

# Sempra Energy

## Initiating with Buy: Adding Value at Every Turn

### Top Tier Growth with Lots More to Come

We initiate coverage on Sempra with a Buy rating and \$106 price target. Sempra is involved in every attractive angle of energy infrastructure, with the bulk of its growth tied to LNG exports through its Cameron facility in the gulf coast and Mexican energy reforms. Its underlying core utility business in Southern California is also well positioned to benefit from ever-expanding state energy policies, including storage, improved pipeline safety and hefty renewables ambitions. It can readily achieve a 10% EPS CAGR through 2019 (9-11% CAGR guidance), meaningfully above utility peers at ~4%.

### Where is there more? LNG export terminals, International, and an MLP too

In 2014, we look for management to sign customers at potentially both of its further LNG export terminals in the US and in Mexico. Coupled with LNG, are mgmt's continued efforts to acquire modest midstream assets to kick start its own MLP, putting SRE to 'drop down' Cameron at the full 50/50 splits by the '18 service of its Cameron LNG export terminal. Its Mexican subsidiary is capable of capturing ~\$25 Bn in midstream investment alone due to pending energy reforms, driving mid- (or even high-) teens EPS growth through the decade.

### Balance Sheet and Operational Leverage provide ample justification for P/E

With shares trading at ~19x 2016E EPS (vs. diversified utility peers at ~15.3x), investors need look only to forthcoming balance sheet and operational levers to explain the higher multiple including potential MLP, debt capacity at foreign subs as well as cushion in parent metrics, and most importantly very low earnings from existing assets poised to recover. Specifically, we see upside from re-contracting its REX gas pipeline and gas generation (MexiCali) as well as potential monetization opportunities at accretive multiples (Mesquite gas plant, wind and even solar given YieldCo valuations).

### Valuation: Initiate with Buy and SOP-derived PT of \$106; Catalyst rich in 2014

With many catalysts, including M&A and corporate structuring (MLP), we see a continued upside in shares. Just in 2014, we look for construction on its LNG facility, announcement of new midstream projects, and even MLP strategy.

### Equities

Americas  
Electric Utilities

**12-month rating** **Buy**  
*Prior: Not Rated*
**12m price target** **US\$106.00**  
*Prior: -*
**Price** **US\$96.42**
**RIC:** SRE.N **BBG:** SRE US

### Trading data and key metrics

<b>52-wk range</b>	US\$96.82-78.36
<b>Market cap.</b>	US\$23.5bn
<b>Shares o/s</b>	243m (COM)
<b>Free float</b>	93%
<b>Avg. daily volume ('000)</b>	331
<b>Avg. daily value (m)</b>	US\$31.1
<b>Common s/h equity (12/14E)</b>	US\$11.6bn
<b>P/BV (12/14E)</b>	2.0x
<b>Net debt / EBITDA (12/14E)</b>	3.3x

### EPS (UBS, diluted) (US\$)

	12/14E		% ch	Cons.
	From	To		
<b>Q1E</b>	-	0.94	-	0.94
<b>Q2E</b>	-	1.17	-	1.17
<b>Q3E</b>	-	1.28	-	1.27
<b>Q4E</b>	-	1.10	-	1.11
<b>12/14E</b>	-	4.49	-	4.46
<b>12/15E</b>	-	4.88	-	4.86
<b>12/16E</b>	-	5.16	-	5.16

### Julien Dumoulin-Smith

Analyst  
julien.dumoulin-smith@ubs.com  
+1-212-713 9848

### Michael Weinstein

Associate Analyst  
michael.weinstein@ubs.com  
+1-212-713 3182

### Paul Zimbardo

Associate Analyst  
paul.zimbardo@ubs.com  
+1-212-713 1033

Highlights (US\$m)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
<b>Revenues</b>	10,036	9,647	10,557	11,555	12,326	13,087	14,077	17,160
<b>EBIT (UBS)</b>	1,961	1,834	2,079	2,310	2,583	2,700	2,854	3,585
<b>Net earnings (UBS)</b>	1,072	1,066	973	1,128	1,235	1,319	1,424	1,737
<b>EPS (UBS, diluted) (US\$)</b>	4.44	4.32	3.90	4.49	4.88	5.16	5.47	6.61
<b>DPS (US\$)</b>	1.92	2.40	2.52	2.62	2.73	2.83	2.93	3.03
<b>Net (debt) / cash</b>	(10,295)	(11,712)	(10,914)	(11,620)	(11,919)	(12,434)	(12,826)	(12,688)
Profitability/valuation	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
<b>EBIT margin %</b>	19.5	19.0	19.7	20.0	21.0	20.6	20.3	20.9
<b>ROIC (EBIT) %</b>	12.9	10.2	11.1	12.0	12.5	12.2	12.2	14.5
<b>EV/EBITDA (core) x</b>	6.4	7.5	8.2	8.4	7.8	7.5	7.2	6.0
<b>P/E (UBS, diluted) x</b>	11.8	15.0	21.3	21.5	19.8	18.7	17.6	14.6
<b>Equity FCF (UBS) yield %</b>	(15.2)	(6.0)	(3.9)	(1.0)	(1.1)	(0.4)	0.3	2.8
<b>Net dividend yield %</b>	3.7	3.7	3.0	2.7	2.8	2.9	3.0	3.1

Source: Company accounts, Thomson Reuters, UBS estimates. UBS adjusted EPS is stated before goodwill-related charges and other adjustments for abnormal and economic items at the analysts' judgement. Valuations: based on an average share price that year, (E): based on a share price of US\$96.42 on 11 Apr 2014 16:14 EDT

# Investment Thesis

## Sempra Energy

### Investment case

Sempra Energy is a well-diversified energy infrastructure company with its growth tied to LNG exports through its Cameron facility in the gulf coast and Mexican energy reforms. Its underlying core utility business in Southern California is also well positioned to benefit from ever-expanding state energy policies, including storage, improved pipeline safety and hefty renewables ambitions. It can readily achieve a 10% EPS CAGR through 2019 (9-11% CAGR guidance), meaningfully above utility peers at ~4%.

