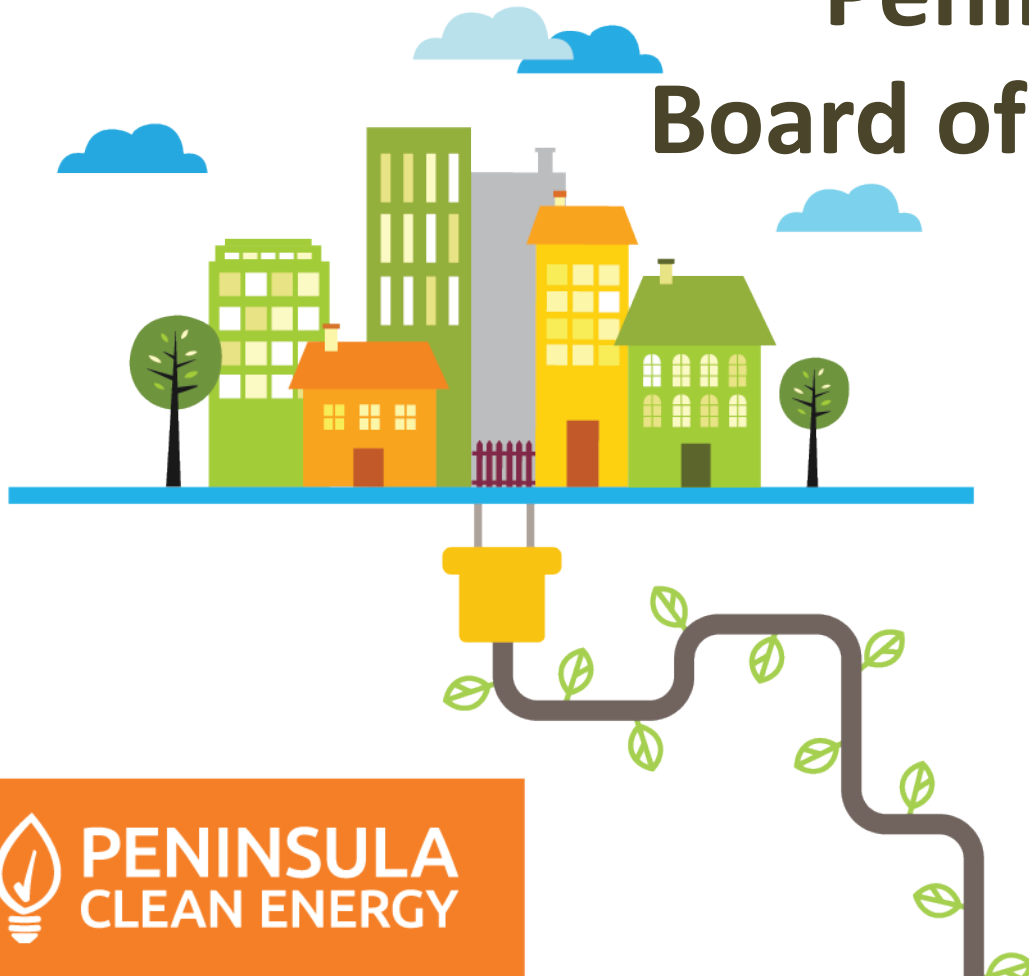


Peninsula Clean Energy Board of Directors Meeting

February 23, 2017



**PENINSULA
CLEAN ENERGY**

Agenda

Call to order / Roll call

Public Comment

Action to set the agenda and approve consent items

Regular Agenda

1. Chair Report (Discussion)

Regular Agenda

2. CEO Report (Discussion)

Lease Update

- We have moved into the temporary space at 555 Marshall, Redwood City
- Permanent space at 2075 Woodside Road will be ready for occupancy in June or July

Recruiting Update

- Welcome to Leslie Brown, Customer Care Manager
 - Started on January 30
- Regulatory/Legislative Analyst
 - Position posting closed today
 - Interviews next week
- Other positions
 - Contracts and Compliance Manager
 - Posting soon for Finance Manager / Director and Energy Analyst

Regulatory Update

- En Banc Hearing on CCAs – February 1, 2017
 - Thank you to the Board members who attended and made comments
 - CalCCA filed comments today (February 23)
- PCE Meet and Greet with CPUC Commissioner Carla Peterman on February 2, 2017
- Diablo Canyon Retirement proceeding
 - PCE part of Joint Parties filed testimony on January 27
 - Jan is witness sponsoring in two sections
- PCE filed pre-hearing conference statement with Marin Clean Energy on CCA bond requirements
- CalCCA protesting Sempra's marketing activities against the San Diego CCA, which is in violation of the code of conduct
- Other CCAs protesting PG&E advice filing for amendment to Ivanpah PPA

Legislative Update

- Met with State Assemblymembers Marc Berman and Kevin Mullen on January 27
- CalCCA meeting with State Senators and legislative staff in Sacramento – January 25 and 26 (David Burruto attended for PCE)
- CalCCA meeting in Sacramento on February 28 (David Burruto will attend for PCE)

Upcoming Conference

- The Business of Clean Energy Symposium
- Friday, May 5
- Long Beach Hyatt Regency

Regular Agenda

3. Marketing and Outreach Report (Discussion)

City-Specific Outreach Plans

- Some city staff wanted workshops, some preferred other outreach strategies
 - Coordinating with city staff through the RICAPs regional climate action program network
 - Workshops will be advertised on FB to residents of neighboring cities to cover all county
- Cities are leveraging their communications capacity
 - City Manager newsletters, social media, water bills, parks and rec brochures, city signs, etc.
 - All cities will be covered by PCE ad campaigns
- Your input is welcome on your city's plan

City Outreach Plan Status

City	City Staff Contact	Status	Workshop/Tabling Date
Atherton	Dori Ganetsos	Confirmed	April 19 City Council presentation
Belmont	Carlos de Melo	Confirmed	April 29 Earth Day
Brisbane	Karen Kinser	Confirmed	March 2 City Council
Burlingame	Sigalle Michael	Confirmed	March 28 Energy Workshop
Colma	Kathleen Gallagher	Confirmed	Partnering w/ Daly City March 15
Daly City	Stephen Stolte	Confirmed	March 15 PCE workshop
East Palo Alto	Michelle Daher	Confirmed	City tabling Earth Day for PCE
Foster City	Vanessa Brannon	Confirmed	City tabling Earth Day for PCE
Half Moon Bay	Jennifer Chong	Confirmed	PCE Public Workshop date TBD
Hillsborough	Elizabeth Cullinan	Confirmed	June 6 Earth Day
Menlo Park	Clay Curtin	Confirmed	Other outreach
Millbrae	Shelly Reider	Confirmed	March 1 Energy and H2O Workshop
Pacifica	Christian Murdock	Confirmed	Earth Day April 22
Portola Valley	Brandi de Garmeaux	Confirmed	March 9, 11, and Earth Day April 22
Redwood City	Vicki Sherman	Confirmed	March 18
San Bruno	Jennifer Dianos	Confirmed	March 14 City Council presentation
San Carlos	Elena Olmedo	Confirmed	March 7 Energy Workshop
San Mateo	Christine Ferry	Confirmed	March 8 PCE Workshop
South San Francisco	Adena Friedman	Confirmed	City will promote events nearby
Woodside	Sean Mullin	In progress	Earth Day April 22

