission ordered Southern California Electric Company, Pacific Gas & Electric Company, San Diego Gas & Electric Company (“Utilities”) and third-party demand response providers to enforce restrictions on the use of prohibited resources to reduce load during demand response events. The final DRAM contract will reflect the full requirements of this decision. Please see <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M167/K725/167725665.PDF>, Ordering Paragraphs 3 – 5 (pps 94-97) and Sections 4.1.3.1 – 4.1.3.3 (pps 28 -42) for more information.”

EXHIBIT C2 - Notice of Demonstrated Capacity (EFC)

Demand Response Auction Mechanism (DRAM)

For use with Flexible Capacity Product

Showing Month:
 Seller:
 Seller Contact Name:
 Seller Contact Phone:
 SCID:
 Local Capacity Area (LCA): (mark "nil" if not a Local Capacity product)

Total "Monthly Quantity"[▲] (MW):
 Total "Demonstrated Capacity" (MW): 0.00 MW
Residential Product (Yes / No):
 Therefore: in Delivered Capacity Payment formula, "B" = ********* and "D" = *********

PDRs in the DRAM Resource				--- "Demonstrated Capacity" (MW) --- It is Seller's sole discretion as to which Demonstrated Capacity method is used for each Resource				Joint Resource Adjustment		Residential Product Delivery			Local Capacity Product Delivery						
PDR Resource Name	CAISO Resource ID	Assigned EFC (MW) 0.00 MW	Flexible Category (1, 2, or 3)	For each PDR Resource (row), choose <u>one</u> demonstration method (column) to establish monthly Demonstrated Capacity				Complete for all resources		This section is only required if delivering Residential Customer Product			This section is only required if delivering Local Capacity Product						
				Capacity Test Average hourly load reduction during capacity test conducted by Seller's SC during Showing Month		Must Offer Obligation (MOO) Average capacity amount Seller bid into CAISO during Showing Month		Dispatch Results Average hourly load reduction resulting from Dispatch during Showing Month		MW Claimed Specify the MW portion used to meet the contract obligation		Total Service Accounts*	Residential Customer Service Accounts*	Small Business Customer Service Accounts*	Total Service Accounts**	Customer Service Accounts within specified LCA**			
				Raw Demonstrated Capacity	Lesser of Assigned EFC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lesser of Assigned EFC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lesser of Assigned EFC or Raw Demonstrated Capacity	Joint Resource? (Yes/No)	MW Claimed								
					0.00 MW		0.00 MW												
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Demonstrated Capacity ==>					0.00 MW		0.00 MW				0.00 MW	0	0	0	0	0			
IMPORTANT NOTES: ▲ "Monthly Quantity" is from the quantity & pricing Table in Exhibit E. * In case of a Joint Resource, report full PDR EFC here. ** If using a Joint Resource, report Service Account information (count) only for the portion used.				1) Each capacity test must be at least two (2) consecutive hours long	1) Must be bid into the Day-Ahead and Real-Time Market		1) An eligible Dispatch requires that the PDR provided load reduction in all applicable hours of the CAISO Dispatch Instructions. Only include dispatch results during the MOO hours.		For PDRs that are not Joint Resources, MW Claimed = MW Demonstrated (Column F, H or J)		Percent Residential Accounts			Percent Local Accounts					
				2) Should be calculated using the PDR Capacity Baseline	2) Only include bids submitted in compliance with the MOO hours		2) Should be calculated using the PDR Capacity Baseline		For Joint PDRs, MW Claimed is a portion of MW Demonstrated										

The information provided by Seller in this Notice of Demonstrated Capacity is required by Section 1.6 of the DRAM Resource Purchase Agreement with <insert IOU name>.

Comparison Between IOUs' Offer Forms, Evaluations, and Submission Requirements

RFO Requirements	PG&E	SCE	SDG&E
Offer Submittal Platform	Power Advocate	Email DRAMRFO@sce.com	Power Advocate
Offer Deadline time on April 10, 2017	1 pm PT	12 pm PT	12 pm PT
Quantitative Evaluation Method	Net Market Value	Net Market Value	Net Market Value
Qualitative Factors:			
Adder included in evaluation score, based on qualitative factors	Several	None	Several
Eligibility Requirements:			
Number of bids/variations allowed	20	20	20
Maximum bid size per month	10 MW	10 MW	N/A
Min bid size for PDR/RDRR per month, if not 0 kW	100 kW/500 kW	100 kW/500 kW	100 kW/500 kW
August Capacity > 0 kW required for each year's bid	Yes	Yes	Yes
Min bid size required for all months for Local Capacity	No	No	No