### Upside scenario

We upside to at least \$120/sh, particularly on simply netting out the interest expense (at the current P/E multiple) versus netting out the value on a gross basis. Moreover, assuming a greater portion of contemplated growth projects are achieved we see an 11-12% EPS CAGR as entirely achievable through '19 (~\$7.50 EPS). Additionally, we see successful execution of MLP strategy through modest midstream acquisition and full-scale monetization of renewables to YieldCo entities as further enabling multiple expansion. Lastly, IENova could succeed in winning a disproportionate share of growth across a range of energy investment opportunities available, driving a further ~\$10/sh accretion to Sempra through the decade.

### Downside scenario

We see downside to ~\$95/sh, primarily on the lack of execution on any MLP strategy (~\$5/sh) as well as collapse in valuations for renewable assets. Moreover, concerns over the California regulatory environment from a particularly onerous gas safety program could push down multiples on all utilities in the state. Lastly, we see downside on limited value for re-contracting its REX pipeline for gas shipped to the Midconn region.

### Upcoming catalysts

Mexican energy reform secondary legislation	~Summer 2014
REX Open Season Results	Next few months
Final FERC Approval of Cameron EIS	Next few months
Sale of remaining Mesquite CCGT	2014

12-month rating

Buy

12m price target

US\$106.00

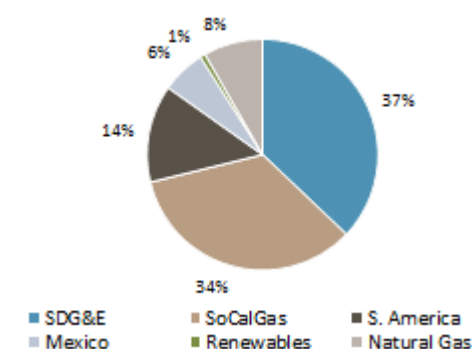
### Business description

Sempra Energy is the parent company to: San Diego Gas & Electric, Southern California Gas Company, Sempra International, and Sempra US Gas and Power. San Diego Gas & Electric serves ~3.4m customers, while Southern California Gas Company serves 21m gas customers. Sempra US Gas & Power has ~1,500 MW of solar, wind, and natural gas plants in the US. Sempra International is composed of Sempra South American Utilities, which provides power to ~1.5m customers in Chile and Peru, as well as Sempra Mexico, which owns and operates natural gas, wholesale electricity, and LNG operations in Mexico.

### Industry outlook

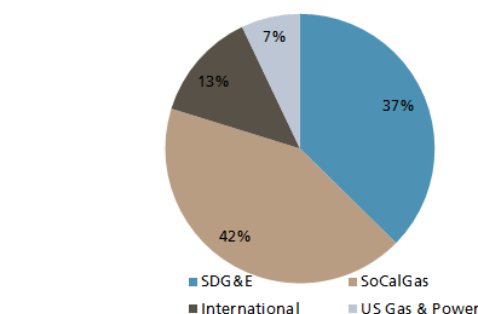
The electric utility industry is projected to experience weak or negative electric demand growth in coming years as a tepid economy and energy efficiency dampen demand. In the unregulated merchant power space, we see limited potential for a meaningful recovery from currently low power prices due to limited projected demand growth, growth of subsidized renewables, and potential for only modest further retirements. At regulated utilities, we believe rising interest rates and robust valuations are a challenge to the sector, particularly as earnings growth stalls once EPA-mandated growth capex slows mid-decade. We expect cost-cutting and strategic planning to be a key theme across both regulated and competitive companies, with M&A at modest (at best) premiums designed to extract cost synergies. We believe utilities with high parent leverage will disproportionately suffer, as they are unable to recoup from rising interest rates.

### 2013A Revenues by segment (%)



Source: Company Filings

### Capital Expenditure Plan: 2014-2018E



Source: Company Filings

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**Julien Dumoulin-Smith**  
Analyst  
julien.dumoulin-smith@ubs.com  
+1-212-713 9848

**Michael Weinstein**  
Associate Analyst  
michael.weinstein@ubs.com  
+1-212-713 3182

**Paul Zimbardo**  
Associate Analyst  
paul.zimbardo@ubs.com  
+1-212-713 1033

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# Investment Thesis

## *The Diversified Growth Story*

We initiate coverage of Sempra Energy with a Buy rating and \$106 price target. Following its latest Analyst Day in recent weeks, we see a clear path forward toward execution on a whole range of growth opportunities (many still excluded from its formal capital budgeting and targets) that should readily enable a low-double-digit total EPS CAGR. While appearing pricey on a pure P/E basis, our extensive SOP valuation suggests continued upside to shares, predicated on leveraging under-earning assets through re-contracting efforts and monetization; this includes the sell-down of some renewables and its Mesquite gas plant, which generate no earnings, as well as opportunities to sign new contracts for its REX pipeline and MexiCali gas plant. Additionally, we have dug in extensively into the South American and Mexican subsidiaries, with these segments in particular poised to deliver a disproportionate share of the overall growth opportunity. We see the Mexican investment opportunity as among the most attractive, taking part in the country's transition from an oil to a gas economy. Meanwhile, with incremental debt capacity across a range of its international subsidiaries, management will not need to deploy any further capital abroad in order to achieve low- to mid-teens growth through the decade. Rather, a public listing in Chile of its Chilquinta sub would likely only further highlight foreign value and growth opportunities. Despite some challenges in the past, we see opportunities today to leverage these assets into higher earning assets, such as upside on natural gas storage and conversion of its second LNG import facility, Costa Azul, to an export terminal. The outlook is exceptionally bright, with key drivers of incremental upside being details on the future monetization strategy of its Cameron LNG export via an MLP and even further sell-down of its renewable asset. Focusing on its core utilities, San Diego Gas & Electric (SDG&E) and SoCalGas, we see the opportunity for further investment in utility assets as unparalleled in the US, applying modest premiums to both for capex upside on an already ~6% rate-base CAGR.

On its surface, it's a complicated company, but under the hood, there's something for everyone, with management having its hand in every conceivable growth avenue in the sector, including both midstream and renewables, as well as *the* pre-eminent vehicle for Mexico relating to pending energy reforms. Meanwhile, its core utilities businesses in SoCal remain top-tier growers in their own right. We see a number of further avenues with an abundance of catalysts to continue to drive outperformance for yet another year vs. the peer group.