Recent Community Presentations

- Office of Sustainability's Sustainability Academy Webinar Feb 9th
- San Mateo Baywood Association Annual Meeting Feb 12th
- Office of Sustainability's Sustainability Master Resource Conservation Course Feb 23rd
 - Recruited nine community outreach volunteers

Upcoming Presentations & Tabling

1 March	City of Milbrae combined workshop on energy and water
2 March	Rebuilding Together Peninsula Energy Working Group Presentation
2 March	City of Brisbane City Council Presentation on PCE
4 March	Portola Valley Official PCE Community Workshop #1
7 March	City of San Carlos Official PCE Community Workshop
8 March	City of San Mateo Official PCE Community Workshop
9 March	Portola Valley Official PCE Community Workshop #2
14 March	San Bruno City Council Presentation
15 March	Cities of Daly City and Colma Official PCE Community Workshop
18 March	Redwood City Water and PCE Workshop
23 March	North Fair Oaks Council PCE Presentation
28 March	Burlingame BAYREN Multifamily EE and PCE workshop
18 April	Portola Valley Earth Day
19 April	PCE Presentation at Atherton City Council
20 April	<i>Silver Dragon Exercise (pending)</i>
22 April	Marine Science Earth Day tabling in Redwood City
22 April	Pacifica Earth Day tabling
29 April	Belmont Earth Day tabling
11 May	<i>Bike to Work Day (pending)</i>
3 June	Hillsborough Earth Day tabling

Thank You to Your City Staff!

- Sustainability staff have been generous with their time, ideas, and enthusiasm in supporting PCE outreach




Social Media Champions

- Thank you for volunteering!
- Action steps:
 1. Like PCE Facebook page
 - *PCE FB group will be phased out as redundant*
 2. Re-post FB content on your page, especially events in your area
 3. Follow @pencleanenergy on Twitter, mention and re-tweet
 - When you tag PCE, will we amplify
 4. Monitor Next Door, post accurate information about PCE

Social Media: February 2017

Peninsula Clean Energy
Published by Kirk Nelson [?] · February 2 at 10:15am ·

Trouble understanding your electricity bill? Our ECOplus and ECO100 sample bills are here to help! Visit our website to learn more:
<http://bit.ly/2kswtAX>



The graphic features two sample electricity bills from Peninsula Clean Energy. The top bill is for ECO100 and the bottom one is for ECOplus. Both bills show a 'SAMPLE BILL PAGE ONE' and 'SAMPLE BILL PAGE FOUR' header. The ECO100 bill includes a 'Service For' section with contact information for the Peninsula Clean Energy office. The ECOplus bill shows a 'Your Account Summary' with a 'Total Amount Due by 01/09/2017' of \$19.02. A large 'NEED HELP?' text is overlaid on the bills.

Peninsula Clean Energy
Published by Patch [?] · February 10 at 10:06pm ·

Thanks to the local Patch for covering our exciting news!



PCE Approves Long-Term Power Purchase Agreement
The PPA will purchase the output from a 200 MW solar photovoltaic power plant and will be enough to power almost 33K homes.
PATCH.COM

The image shows a large array of solar panels installed on a grassy hill under a clear sky. The text below the image announces a long-term power purchase agreement (PPA) for a 200 MW solar plant, stating it will power nearly 33,000 homes.

Peninsula Clean Energy
Published by Kirk Nelson [?] · February 14 at 5:18pm ·

Happy Valentine's Day! We're sharing the love with San Mateo County with our clean and green energy!



The graphic features a large red heart being held by a yellow hand. A small blue and yellow bird is perched on top of the heart. The background is a light blue sky.

Peninsula Clean Energy shared their event.
Published by Kirk Nelson [?] · February 20 at 12:45pm ·

On March 8 from 6:30 p.m.-8:00 p.m., the City and County of San Mateo invite you to learn about Peninsula Clean Energy. Staff will be present to explain Peninsula Clean Energy and answer questions:
<https://www.facebook.com/events/315004290307549/>



PCE Community Workshop - San M...
Wed 6:30 PM - 8:00 PM · 55 W 3rd Ave, San Mateo, CA.
You like Peninsula Clean Energy

The image shows a large array of solar panels installed on a flat roof, with a cityscape visible in the background. The text below the image provides details for a community workshop on March 8th from 6:30 PM to 8:00 PM at 55 W 3rd Ave, San Mateo, CA.

Peninsula Clean Energy
Published by Kirk Nelson [?] · February 16 at 1:30pm ·

Videos, graphics, fact sheets, news clippings and more! Visit our News & Media page for everything PCE!
<http://www.peninsulacleanenergy.com/resources/news-media/>



Peninsula Clean Energy
I choose Peninsula Clean Energy for cleaner and greener energy at lower rates.
PENINSULACLEANENERGY.COM

The graphic features a circular logo with the text 'PROUD TO BE PENINSULA CLEAN ENERGY POWERED BY' and a small leaf icon. Below the logo, the text reads 'Peninsula Clean Energy I choose Peninsula Clean Energy for cleaner and greener energy at lower rates. PENINSULACLEANENERGY.COM'.

Media and Advertising

- Strategic ad buys in key local media to run from mid-February through May
- Press advisory and press kit to local press in February to correspond with enrollment notices
- Community newsletters outreach
- Media event for April rollout at a prominent location in the County

Press Releases

- Two press releases distributed in February
 - PCE to Enroll 210,000 New Customers and Maintain 5% Discount
 - PCE Inks Deal for 200 MW of New Solar
- Media coverage included
 - Half Moon Bay Review
 - Solar Industry Magazine
 - Bay Voice
 - IJ Global News
 - Patch
- Will do two more in April
 - Phase 2 announcement
 - Portola Valley in ECO100

Eco Business Directory

- Will list non-residential participants in ECO100
- Housed on our website and updated in real time
- Back-end completed
 - Email to ECO100 customers next week
 - Businesses/cities have 3 weeks to complete form
- Soft launch of public-facing website in March
- Promotion in April around Earth Day

Spring Advertising Summary

Media Mix:

- Print
- Radio
- Online
- Cable
- Outdoor/Transit
- Social Media

Audiences:

- Residents
 - English, Spanish, & Chinese language
- Multicultural Communities
- Businesses
- Seniors

Timing:

- Late February
- All March
- Early/Mid April

Phase 2 Advertising Examples

THE CHOICE IS YOURS!



5% savings



100% green power



"I'm so proud of the county for doing this. We're a model for all others to follow."
— Sister Christina H., St. Francis Center



LEARN MORE AT
peninsulacleanenergy.com

ENERGÍA MÁS LIMPIA CON TARIFAS MÁS BAJAS

La energía más limpia significa un futuro más brillante para su familia.



"Suelo con un planeta impulsado por la energía del sol. PCE está a la vanguardia de ese movimiento."
— David C.