Offer Forms – Offer Information highlights

- **Offer Products**
 - Local, Flex, or System Capacity
 - PDR or RDRR resources
 - Residential or non-residential customers
- **Expected number of Rule 24 service accounts expected per Offer**
 - Bidders may specify how many customers/Offer would require *new* Rule 24 service accounts, and how many customers already have Rule 24 service accounts.
- **Indication of which bids are Exclusive or Inclusive**
 - Exclusive – offers are exclusive of each other, if two or more offers cannot both be awarded contracts in this RFO (e.g., Offers 1 and 4 cannot both be shortlisted, as customers are the same). SDG&E calls Exclusive Offers “variations.”
 - Inclusive – offers that are inclusive of each other means that they all must be awarded contracts together (e.g., Offer 2 must be selected with Offer 4). (SCE only)

Walk-Through: IOU DRAM Offer Forms

Neda Oreizy – PG&E

Anna Chung – SCE

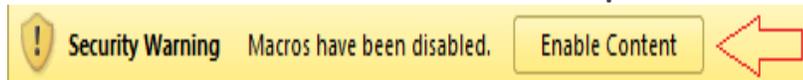
Evan Bierman – SDG&E

PG&E-Specific Offer Form Instructions

- You must submit an **Excel** Offer Form – no other formats will be accepted.
- Each Participant should only submit one Offer Form.
- If you need more rows on your Offer Form, please contact us at DRAMRFO@pge.com, and we will reformat your Offer Form to enable more rows.
- Enable macros when opening the Offer Form. This can be done in two ways:
 - a. Enable macros on the “Microsoft Excel Security Notice” that is displayed before the form opens...



- b. Enable macros by clicking the “Enable Content” button that is often displayed at the top of the screen when the form first opens:



PG&E Offer Form – “Participant Information” tab

You must select “Yes” for each of the Acknowledgement, Participant, Attestation, and Affirmation of ability to perform sections.

Acknowledgement of Protocol	
By selecting “Yes” participant hereby agrees to the terms of the Solicitation Protocol. Participant acknowledges that any costs incurred to become eligible or remain eligible for the solicitation, and any costs incurred to prepare an offer for this RFO are solely the responsibility of Participant.	
Section VI: Participant will abide by the confidentiality terms and conditions.	
Section IX: Participant knowingly and voluntarily waives all remedies or damages at law or equity concerning or related in any way to the Solicitation.	
Electronic Signature	<input type="text"/>
Title	<input type="text"/>
Select "Yes" to certify that the typed name acts as your electronic signature	
<input type="button" value=" <Choose One >"/>	
Participant Authorization	
By selecting "Yes", participant hereby confirms that they are "a duly authorized representative of Participant."	
Electronic Signature	<input type="text"/>
Title	<input type="text"/>
Select "Yes" to certify that the typed name acts as your electronic signature	
<input type="button" value=" <Choose One >"/>	
Attestation	
By providing the electronic signature, below, Participant hereby attests that all information provided in this Offer Form and in response to this DRAM RFO is true and correct to the best of Participant's knowledge as of the date such information is provided.	
Electronic Signature	<input type="text"/>
Title	<input type="text"/>
Select "Yes" to certify that the typed name acts as your electronic signature	
<input type="button" value=" <Choose One >"/>	
Affirmation of ability to perform all obligations under the PA	
I have read and understand the PA and attest that we are able to perform all obligations under the PA and Protocol.	
Electronic Signature	<input type="text"/>
Title	<input type="text"/>
Select "Yes" to certify that the typed name acts as your electronic signature	
<input type="button" value=" <Choose One >"/>	

PG&E Offer Form – “Participant Information” tab: CONFIDENTIALITY

Acknowledgement of Protocol	
By selecting “Yes” participant hereby agrees to the terms of the Solicitation Protocol. Participant acknowledges that any costs incurred to become eligible or remain eligible for the solicitation, and any costs incurred to prepare an offer for this RFO are solely the responsibility of Participant.	
Section VI: Participant will abide by the confidentiality terms and conditions.	
Section IX: Participant knowingly and voluntarily waives all remedies or damages at law or equity concerning or related in any way to the Solicitation.	
Electronic Signature	Select “Yes” to certify that the typed name acts as your electronic signature
Title	

2018-2019 DRAM Solicitation Protocol, Section VI: Confidentiality

- No Bidder shall collaborate on or discuss with any other Bidder or potential Bidder Offer strategies, the substance of any Offer(s), including without **limitation the price or any other terms or conditions of any Offer(s), or whether PG&E has Selected Offers or not.**
- PG&E shall follow a similar confidentiality protocol regarding submitted bids.
- The treatment of confidential information described above shall continue to apply to information related to Selected Offers which are formalized through execution of a Purchase Agreement.

PG&E Offer Form – “Offer Information” tab

You can have different Products for the same Offer on multiple rows. These rows are, in effect, “inclusive” of each other.