Sempra is among the best positioned companies in the sector to capitalize on our two key investment themes: Midstream and Renewables

Additional LNG export terminals enhances MLP strategy

The Mexican opportunity is just taking off: no capex is yet reflected from reforms

Under-utilized debt capacity and assets provide upside without equity capital

Mgmt operates the business on FCF rather than EPS, suggesting naive P/E approach misses upside

Out \$106 PT is supported by an extensive SOP, applying only slight premiums to select subs

# Key Investment Points

## What about the long term? Growth is still clear

Focusing beyond 2018, management appears poised to continue to develop its LNG opportunities, focusing on both opportunities around its Costa Azul (ECA) site in Mexico and the addition of two further trains at its Cameron site (4 & 5). We understand the development of both sites is in the 2018+ timeframe, but with tangible data points on development likely by year end, we imagine this will increasingly occupy investor attention. Importantly, for ECA, we flag ambitions here are likely geared towards FTA countries (rather than non-FTA), likely to avoid any issues with the US DOE, as the project relies on imported natural gas (specifically, Chile and Hawaii were mentioned as potential opportunities). We understand the ECA export project could still encounter difficulty from the DOE's Presidential permit necessary to expand pipeline capacity from the US (Executive Mark Snell cautiously invoked the analogy of Transcanada's Keystone project to describe potential hurdles, emphasizing a tactical change in perceptions of international energy projects tied to the US).

**Lots going on, with litany of positive catalysts**

## What are the primary initiatives at the company?

- **Cameron LNG Export and MLP:** *Finalizing construction on a new LNG export facility as well as seeking acquisition targets to kick-start its own MLP. Desire is to capitalize on attractive General Partnership structure cash flows from Cameron once in-service in 2018/19. Look for ~\$200m/yr in MLP-qualifying assets (~\$2-2.5bn deal) – among other potential avenues to create an MLP.*
- **More LNG to come?** Looking to expand Cameron with additional "trains" of capacity and convert its second facility in Mexico, Cost Azul.
- **US Midstream:** *Re-contracting its REX pipeline, whose existing terms expire in 2019. Upside to 2015+ numbers, and sustaining viability of this non-recourse entity beyond initial contract expiration.*
- **Mexico:** *81% owner in IENOVA, premier vehicle to capitalize on midstream and power growth opportunities out of ongoing energy reforms in the country – as well as transition of economy from oil to gas.*

**All eyes will be on (re)contracting and the regulatory dockets in North America**

## Secondary

- **SoCal Gas:** *More spending on safety-related growth in California. Also to enable further gas plant expansions in the region.*
- **San Diego Gas & Electric:** *Transmission projects in a post-SONGS world and Battery storage.*
- **Renewables:** *Modest additions, but really could be a sell-down story.*

## Upcoming catalysts

*Sempra certainly has a lot going on – and with it – a lot of upcoming catalysts. We flag a few particularly relevant data points to keep scanning for:*

- **REX open-season:** New rate on East-West backhaul. Management expects details in the medium term, with any contract taking effect for 2015.
- **Rosamond Solar Contract:** Given management's confidence including this project in its projections (despite lacking a contract), we expect developments in the medium term (potentially part of pending California IOU's RFOs for new capacity).
- **Cameron LNG construction/final FERC:** Expect a FERC approval of EIS (next up on deck), as well as a final investment decision following recent assignment of EPC contract.
- **Finalization of second Mexican energy reform:** We continue to await finalization of the exact processes behind Mexico's ongoing midstream energy reforms, with specific opportunities elaborated throughout 2014 (accelerating currently disclosed growth projects).
- **Peru:** We look for both updates around its next Hydro generation project, as well as aims around large-scale pipeline development (\$3-4bn investment opportunity). We suspect investors have largely failed to appreciate the magnitude of these opportunities, particularly following the Analyst Day.
- **Addressing remaining merchant exposure:** We see management tacitly guiding towards a sale this year of its remaining Mesquite CCGT in AZ (partially contracted beginning in 2015), for value greater than its ~\$300m book value. Meanwhile, we continue to await developments around a contract for IENOVIA's TDM (MexiCali CCGT), interconnecting the project into Mexico away from California.
- **Sell-down of businesses?** Management has yet to execute on the sell-down of several subsidiaries, including ESJ in Mexico (150 MW wind farm), as well as further renewable projects (Rosamond).

## How to justify the higher value?

To address many investors' key concerns surrounding a "pricey" relative P/E multiple, we thought it would be appropriate to respond with four messages:

- 1) Many assets do not generate EPS:** We believe many investors fail to appreciate the inherent "leverage" in a number of investments that do not generate EPS. Specifically, its large midstream investments, including Storage, Cameron LNG import, and pipeline assets, do not generate any meaningful earnings. Additionally, its remaining interest in the merchant Mesquite CCGT doesn't either. Finally, we flag its renewable program, particularly solar (beyond the one-time benefit of the ITC) doesn't meaningfully generate earnings.
- 2) Repatriation impact is non-cash:** With management continuing to receive \$300m/yr in cash dividends from its international subsidiaries, we flag there is a \$60m/yr earnings impact, given the associated income statement impact of repatriation, which is itself non-cash, given its existing NOL position. We flag future extensions of bonus depreciation and further meaningful build of solar investments will extend its tax shield, and a decision to continue to bring back cash from abroad. This ~\$0.25/yr per share drag on earnings is transient, likely abating once its (current) tax shield is fully exhausted in ~2018/19. This would reduce the multiple by ~0.5x turn as the non-cash tax effect of repatriation stops.
- 3) Disproportionate growth?** Relative to utility peers, SRE's growth profile is top tier, promising 8-10% through 2018, but more realistically 9-11% through 2019 (effectively assuming Cameron Export LNG in-service). However, to state this would be to substantially under-estimate the leverage of its underlying portfolio. Importantly, segments such as its International Segment have yet to fully disclose incremental growth in Mexico and elsewhere, likely to drive mid-teens growth. Overall, including contemplated growth opportunities, we suspect the high end of its EPS growth rate is possible through 2019, particularly should it be successful in re-contracting its REX project at a reasonable rate, beyond its current 2019 expiration of offtake arrangements (not formally included in management's plan). Our formal estimates reflect a ~10% EPS CAGR, but execution on disclosed growth projects at the parent suggests growth could yet be in the low-teens.
- 4) Higher multiple businesses?** With a meaningful portion of the company invested in midstream and renewable businesses, typically valued using cash metrics (or EV/EBITDA), we see an argument for a premium multiple vs. utility peers "off-the-bat". On a P/E basis, with these businesses continuing to grow, the question remains whether there can be further expansion of the story.