INFÓRMESE MÁS EN
es.peninsulacleanenergy.com

GO GREEN. SAVE MONEY.



LEARN MORE AT
peninsulacleanenergy.com

SAN MATEO COUNTY IS ALL IN

Peninsula Clean Energy is going countywide in April! Now it's your turn to enjoy cleaner energy at lower rates.



"Peninsula Clean Energy is the right choice for us because it's renewable, affordable and keeps our environment healthy."
— Lori L.

Be an eco hero! Opt-up to 100% renewable energy with ECO100 for Earth Day!

Learn more at PeninsulaCleanEnergy.com
or call us at 1-866-966-0110.



清潔能源就是 美好未來

平生第一次，電力來源由您選擇。



「這是我們可以選擇我們的能源來自何處的大好機會。」



請上網到 zh.peninsulacleanenergy.com 了解詳情

Bus Shelters (Draft)

SAN MATEO COUNTY IS ALL IN!

Cleaner energy at lower rates is going countywide this Spring.

"We can start locally, to make a real difference globally."
— Adam L.



LEARN MORE AT peninsulacleanenergy.com

GO GREEN. SAVE MONEY.

It's your turn to enjoy cleaner energy at lower rates this Spring!

"It's the responsibility of each citizen to take care of our collective future."
— Anja M.



THE CHOICE IS YOURS!



5% savings



100% green power



"I'm so proud of the county for doing this. We're a model for all others to follow."
— Sister Christina



LEARN MORE AT peninsulacleanenergy.com

BE AN ECO HERO!

Peninsula Clean Energy offers a choice between 50% or 100% renewable energy.

"PCE is our opportunity to take an active role in saving our planet."

— Lori L.



OPT UP TO ECO 100 AT peninsulacleanenergy.com

Digital Billboard in Millbrae (Draft)

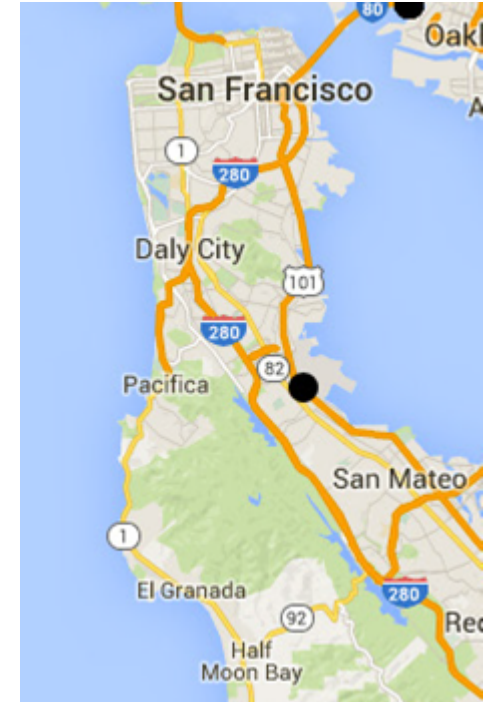
SAN MATEO COUNTY IS ALL IN

It's your turn to enjoy cleaner energy at lower rates this Spring!



PENINSULA CLEAN ENERGY IS SAN MATEO COUNTY'S OFFICIAL ELECTRICITY PROVIDER

- ✓ Cleaner Energy
- ✓ Lower Rates



Pandora Streaming Radio

Voiceover script:

San Mateo County is ALL IN! It's your turn to enjoy CLEANER ENERGY at LOWER RATES with Peninsula Clean Energy, the official electricity provider for San Mateo County. Learn more at Peninsula Clean Energy dot com.

Customer Notices: Update

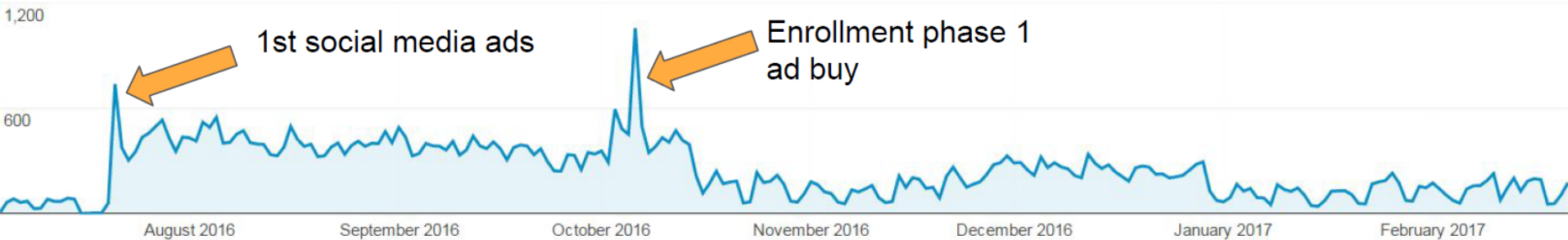
- Phase 2 notices started mailing this week
- 208,000 units
- 3 different letters this month
 - Commercial
 - Residential
 - Portola Valley
- Letter includes both Spanish and Chinese
- Next month will be a self-mailer

Outreach to Top 100 Customers

- Reaching out to largest electric users and other key accounts such as school districts and hospitals
- Asking for meeting to provide overview of PCE and answer questions
- Have strong connection with about 20 of 100
- Dan needs help with some contacts