To provide Product for a specific LCA such as “Greater Bay,” the service accounts must be physically located in that LCA.

Offer Number (#)	Offer Name and/or Comment (Optional)	Describe any Exclusivity (i.e., where two or more offers cannot all be awarded contracts in this RFO due to shared customers or some other reason), using Offer Numbers in Column B (select from drop-down list)	Offer Number Exclusive With (leave blank if not applicable)	Registered and Confirmed Rule 24 Service Accounts	Estimated Additional Rule 24 Service Accounts Required	TOTAL Accounts	Residential or Non-residential (select from drop-down list)	PDR or RDRR (select from drop-down list)	Type of Product A=System Resource Adequacy (RA) B= Local and System RA C= Flexible and System RA D = Flexible, System, and Local RA (select from drop-down list)	[A] 2017 Monthly Quantity (kW) PDR—if not 0 kW, minimum is 100 kW RDRR—if not 0 kW, minimum is 500 kW August cannot be 0 kW										
										Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept		
1	Offer 1 - part a	Individual Offer		100	1100	1,200	Residential	PDR	D2-1_Flex2_Greater Bay	100	100	100	100	100	100	100	100	100	100	
1	Offer 1 - part b	Individual Offer		200	1200	1,400	Non-residential	RDRR	A0_System	-	-	-	-	-	-	-	500	-	-	
2	Offer 2	Exclusive With	3	300	1300	1,600	Residential	PDR	B2_Humboldt	300	300	300	300	300	300	300	300	300	300	
3	Same as Offer 2, but with Flex RA	Exclusive With	2	300	1300	1,600	Residential	PDR	D3-2_Flex3_Humboldt	500	500	500	500	500	500	500	500	500	500	
Example Offers Are Above--Actual Offers MUST Be Entered Below																				
4		<Choose One>				-	<Choose One>	<Choose One>	<Choose One>											

Cells are peach when incomplete, and turn to a mint green color once you enter a value.

These 2 offers are exclusive of each other (i.e., they can't both be shortlisted, it's one or the other). SDG&E calls offers that are exclusive of each other variations of the same offer.

Flexible RA Product cannot be RDRR.

For August, you must provide at least 100 kW for PDRs and 500 kW for RDRRs

Optional tab – monthly registrations

Ordering Paragraph 6 of Resolution E-4817

The IOUs shall include in their 2018-2019 DRAM RFO estimates of the additional Rule 24/32 registrations that they plan to make available for each month of the 2018-2019 DRAM pilot. However, the 2018 DRAM RFO shall state that these monthly estimates serve as illustrative, that the registrations are dynamic and do not serve to limit bid evaluation and selection, and shall explicitly permit bidders to submit monthly estimates of their Rule 24/32 registration needs.

Offer Name and/or Comment															
(Optional)	2018 Monthly Rule 24 Registrations														
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar

Walk-Through: SCE DRAM Offer Form

Anna Chung - SCE

SCE Offer Form – “Instructions” tab

Offer form is “protected” with the exception of these color-coded INPUT areas (orange and yellow)

DRAM Offer Form Instructions

DRAM 3 RFD

Color/Pattern Codes

 Space to type in required Information (text or numbers)
 Text/Information/Error/Good to Go SCE Only (headers, information and validation messages)

 Select from a drop-down box
 Error text-number/Good text-number Data validation color

SCE 2017 DRAM Offer Form

Tab Names:	Required Information
Instructions	n/a
Front Page	Required
RA Offers	Required
RA Type	n/a

Notes

File should be opened and completed using Excel 2010 or later.
Please fill out all data in units requested.

Workbook Instructions

Complete each required worksheet in the Offer Form.
One file per Seller.
If there is any inclusivity/exclusivity please describe it on the Front page and in the column BG on "RA Offers" tab.

I. "Front Page" tab

a) Seller Name – Seller must enter the name of the Counterparty consistent with the name in the RA Confirmation on the "Front Page" tab (Cell A23). No commas, please.

b) CPID – SCE will enter a Counterparty ID.

c) File Update Date - Seller should update the File Update Date field any time a change is made to the Offer Form.

A. Validation Message
Read the validation messages and address them before submitting Offer Form.

B. Contact Information
Provide the required contact information.

C. Additional Information
Answer questions "Yes" or "No".

SCE Offer Form – “Front Page” tab

Seller Name must match Non Disclosure Agreement exactly

FINAL OFFER
RESOURCE ADEQUACY OFFER FORM
DEMAND RESPONSE AUCTION MECHANISM (DRAM)
RESOURCE PURCHASE AGREEMENT (PA)
between
SOUTHERN CALIFORNIA EDISON COMPANY
and
[Seller Name]

File Update Date:	
CPIO:	TBD

[SCE Note: Assigned by SCE.]