Focus on EBITDA and FCF instead of EPS; a pure EPS approach does not fairly value all of SRE's assets

Under-earning assets provide leverage to upside

Repatriation earnings hit further distorts GAAP earnings

Bias for growth is to the high-end of guidance, if not higher

Investment in renewables and midstream assets naturally implies a premium P/E valuation

### Cash or earnings: What matters more in utilities?

We see the Sempra story as testing the limits of a diversified utility investors' willingness to go along with investments that generate cash flow in lieu of EPS. We flag that many utility peers in the sector have consciously opted to forgo many of the investments SRE management explores simply because they do not drive consistent EPS growth (despite attractive overall returns). Between NextEra and Sempra, we see these companies as having gained investor comfort in investing beyond the strict EPS growth – and focusing on the overall value of FCF generated. Rather, with some investors remaining cautious of this EPS approach, we still see

The FCF vs. earnings growth debate is elevated at Sempra

Mgmt appears to bias towards good FCF investments despite the impact on its P/E multiple



meaningful value in the shares. Akin to the eventual debate at AES, we believe management is likely to eventually trend towards the use of P/E accretive investments, making the overall story more attractive to more earnings-centric utility investors.

### How about parent leverage? Remains modest, but worth watching

The next table showcases parent debt (unallocated to any subsidiary). We attribute the bulk of these notes to previous investments in midstream, including storage and the Cameron LNG import project. For the purposes of our valuation, we've opted to net this out against projects among the more punitive approaches we've seen both for SRE and peers. Despite this more conservative approach, we still find meaningful value in shares, whereas we have historically seen this approach drive downside to Street targets (as is the case with FE and ETR).

Going forward, we suspect management will make more use of non-recourse structures to enable its midstream development (such as its REX project, as well as the development of its Cameron LNG export project).

Netting out interest expense on P/E basis instead of the notional debt would add \$9/sh to our SOP

Figure 1: Parent Debt Valuation Scenarios

Interest Rate	Maturity	Outstanding-- 12/31/13	Interest
2%	Mar-14	500	10
1%	Mar-14	300	3.03
7%	Jun-16	750	48.75
2%	Apr-17	600	13.8
6%	Jun-18	500	30.75
10%	Feb-19	500	49
3%	Oct-22	500	14.375
4%	Dec-23	500	20.25
6%	Oct-39	750	45
	Swaps	12	0
	Buid-to-suit Lease	14	0
<b>Total</b>		<b>4926</b>	<b>234.96</b>
<b>Scenario 1: Total Debt</b>			4926.00
<b>\$/sh of total debt</b>			<b>19.46</b>
After-tax Interest Expense (assuming 35% tax rate)			152.7208
Multiple			<b>18</b>
Interest Expense with Multiple			2748.97
<b>Scenario 2: Interest Expense with Multiple</b>			2748.97
Difference between scenarios			2177.03
<b>Difference between scenarios per share</b>			<b>8.60</b>

Source: Company Reports & UBS. All values are \$Mn.

# Valuation

## Sum of the parts

We value Sempra at \$106/share, applying P/E multiples against its portfolio of utilities (SDG&E, SoCal Gas, and its two Southeast gas LDCs, as well). We value IENova using its current equity value in Mexico and Luz Del Sur using the value of its local shares as well.

Figure 2: Summary SOP Valuation for SRE

Summary Sempra Sum of the Parts Analysis - UBSe		Valuation/Share
Segment	Primary Methodology	
<b>Sempra Natural Gas</b>		
Storage, Cameron (Import & Interstate), and REX Gas LDCs	7-12x EV / EBITDA 16x P/E	\$3.86 \$0.72
<b>Total Sempra Natural Gas</b>		<b>\$4.57</b>
<b>Sempra US Power &amp; Renewables</b>		
Solar	14x EV/EBITDA	\$0.53
Wind	7-12x EV/EBITDA	\$1.13
Accelerated Depreciation Tax Shield and Other	NPV	\$5.56
<b>Total Sempra US Power &amp; Renewables</b>		<b>\$7.22</b>
<b>Cameron LNG Export Project</b>		
Trains 1-3	NPV of 9x EV / EBITDA and MLP Accretion	\$16.44
Accretion due to GP/LP Structure in MLP		\$3.36
Trains 4-5		\$2.40
<b>Total Cameron LNG Export Project</b>		<b>\$22.20</b>
<b>California Utilities</b>		
SoCal Gas	16.5x P/E (1x Premium)	\$25.86
SDG&E	15.5x P/E (1x Premium)	\$33.94
<b>Total California Utilities</b>		<b>\$59.80</b>
<b>International</b>		
SRE Mexico	12x EV/EBITDA	\$10.25
PEMEX JV	14x EV/EBITDA	\$4.67
Growth Opportunity: Midstream Pipeline	6x EV/EBITDA	\$7.30
Chile (Chilquita) - Unlisted	11x P/E	\$4.40
Peru - Listed	Public Value	\$4.97
<b>Total International</b>		<b>\$31.59</b>
Less: Parent Debt	Book Value	(\$19.46)
<b>Grand Total Sempra</b>		<b>\$105.91</b>

Source: Company reports and UBS estimates. All values are \$Mn.

## Full sum-of-the-parts valuation

**For its US Power & Gas business**, we value its Rex pipeline at an average of book value and distributions from the project through 2019, including potential backhaul. While nominally, we see little value today for Rex (net of its respective portion of debt) we see future value of the pipe, given the reversal of flow to the Midcon.

As for its last merchant power project, Mesquite, we value this at an 80% discount to the sale of the first unit, at ~\$300m, equivalent to its book value today for the 625 MW CCGT in the AZ desert. We continue to expect Sempra to monetize this asset as available, particularly with its contract on nearly half of its remaining stake in the plant.

**As for its renewable business,** we apply an EBITDA multiple to the entire portfolio. We largely ascribe value from its tax credits (generated both from its solar business using ITC and wind portfolio from PTC). We look for greater clarity from management on valuing this segment in subsequent periods). We flag that our renewable approach co-mingles the overall tax shield the company benefits from through 2019. We flag the value is largely consistent with the \$707 Mn in book value disclosed on its balance sheet.