Ad Campaign & Web Metrics

Website Visits: July 4, 2016 - February 21, 2017



Sessions

57,116



Users

27,646



Pageviews

113,611



■ Returning Visitor ■ New Visitor

Pages / Session

1.99



Avg. Session Duration

00:02:02



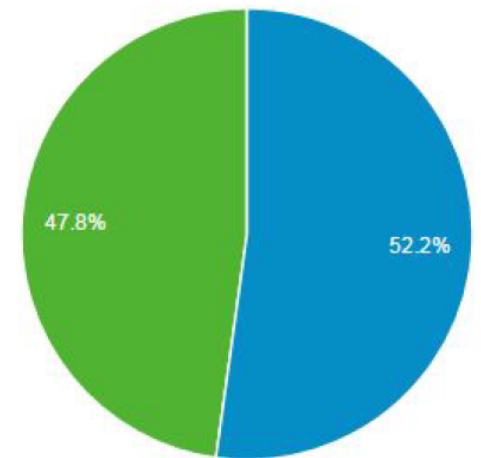
Bounce Rate

65.36%



% New Sessions

47.78%



Opt-Outs

OPT OUT BY CITY/POPULATION														
CITY	Eligible Accts	Phase 1 Accts	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb to Date	Total - Last week (2/10)	Total	TOTAL OPT OUT %	OPT OUT % OF PHASE 1
PORTOLA VALLEY INC	1,674	160				1	2		1	2	6	6	0.36%	3.75%
SAN BRUNO INC	16,416	4,088	6	24	14	6	13	19	19	2	103	104	0.63%	2.54%
DALY CITY INC	33,729	8,111	23	34	21	2	15	38	46	16	195	204	0.60%	2.52%
PACIFICA INC	15,417	3,778	17	15	9	2	6	13	14	8	84	87	0.56%	2.30%
SO SAN FRANCISCO INC	24,857	7,315	7	43	26	7	19	29	21	6	158	165	0.66%	2.26%
HILLSBOROUGH INC	4,056	1,027			4		6	6		1	17	19	0.47%	1.85%
HALF MOON BAY INC	4,910	1,449	2	4	6	1	5	3	5		26	26	0.53%	1.79%
BURLINGAME INC	15,458	4,595	12	6	7	2	5	23	14	4	73	82	0.53%	1.78%
UNINC SAN MATEO CO	24,362	7,180	11	27	18	13	13	11	14	11	118	123	0.50%	1.71%
SAN MATEO INC	43,457	11,540	6	40	25	14	16	36	26	8	171	185	0.43%	1.60%
SAN CARLOS INC	14,380	4,704	10	8	7	6	3	24	9	3	70	73	0.51%	1.55%
BRISBANE INC	2,475	864	1	3	3		1	3	2		13	13	0.53%	1.50%
BELMONT INC	11,818	3,085	10	4	5	5	1	11	5		41	43	0.36%	1.39%
MENLO PARK INC	14,955	4,255	9	5	8	4	6	14	9	4	59	59	0.39%	1.39%
WOODSIDE INC	2,282	675	1	2		1	3	1	1		9	9	0.39%	1.33%
COLMA INC	799	772		1	1		2	2	2	2	10	10	1.25%	1.30%
MILLBRAE INC	9,377	2,386		1	1	1	9	6	9	1	28	28	0.30%	1.17%
REDWOOD CITY INC	34,377	9,387	12	15	10	6	8	16	20	9	96	103	0.30%	1.10%
EAST PALO ALTO INC	7,715	1,852		2	1			3	9	2	17	19	0.25%	1.03%
FOSTER CITY INC	14,401	3,445			1	5	4	11	6	4	31	32	0.22%	0.93%
ATHERTON INC	2,683	756	3	1				2			6	6	0.22%	0.79%
Grand Total	299,598	81,424	130	235	167	76	137	271	232	83	1,331	1,396	0.47%	1.71%

Opt-Ups

ACTIVE ACCTS BY CITY	Eligible Accts	Offered Enrollment	Nov	Dec	Jan	Feb			
CITY	Full Territory	Total Eligible Accts from Phase 1/ NEM 1-3	ACTIVE	ACTIVE	ACTIVE	RES ACT	COM ACT	ACTIVE	ECO100
ATHERTON INC	2,683	756	644	646	677	559	167	726	29
BELMONT INC	11,818	3,085	2,989	2,953	3,045	2,226	848	3,074	21
BRISBANE INC	2,475	864	833	830	847	387	454	841	46
BURLINGAME INC	15,458	4,595	4,400	4,432	4,497	2,703	1,775	4,478	40
COLMA INC	799	772	766	759	758	495	262	757	
DALY CITY INC	33,729	8,111	7,845	7,810	7,884	6,250	1,689	7,939	
EAST PALO ALTO INC	7,715	1,852	1,781	1,775	1,847	1,472	362	1,834	
FOSTER CITY INC	14,401	3,445	3,358	3,354	3,424	2,678	719	3,397	66
HALF MOON BAY INC	4,910	1,449	1,355	1,357	1,388	882	517	1,399	
HILLSBOROUGH INC	4,056	1,027	901	902	972	859	118	977	
MENLO PARK INC	14,955	4,255	4,053	4,018	4,117	2,731	1,448	4,179	143
MILLBRAE INC	9,377	2,386	2,316	2,314	2,335	1,741	581	2,322	51
PACIFICA INC	15,417	3,778	3,539	3,540	3,639	2,986	737	3,723	32
PORTOLA VALLEY INC	1,674	160	75	77	122	155	13	168	123
REDWOOD CITY INC	34,377	9,387	9,075	8,877	9,155	6,245	3,054	9,299	378
SAN BRUNO INC	16,416	4,088	3,945	3,924	3,996	3,030	970	4,000	20
SAN CARLOS INC	14,380	4,704	4,428	4,408	4,546	2,569	2,056	4,625	112
SAN MATEO INC	43,457	11,540	11,076	11,101	11,308	7,823	3,421	11,244	92
SO SAN FRANCISCO INC	24,857	7,315	7,103	7,091	7,120	4,248	2,910	7,158	16
UNINC SAN MATEO CO	24,362	7,180	6,649	6,599	6,830	4,449	2,497	6,946	96
WOODSIDE INC	2,282	675	579	571	608	475	178	653	22
Unallocated			175	38	18			-	
Unallocated (cust type)			-	680	350	402	29	431	
Grand Total	299,598	81,424	77,885	78,056	79,483	55,365	24,805	80,170	1,332

Regular Agenda

4. Approve a Resolution Delegating Authority to the Chief Executive Officer to Execute one or more Phase 2 Confirmation Agreements with Energy America, LLC; Shell Energy North America (US), L.P.; and/or Exelon Generation Company, LLC; and Ancillary Documents (Action)

Background

- On June 23, 2016, PCE's Board executed Master Agreements with three short-listed Energy Service Providers (ESPs):
 - Energy America, LLC
 - Shell Energy North America (US), L.P.
 - Exelon Generation Company, LLC
- Energy America LLC was selected to provide Phase 1 energy supply