A. Validation Message
[SCE Note: Read and address the validation message below.]

Offer Validation Message:	Enter Seller Name Enter File Update Date Enter RA Offers	and:	Fill in information in Section B
----------------------------------	---	-------------	---

[SCE Note: Offer Form Summary.]

Number of Offers:	0	Number of Valid Offers:	0
--------------------------	---	--------------------------------	---

B. Contact Information
[SCE Note: address where physical packages can be delivered]

Name: _____
Title: _____
Phone: _____
Address Line 1: _____
Address Line 2: _____
City: _____
State: _____
Zip Code: _____
Country: _____

Seller S&P Credit Rating: _____
Seller Moody's Credit Rating: _____
Seller Fitch Credit Rating: _____

[SCE Note: contact information for two representatives authorized to act on your behalf]

Name: _____
Title: _____
Office Phone: _____
Mobile Phone: _____
Email: _____

Name: _____

Must be S&P, Moody's or Fitch credit ratings only

SCE Offer Form – “RA Offers” tab

5 File Update Date: Maximum number of Offers: 20 Offers Entered: 0

6 **A. List of Offers**

7 [SCE Note: Refer to details on the "Instructions" tab. All Offers must be entered in columns C-D, F-AD, AG-BD, BF-BI. No blanks (zeros or positive numbers rounded to two decimal points only).]
 8 [SCE Note: Select Type of Product in column C and Resource Type in column D. Refer to Type of Product descriptions on the "Instructions" tab.]
 9 [SCE Note: Select "Yes" for Residential Customer Type if applicable in column F. Enter Estimated Number of Registrations per Offer in column BH and BI.]
 10 [SCE Note: Do not skip rows. Do not cut and paste.]
 11 [SCE Note: Product is defined by the Year, Monthly Quantity (MW) and Contract Price (\$/kW-month) entered.]
 12 [SCE Note: Check validation comment in column BM. Offer Name (column A) will appear once all of the fields are entered correctly.]
 13 [SCE Note: "EXAMPLE"/"SAMPLE" offer is in Row 15.]

Validation Message:

Check validation message

							2018 Monthly Quantity (MW for each day of Showing Month)										
Offer Name	Offer ID#	Type of Product in Section 1.1.b	Resource Type	Product	Residential Customer Product in Section 1.1.c (Yes/No)		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
TBD-TBD-Mo-A-System-000	000	A-System	PDR	Monthly	Yes		1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
EXAMPLE/SAMPLE OFFER IS ABOVE. ACTUAL OFFERS MUST be entered BELOW (COLUMNS C, D, F through AD, AG though BD and BH). Modify BF and BG only if needed for inclusivity and BG for exclusivity																	
				None			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		A-System		None			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		B1-LAB		None			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		B2-BCV		None			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		C1-System Flex1		None			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		C2-System Flex2		None			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		C3-System Flex3		None			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		D1-1-LAB Flex1		None			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		D1-2-BCV Flex1		None			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

new

new

BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM
4.1												
Sep	Oct	Nov	Dec	Package ID#	Describe Inclusivity and Exclusivity (Offer ID# is in column B)	Estimated Number of Existing Registrations per Offer	Estimated Number of New Registrations per Offer	Total Nominal Monthly Payment including SC payment (\$)	Total MW-months	Offer Description	Validation Message	
3.00	3.00	3.00	0.00	900	Individual offer	300	100	40,000.00	16.00	Offer for capacity variable by month	OK	
0.00	0.00	0.00	0.00	901	Individual Offer				0.00	Not an offer	Not an Offer	
0.00	0.00	0.00	0.00	902	Individual Offer Exclusive with * Inclusive with *				0.00	Not an offer	Not an Offer	
0.00	0.00	0.00	0.00	903	Individual Offer				0.00	Not an offer	Not an Offer	

Modify only if required for exclusivity or inclusivity with other offer(s) – e.g., “Exclusive with Offer 002”

Walk-Through: SDG&E DRAM Offer Form & Valuation Example

Evan Bierman – SDG&E

www.sdge.com/2018DRAMRFO

Solicitation Submittal Documents

1. Offer Form
2. [Credit Application](#)
3. Company Organization Chart and key personnel bios (Submitted as a separate attachment to your Offer)
4. Supporting documentation for your qualitative criteria answers (Submitted as a separate attachment to your Offer)

Evaluation Example

To facilitate understanding of the evaluation SDG&E created a mock evaluation spreadsheet with **RANDOM FAKE** numbers showing how NMVs are calculated (Press F9 to see the numbers change). The numbers in this spreadsheet should not be taken seriously. This is provided just to show how NMVs are calculated.

- [Example DRAM Evaluation](#)

Questions