**For its Cameron LNG business,** we apply a 9x multiple to 2020E EBITDA, appropriately discounting the execution risk still behind the project. We discount this back 4 years to reflect our current SOP methodology. In addition, we provide nominal upside for additional Trains 4 & 5. We also tack on a full MLP model to tack on the accretion from an eventual structure, which would enable Cameron to be dropped down at a full 50/50 split; our model even accounts for the dilution from acquiring midstream assets initially at a dilutive multiple to kickstart the MLP in the initial years (2015-2018) at a \$100 Mn/yr of EBITDA (driving a ~\$1.2 Bn investment).

**For the California utilities,** we apply a 1x premium P/E multiple to both segments to reflect the disproportionate growth opportunities before both companies. While we're biased to see greater value in SoCal than SDG&E given the greater focus on safety spending and expanding use of gas in the state in the near term, we continue to see both as above-average growers in their own rights vs peers.

**As for the International Segment,** we use the market value of the Peruvian subsidiary and a peer multiple on Net Income from the Chilean business. Meanwhile, we apply US midstream multiples to the pipeline assets at IENova, its publically listed subsidiary in Mexico, the only one of its kind. We apply 14x EBITDA multiple to its Pemex-JV given the disproportionate growth opportunities and unique positioning to partner alongside the state.

*How about growth in Mexico?* We explicitly call out growth opportunities in the SOP, applying a market capture rate to the ~\$23 Bn in midstream opportunities identified as part of Mexican energy reforms of ~30% (equal to its current market position), applying a 30% probability on the hypothetical accretion off its historic build vs. market value.

**What about the debt?** Lastly, we net out the full value of the parent debt, among the most conservative valuation approaches possible, a \$19/sh drag. Applying this methodology to any other stock in our coverage universe typically produces a target *below* their current trading range (in sharp contrast to the current instance). We do *not* adjust for trued-up corporate FCF at the parent, as our segment level approaches have largely captured interim cash flows.

**Figure 3: SOP Valuation – Page 1 (\$Mn unless otherwise indicated)**

Sum of the Parts Analysis - UBSe							
		2015E Adj. EBITDA	EV/EBITDA & P/E Multiple			Enterprise Value	
Sempra Natural Gas							
Storage, Cameron (Import & Interstate) and REX							
		Low	Base	High	Low	Base	High
			EV/EBITDA				
Storage	9	11x	12x	13x	\$96	\$104	\$113
<u>Exclude any contribution from Cameron LNG Import and Associated Pipeline Facility</u>							
Cameron Interstate Pipeline (2018e)	26	9x	10x	11x	\$235	\$261	\$287
Cameron Import [Off Existing Contracts]	25	6x	7x	8x	\$150	\$175	\$200
<u>REX Pipeline Valuation</u>							
DCF Project Distributions w/o Backhaul Uplift in '15+ / No Value in '19+		DCF @ 8%				\$354	
Add: Incremental Value of Backhaul (w/o volume expansion, net of cost)		DCF @ 8%				\$82	
						Total (From	Plus '19+
					Min @ BV	Above)	Value
Equity Value (Primarily through Distributions to Parent)					\$329	\$435	\$466
REX-Project Debt 2015 @ 25% Ownership - Excluded/Unconsolidated					(\$775)	(\$775)	(\$775)
<u>Gas LDCS</u>							
			P/E				
Gas LDCS	11	15x	16x	17x	\$170	\$181	\$193
Total Natural Gas Equity Value					\$595	\$1,157	\$772
Total Natural Gas Equity Value per Share					\$2.35	\$4.57	\$3.05
Sempra US Power & Renewables		2015	EV/EBITDA				
Renewables							
Solar (adjusted for SRE's Interest)	68	13x	14x	15x	\$883	\$951	\$1,019
Wind (adjusted for SRE's Interest)	69	11x	12x	13x	\$762	\$831	\$900
Wind PTC value	48	6x	7x	8x	\$288	\$336	\$384
Total Value of Renewable Projects (ex- Accelerated Depreciation)					\$1,933	\$2,118	\$2,303
Accelerated Depreciation Tax Shield NPV (2015+ Onwards) - NPV @ Parent of All Tax Benefits					\$1,032	\$1,032	\$1,032
Solar-Project Debt 2015	(816)				(\$816)	(\$816)	(\$816)
Wind-Project Debt 2015 (unconsolidated OBS)	(882)				(\$882)	(\$882)	(\$882)
Total					(\$666)	(\$666)	(\$666)
Total Value of Renewable Projects - Equity					\$1,267	\$1,452	\$1,637
Additional projects							
Renewable Pipeline (Rosamond, Mesquite Expansion, ESJ Part II)	MWs	\$/kW					
	875	\$100			\$88	\$88	\$88
Mesquite CCGT (625 MW Remainder)							
	Sale Price in 2012:	Haircut:	Book Value on B/S (\$ Mn):		\$287	\$287	\$287
	\$371	-23%	\$287				
	Implied \$/kW		\$459				
US Power & Gas Portfolio Equity Value					\$2,236	\$2,983	\$2,783
US Power & Gas Portfolio Equity Value per Share					\$8.83	\$11.79	\$11.00
Cameron LNG Export Project							
Baseline Project Value							
		2020 EV/EBITDA					
2020 EBITDA	\$874	8x	9x	10x	\$6,989	\$7,863	\$8,736
Approximate Debt assuming 67.5% debt (per guidance)	(\$2,203)				(\$2,203)	(\$2,203)	(\$2,203)
Equity Value					\$4,786	\$5,660	\$6,534
Implied per Share					\$18.91	\$22.36	\$25.82
Accretion due to GP/LLP Structure in MLP	Date of High Splits	1Q2018E			\$1,157	\$1,157	\$1,157
Implied per Share	(Net of Dilution from Midstream Acquisition)				\$4.57	\$4.57	\$4.57
Total 2020 Value Discounted @ 8% Back to 2016 (4-Years)	8%				\$4,368	\$5,011	\$5,653
Opportunity on Train 4/5 (Assuming Build in 2021), per share						\$608	
Cameron LNG Export and Potential MLP Equity Value					\$4,976	\$5,618	\$6,260
Cameron LNG Export and Potential MLP Equity Value per Share					\$19.66	\$22.20	\$24.74