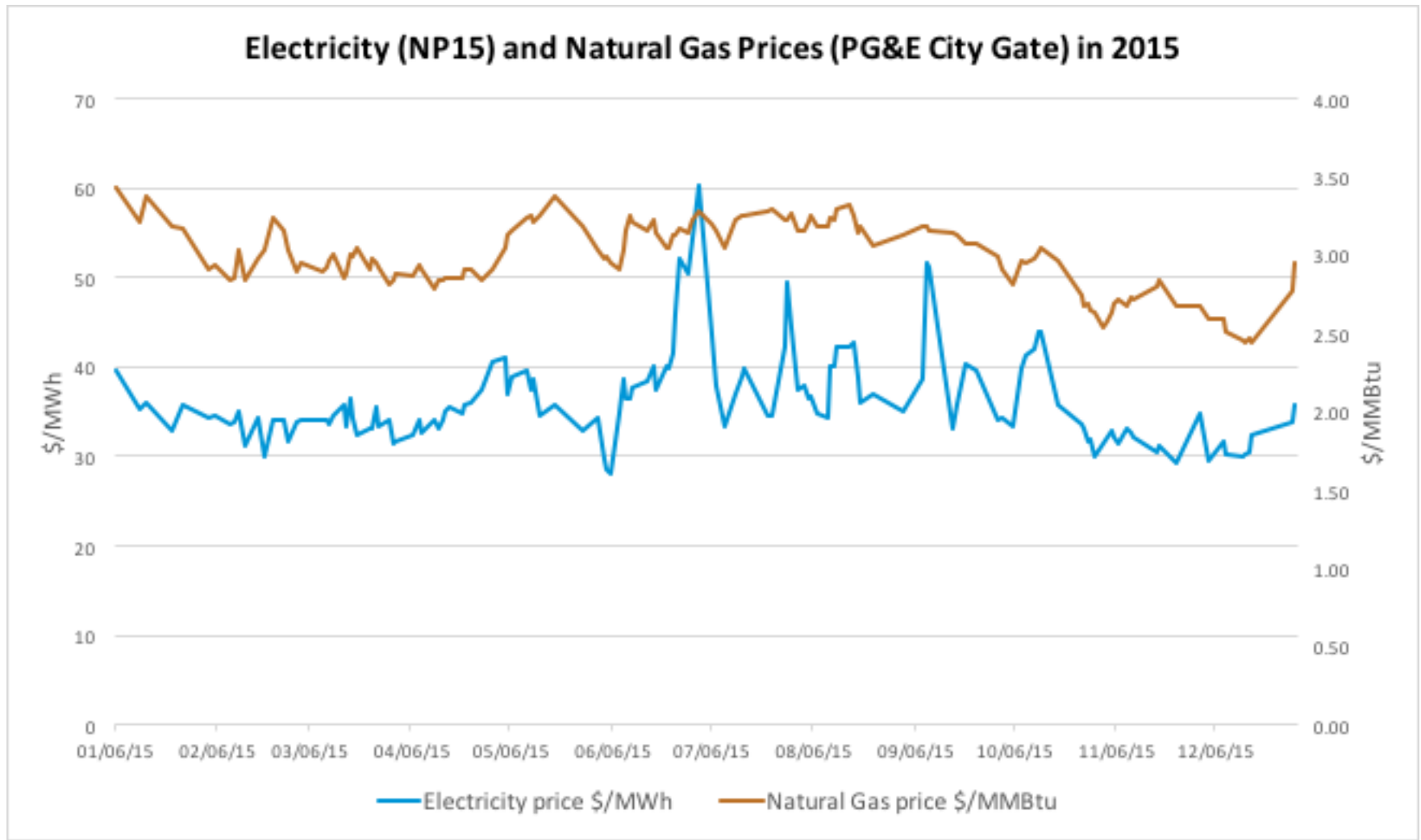
Background

- Ancillary agreements were negotiated with these three ESPs
- Updates to the Confirmation agreements have been negotiated with these three ESPs in anticipation of having them provide energy for Phase 2
- The Board is being asked to authorize the CEO to execute one or more of these Confirmations

Electricity and Natural Gas Prices

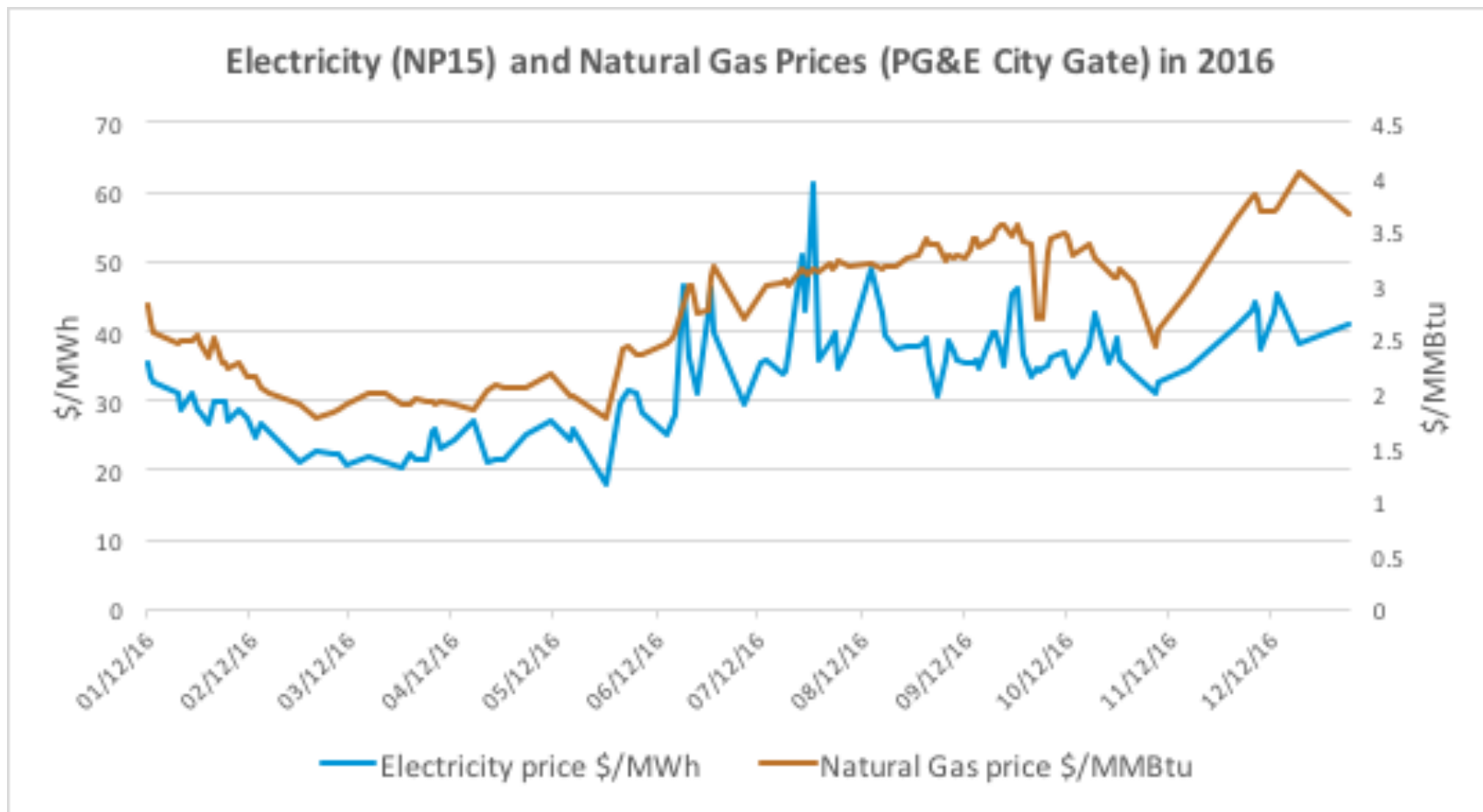
- Wholesale spot electricity and natural gas prices
 - 2015 and 2016 prices
 - *Electricity prices track natural gas prices*
- Short and medium term natural gas price forecast
 - *Natural gas prices are projected to stay low for the next couple of years*

Electricity and Natural Gas Prices



Short-term electricity prices follow same pattern as spot natural gas prices.