Source: Company reports and UBS estimates

**Figure 4: SOP Valuation – Page 2 (\$Mn unless otherwise indicated)**

California Utilities									
2016 Net Income			P/E Multiple			High	Low	Base	High
		Low	Group	Discount/	Base				
SoCal Gas									
SoCal Gas	\$397	15.5x	15.5x	1.0x	16.5x	17.5x	\$6,149	\$6,545	\$6,942
Implied per Share	\$1.57						\$24.29	\$25.86	\$27.43
SDG&E									
SDG&E	\$554	14.5x	14.5x	1.0x	15.5x	16.5x	\$8,036	\$8,590	\$9,144
Implied per Share	\$2.19						\$31.75	\$33.94	\$36.13
Total California Utility Value							\$14,184	\$15,135	\$16,086
Total California Utility Value per Share							\$56.05	\$59.80	\$63.56
International Segment									
Mexico (IENova)									
2015 Adjusted EBITDA			EV/EBITDA Multiple			Enterprise Value			
SRE Mexico - Mexi-Cali CCGT	\$31		11.0x	12.0x	13.0x	\$343	\$374	\$405	
SRE Mexico - Costa Azul LNG Import	\$175		11.0x	12.0x	13.0x	\$1,566	\$2,100	\$2,275	
SRE Mexico - Midstream (non-PEMEX JV)	\$142		11.0x	12.0x	13.0x	\$1,566	\$1,709	\$1,851	
PEMEX JV for Pipeline	\$117		13.0x	14.0x	15.0x	\$1,516	\$1,633	\$1,750	
Baseline Midstream Business EV	\$465		10.7x	12.5x	13.5x	\$4,992	\$5,816	\$6,281	
Net Debt (IENOVA)						(\$984)	(\$984)	(\$984)	
PEMEX JV									
Net Debt (PEMEX JV)						(\$175)	(\$175)	(\$175)	
Baseline Midstream Business Equity Value						\$3,833	\$4,657	\$5,122	
Implied value per Share of IENOVA (in Peso)						43.57	52.94	58.23	
Growth Opportunity: Just Midstream Pipeline (Excludes Gathering, Renewables, LNG Export, etc.)									
Total Build on Midstream (\$ Bn)	\$23		EV/EBIT DA Build Multiple			12.0x			
Capture Rate	30%		EV/EBIT DA Valuation Multiple			6.0x			
Total Build for IENOVA (\$ Bn)	\$6.9		Accretion Value (EV/EBIT DA Build Multiple)			6.0x			
Implied Annual EBITDA	\$1.2		Accretion (\$ Bn)			\$6.9			
			Probability Weighting (1/3 Likely to Materialize)			33%			
Growth Opportunity Upside (\$ Mn)						\$2,277			
Implied value per Share of IENOVA (in Peso)						25.88			
2015 Adjusted EBITDA									
Gross Equity Value						\$6,110	\$6,934	\$7,399	
Implied value per Share of IENOVA (in Mexican Peso)						69.46	78.82	84.11	
Implied upside on current shares							16%		
Sempra Ownership (%)						81%	81%	81%	
SRE-Owned Equity Value						\$4,955	\$5,623.29	\$6,001	
SRE Mexico- Total Equity Value per Share							\$19.58	\$22.22	\$23.71
Market Value of Internationally Listed Subsidiaries									
			Mexico (IENova)		Peru (Luz Del Sur)				
Share Price			68.01		9.10				
Shares Outstanding (Total)			1,154		487				
Local Market Cap			78,484		4,431				
F/X Rate (MEX/USD and SOL/USD, respectively)			0.08		0.36				
IENova Market Cap (Mexico), USD			\$5,983		\$1,576				
Sempra Ownership (%)			81%		80%				
Sempra's Stake in Subsidiary			\$4,851.94		\$1,258.05				
Subsidiary Value per Share			\$19.17		\$4.97				
2015 Net Income									
Chile (Chilquita)- Unlisted	\$101		10.0x	11.0x	12.0x	\$1,011	\$1,112	\$1,214	
Implied per Share	\$0.40		Applying Peer Group Multiple			\$4.00	\$4.40	\$4.80	
Total International Segment Value (Using UBSe for Chile/Mexico & Market Value for Peru)							\$28.55	\$31.59	\$33.48
All Segments Value per Share							\$113.09	\$125.37	\$132.77
Netting out the Parent Debt							(\$4,926)	(\$4,926)	(\$4,926)
Implied per Share							(\$19.46)	(\$19.46)	(\$19.46)
Shares Outstanding (2015E)							253	253	253
Total Equity Value per Share							\$93.62	\$105.91	\$113.31

Source: Company reports and UBS estimates

## Estimates by segment: We're at the top end already

We include our net income and EPS projections by business unit below and compare to consensus. Including just marginal assumptions around future growth at renewables and execution of continued growth in Mexico, we readily achieve above the top end of management's \$6.00-6.50 2018 EPS estimate. Rather, we see management maintaining the current guidance to provide latitude in case of project execution risk around its Cameron LNG project among other single-asset execution. Meanwhile, we see cash flow and EPS growth continuing beyond 2018, driven by further LNG opportunities, Mexico, and even long-term projects in South America (\$3-4bn pipeline from Central Peru).

**Figure 5: Net Income by Segment**

Net Income	2014E	2015E	2016E	2017E	2018E	2019E	2020E
SoCalGas	\$354	\$385	\$397	\$417	\$453	\$497	\$539
<i>Guidance</i>	<i>\$325-\$355</i>	<i>\$360-\$390</i>					
SDG&E	\$510	\$535	\$554	\$583	\$613	\$644	\$673
<i>Guidance</i>	<i>\$470-\$510</i>	<i>\$500-\$540</i>					
South America	\$185	\$204	\$216	\$226	\$239	\$251	\$266
Sempra Mexico	\$174	\$202	\$227	\$257	\$286	\$331	\$387
Sempra International Total	\$359	\$406	\$444	\$482	\$525	\$583	\$653
<i>Guidance - Sempra International</i>	<i>\$355-\$380</i>	<i>\$390-\$420</i>					
US Gas	\$30	\$40	\$37	\$35	\$312	\$409	\$439
Renewables	\$57	\$50	\$113	\$272	\$191	\$132	\$138
US Gas & Power Total	\$87	\$90	\$149	\$307	\$503	\$541	\$577
<i>Guidance - US Gas &amp; Power</i>	<i>\$80-\$100</i>	<i>\$80-\$100</i>					
Parent & Other	(\$201)	(\$200)	(\$242)	(\$379)	(\$386)	(\$373)	(\$370)
<i>Guidance - Parent &amp; Other</i>	<i>(\$200)-(\$170)</i>	<i>(\$200)-(\$170)</i>					
Consolidated NI	\$1,110	\$1,216	\$1,303	\$1,410	\$1,708	\$1,891	\$2,071
<i>Guidance - Consolidated NI</i>	<i>\$1030 - \$1180</i>	<i>\$1130-\$1280</i>					
UBSe EPS	\$4.42	\$4.81	\$5.10	\$5.41	\$6.50	\$7.12	\$7.73
<i>Guidance - EPS</i>	<i>\$4.25-\$4.55</i>	<i>\$4.60-\$4.90</i>		<i>\$6.00-\$6.50</i>			
<i>Consensus EPS</i>	<i>\$4.46</i>	<i>\$4.86</i>	<i>\$5.16</i>	<i>\$5.42</i>	<i>\$6.25</i>		

Source: Company reports and UBS estimates. (\$Mn unless otherwise indicated)

For those thinking in terms of EBITDA, we also include our parent EBITDA vs. segment level. We assume a growing parent drag in the long-term to offset the expanding size of the business (again, conservative, in our view). From a financing perspective, we expect more debt to be allocated to specific projects using subsidiary-level debt rather than pursuing more parent debt (limiting interest expense inflation at the parent).

**Figure 6: Adjusted EBITDA by Segment**

Adjusted EBITDA	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
SoCalGas	\$933	\$1,078	\$1,126	\$1,177	\$1,303	\$1,401	\$1,523	\$1,650
SDG&E	\$1,333	\$1,637	\$1,705	\$1,668	\$1,752	\$1,839	\$1,924	\$2,006
South America	\$335	\$357	\$391	\$415	\$431	\$453	\$473	\$495
Sempra Mexico	\$307	\$387	\$465	\$530	\$605	\$666	\$754	\$862
Sempra International Total	\$642	\$745	\$856	\$945	\$1,036	\$1,119	\$1,227	\$1,356
US Gas	\$140	\$149	\$176	\$181	\$185	\$696	\$944	\$996
Renewables	\$27	\$57	\$61	\$82	\$181	\$207	\$204	\$221
US Gas & Power Total	\$167	\$206	\$238	\$263	\$366	\$903	\$1,148	\$1,217
Parent & Other	(\$30)	(\$6)	\$8	(\$38)	(\$209)	(\$180)	(\$201)	(\$222)
Consolidated	\$3,045	\$3,660	\$3,933	\$4,015	\$4,249	\$5,081	\$5,621	\$6,007

Source: Company reports and UBS estimates. (\$Mn unless otherwise indicated)

## Balance sheet still has latitude

Our projections, adjusting for pension and operating leases, indicate management has ample latitude to execute on further incremental growth projects without the need for external equity (consistent with management's mantra to manage within its cash flows). While the company does use its DRIP to the tune of ~\$100-125m/yr, it remains consistent in its statement that it does not intend to pursue external equity *aside* any potential transformative transaction to acquire adequate size to implement its MLP strategy: a deal for ~\$200m/yr in midstream EBITDA could very well involve ~\$2.5bn, with ~\$1.5bn in equity.

Moody's provides latitude in its cash flow metrics to manage down to 17%, providing maximum incremental investment of ~\$2bn (without considering incremental debt capacity from new investments). Assuming roughly 50/50 leverage, total incremental capacity would appear to be upwards of ~\$4bn, effectively providing latitude to engage in a wide range of transactions. Moreover, we suspect incremental equity raises at Chile and Mexico (both of which remain consolidated) are further levers to drive investment without a secondary equity raise at SRE parent.

**Management has ample leverage to execute on further growth projects**

**Ability to deploy \$4bn in further capex under current metrics**

**Figure 7: Projected Adjusted FFO/Debt Metrics using Moody's Methodology: Outlook Remains Robust**

Projected Credit Metric Analysis (Moody's)	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Cash Flow From Operations	\$1,784	\$2,956	\$3,037	\$3,050	\$3,207	\$3,789	\$3,898	\$4,022
- Changes in Working Capital	\$421	(\$80)	(\$65)	(\$65)	(\$83)	(\$254)	(\$252)	(\$118)
- Changes in Short Term Op. Assets & Liabs.	\$200							
<b>FFO (CFO pre-W/C)</b>	<b>\$2,405</b>	<b>\$2,876</b>	<b>\$2,972</b>	<b>\$2,985</b>	<b>\$3,124</b>	<b>\$3,535</b>	<b>\$3,646</b>	<b>\$3,904</b>
+ Long-term Debt - Gross	\$12,945	\$13,746	\$14,439	\$15,076	\$15,582	\$15,618	\$15,700	\$15,657
Pensions Expense	24	24	24	24	24	24	24	24
Operating Lease Expense	54	54	54	54	54	54	54	54
Capitalized Interest	-44	-44	-44	-44	-44	-44	-44	-44
Debt Additions								
Pension	670	670	670	670	670	670	670	670
Capitalizing Operating Lease	741	714	687	660	633	606	579	552
Additions to Debt	1,411	1,384	1,357	1,330	1,303	1,276	1,249	1,222
Adjusted Debt Balance	14,356	15,130	15,796	16,406	16,885	16,894	16,949	16,879
Adjusted FFO	2,439	2,910	3,006	3,019	3,158	3,569	3,680	3,938
<b>Adjusted FFO/Debt Metric</b>	<b>16.99%</b>	<b>19.23%</b>	<b>19.03%</b>	<b>18.40%</b>	<b>18.70%</b>	<b>21.12%</b>	<b>21.71%</b>	<b>23.33%</b>

*High Teens Target for Moody's (min would be 17%)*

Source: Company reports and UBS estimates. (\$Mn unless otherwise indicated)

## What about unconsolidated subsidiaries? More levered

Importantly, the statistics above do not include any unconsolidated subsidiaries, which typically employ meaningful leverage at the project entity. We flag that management pursues a policy to purposefully unconsolidated highly-levered assets (such as wind and solar renewables) despite their non-recourse nature. While a bit odd in our view (seeing that the total debt on the balance sheet remains semantics), we appreciate management's desire to maintain an optically low level of leverage. For credit assessment above, equity distributions from these entities are considered in the CFO calculation. A key advantage of this strategy appears to be the rating agency's decision thus far not to impute any of this non-recourse debt back on the balance sheet; in contrast, NextEra has a 25% attribution from the agencies for its non-recourse subsidiaries. The agencies could yet attribute

**Management purposefully sells down highly-levered projects to deconsolidate from its books**

some amount of debt associated with Cameron's LNG export project, seeing this project as transformational and strategic for Sempra as a whole (we have *not* included this above in our metrics).