Electricity and Natural Gas Prices



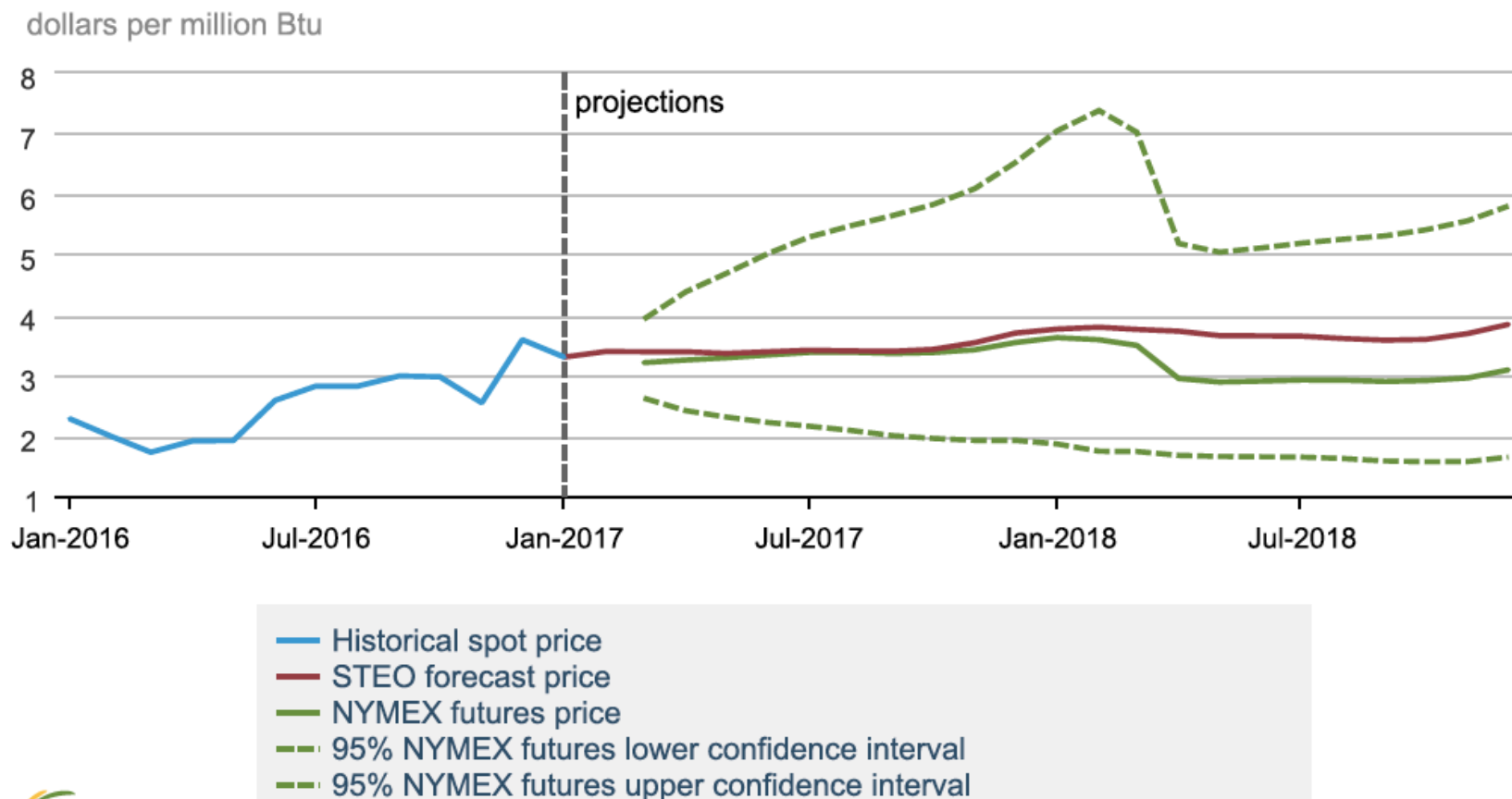
Short-term electricity prices follow same pattern as spot natural gas prices.

Electricity and Natural Gas Prices

- Natural gas power plants set the marginal price in CAISO markets
- Heat rate of a natural gas power plant reflects its efficiency in units of MMBtu/MWh
- If natural gas price is \$3/MMBtu and power plant has heat rate of 8 MMBtu/MWh
- $\$3/\text{MMBtu} \times 8 \text{ MMBtu/MWh} = \$24.00/\text{MWh}$
- Reflects fuel cost to run plant. Additional costs include O&M, debt, etc.

Short-term Forecast of Natural Gas Prices

Henry Hub natural gas price



Source: Short-Term Energy Outlook, February 2017

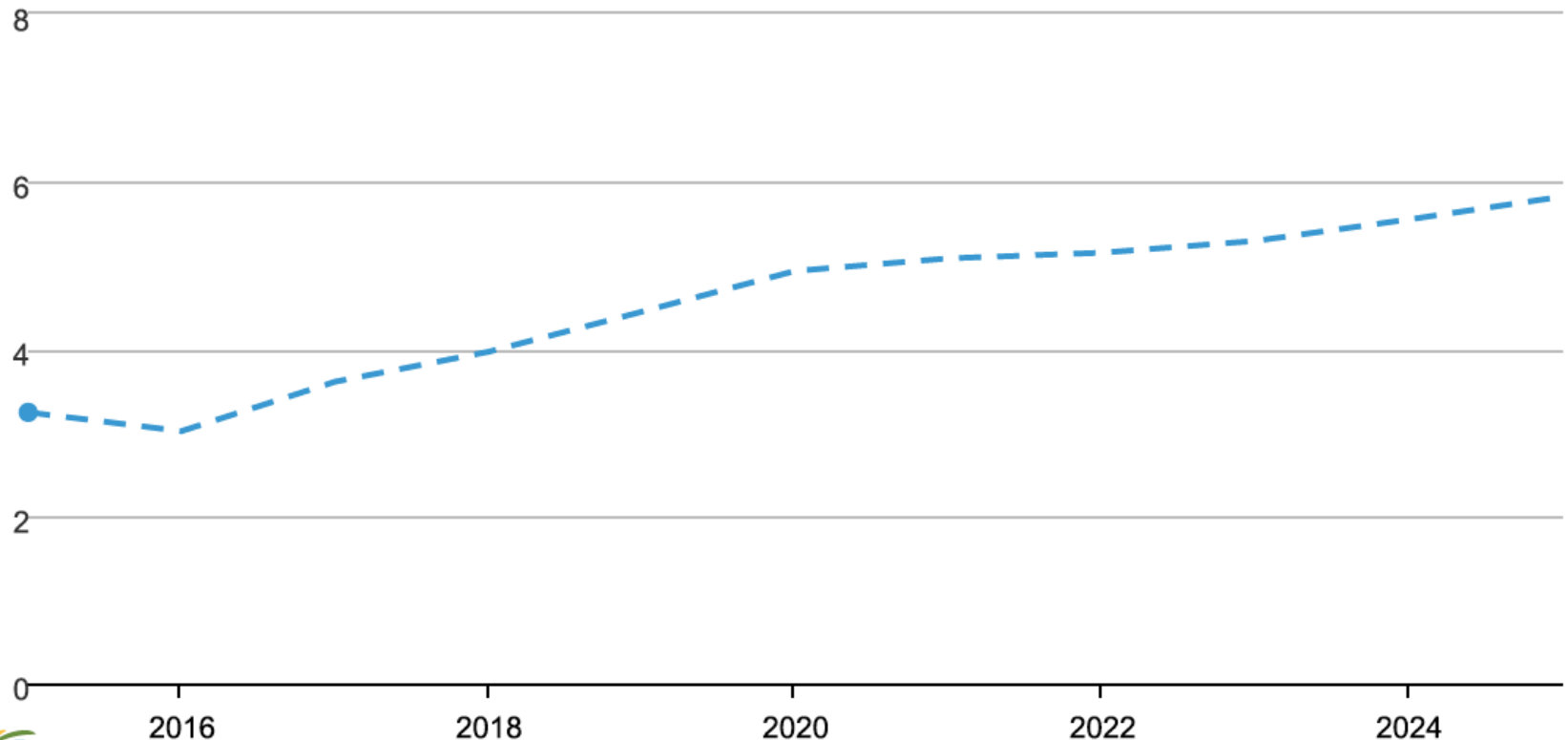
Note: Confidence interval derived from options market information for the 5 trading days ending Feb. 2 2017. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Medium Term Forecast of Natural Gas Prices

AEO2017: Energy Prices: Nominal: Electric Power: Natural Gas

Case: Reference case | Region: United States

nom \$/MMBtu

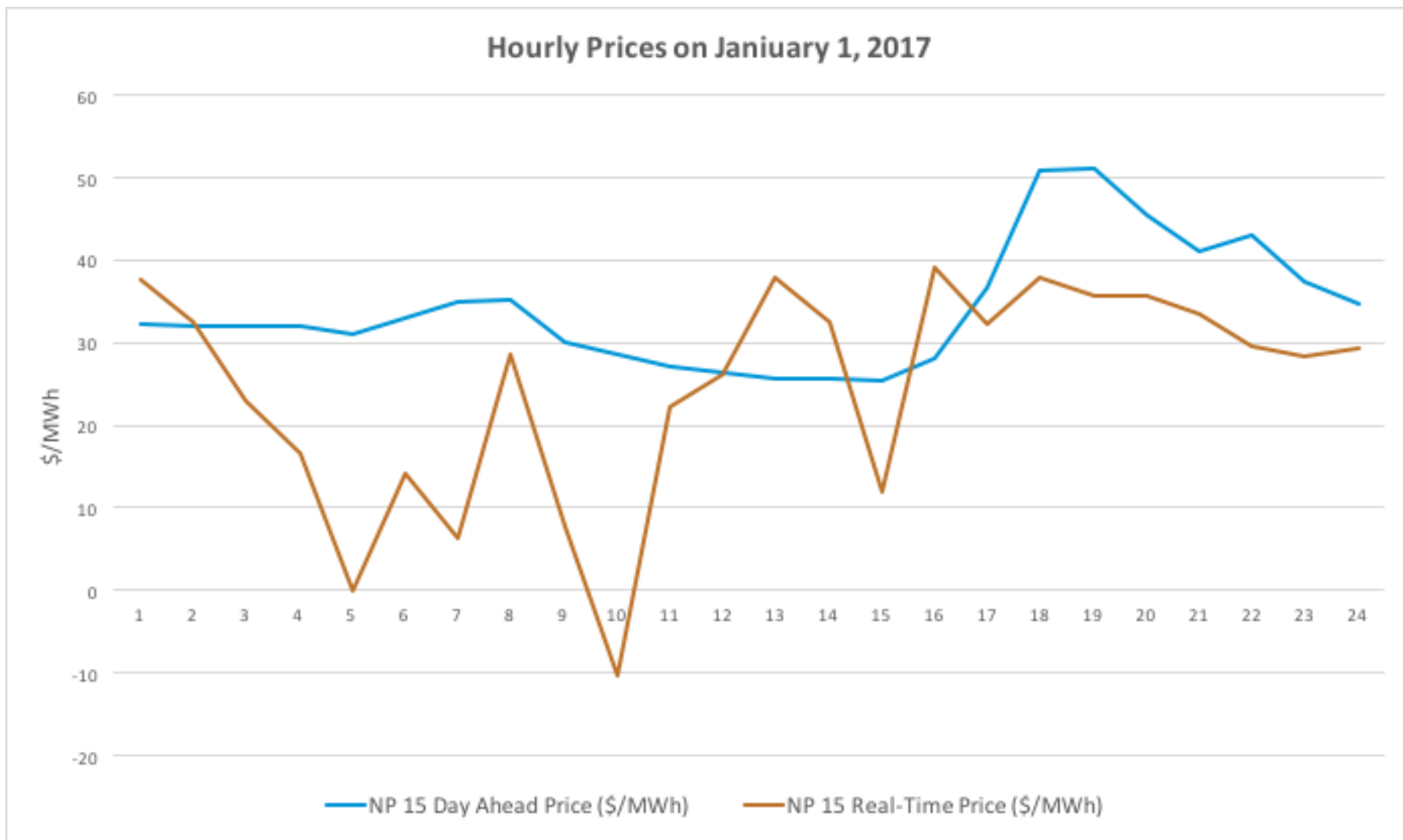


Source: U.S. Energy Information Administration

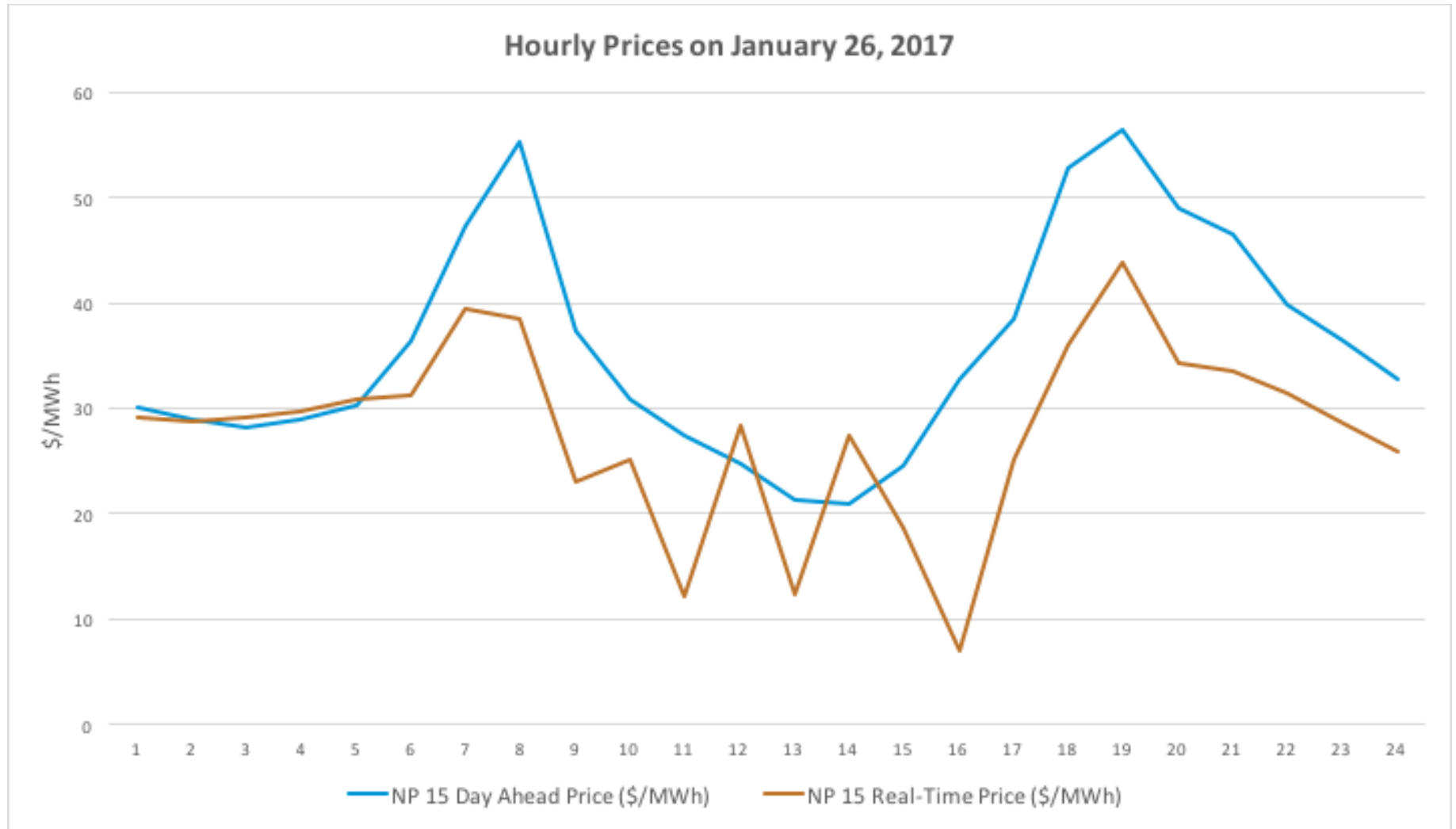
Day-Ahead and Real-Time CAISO Prices

- Day-ahead and real-time prices in CAISO markets
 - Prices can vary widely throughout a day
 - *If PCE does not schedule our open position, we pay the real-time electricity price – is this an acceptable risk?*

Day Ahead and Real-Time Electricity Prices in CAISO Market



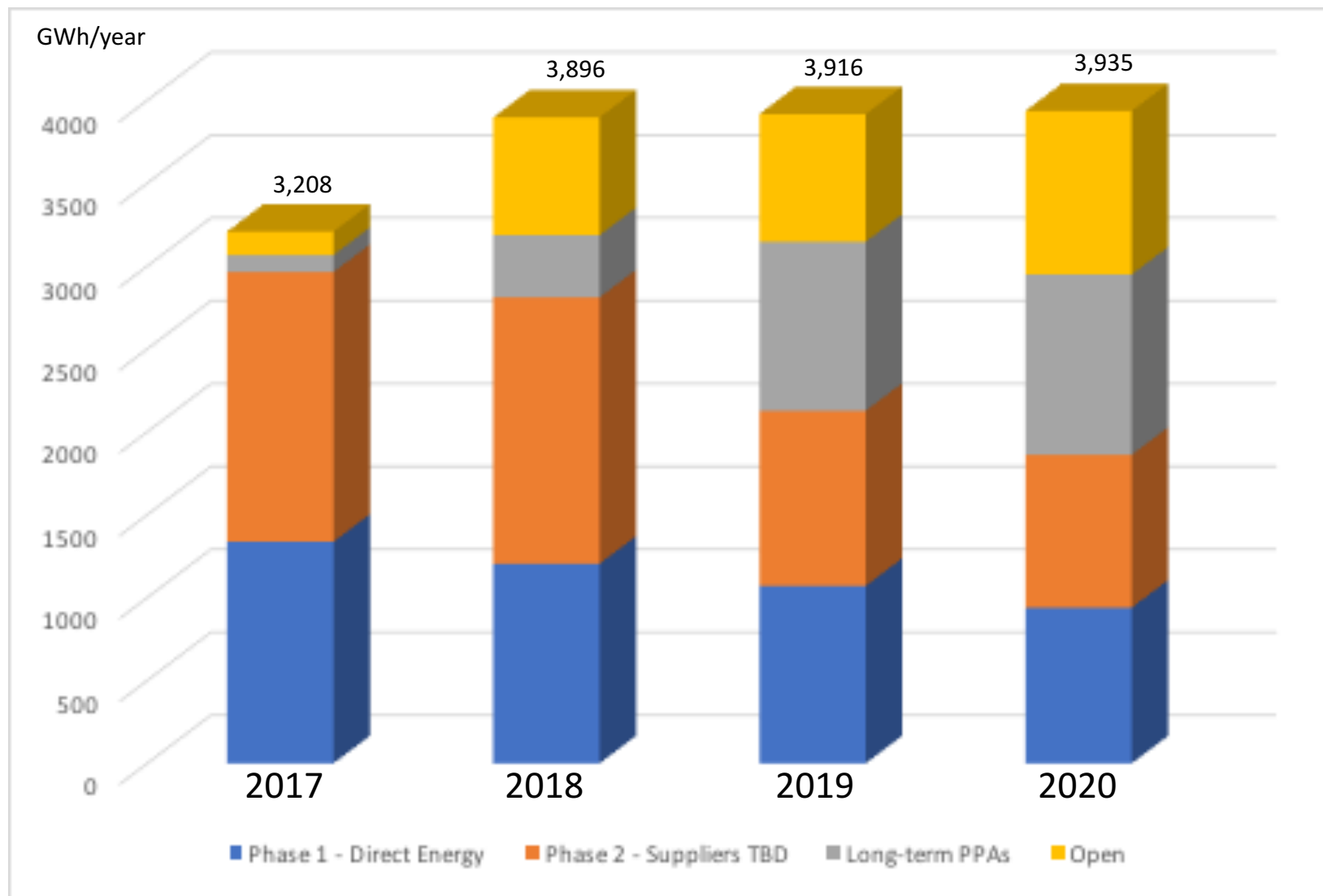
Day Ahead and Real-Time Electricity Prices in CAISO Market



Long-term Power Purchase Agreements

- PCE is planning to bring additional long-term PPAs to the board in March and April
 - These will fill a portion of our supply portfolio from 2017 through 2020 (and beyond)

PCE's Open Position – GWh per Calendar Year



Purchase Phase 2 Supply from ESP

- Select Phase 2 supplier from 3 original ESPs for system, renewable, and GHG-free needs in 2017 and 2018, where we still have large open position, and possibly 2019
- Request final pricing from ESPs on Tuesday, February 28
- No scheduling services (Direct is scheduling all PCE load)
- *We are recruiting **tonight** for an Ad hoc board committee to participate*

Action

- Delegate authority to CEO to execute one or more Phase 2 Confirmation Agreements with:
 - Energy America, LLC
 - Shell Energy North American (US), L.P.
 - Exelon Generation Company, LLC

Regular Agenda

5. Approve a Resolution of Formation of Citizens Advisory Committee (Action)

Regular Agenda

6. Power Charge Indifference Adjustment (PCIA) Vintaging and PCIA Workgroup Update (Discussion)

Regular Agenda

7. Board Members' Reports (Discussion)

Regular Agenda

Adjourn