### Our cash flows compare to management's quite well

The above assumptions and projections align well with disclosed cash flow projections from management's latest Analyst Day. Importantly, management continues to benefit from paying no cash taxes for the foreseeable future. Our total CFO is above management's, given our EPS estimate is at the high end of its forecast range.

**Figure 8: Comparison of Cash Flows vs. Analyst Day Guidance**

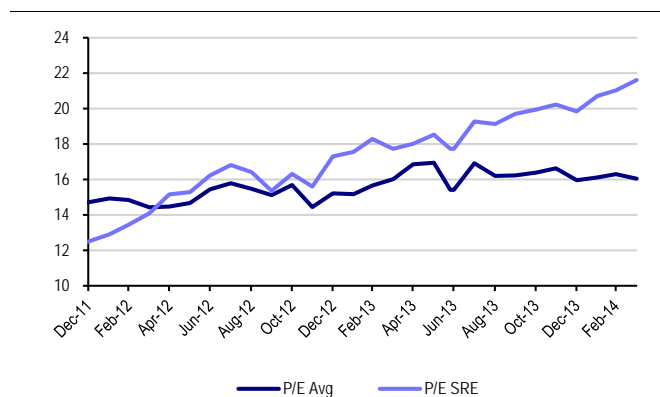
	Mgmt	UBSe
Div UBSe vs. Guidance	\$3,600	\$3,628
Equity UBSe vs. Guidance	\$600	\$600
Asset Sales and Return of Capital Guidance	\$800	\$500
Depreciation Guidance	\$6,500	\$6,570
Working Cap/ Other CFO	\$2,400	\$2,397
Total CFO Guidance	\$15,300	\$16,038
Net Operating Loss (NOL), Nominal	\$1,250	
Net Operating Loss (NOL), NPV @ 8%	\$1,032	

Source: Company reports and UBS estimates. (\$Mn unless otherwise indicated)

### Where has the Stock Historically Traded?

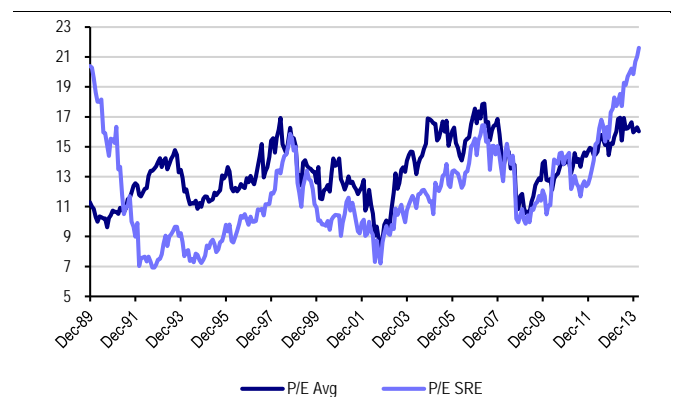
We flag that the implied P/E multiple on shares of Sempra have hit recent highs as shares continue to trade up ahead of multiple expansion from deepening growth opportunities and hopes of an eventual MLP. Meanwhile, we see broader multiple expansion in the renewable sector, and widening discrepancy in growth trajectory vs. utility peers as explaining the recent bifurcation.

**Figure 9: Sempra vs. Peer Group Relative P/E – Recently**



Source: FactSet and UBS estimates

**Figure 10: Sempra vs. Peer Group Relative P/E – LT Trend**



Source: FactSet and UBS estimates



## Key impediments and risks to the story?

We see three historic concerns as key risks to the story:

- 1) EPS quality has suffered from inclusion of gains in guidance: Given the disproportionate growth opportunities, we see management's decision to continue to include gains from asset sales in ongoing results as diluting the overall quality of the story (more so than other stories, given the plethora of growth, whereas other companies typically engaging in these practices are struggling to deliver on any growth).
- 2) Previous development efforts have faced challenges: We flag previous forays into midstream have produced little to show for them across a number of projects. Importantly, the initial Cameron LNG import facility drives negligible net income despite the ~\$1bn investment, as gas prices substantially declined in the US, limiting the attractiveness of the asset. Its existing cash flow is driven by legacy contracts signed to bring gas to the US from abroad, utterly uneconomic today, but subject to take-or-pay payments. Additionally, Sempra has struggled to make good on its previous investments in Storage and has worked its hardest to improve the situation of its REX pipeline (originally designed to bring gas to Ohio, rather than away). With respect to the LNG import and the REX line, we see the macro/commodity market as simply having moved against the company, rather than mismanagement of the situation. Ultimately, we see future projects as largely attractive and likely to generate appropriate returns.
- 3) Parent leverage is real: Following on past investment struggles, we flag there is ~\$5bn in parent leverage without many explicit projects with which to attribute the debt. With some of the notes either short term or explicitly floating, we see exposure to rising interest rates. However, there is a note at 9.8% due in 2019 that could still be refinanced (an interest savings opportunity of ~\$20m). We don't see this leverage as disproportionate to the company's relatively large size/wealth of other investments.

**Incorporation of gains on asset sales in recurring earnings clouds the growth story**

**Previous midstream ventures operational leverage on recontracting and re-use of asset base**

**Management increasingly uses non-recourse debt to limit risk to overall company from specific entities**

## What are the execution risks?

Looking forward, we identify our two primary risks to the story:

- 1) Execution risk around LNG export terminals: While a clearly tested technology, with much of the EPS growth tied to successful execution on the build out of the Cameron LNG terminal we see concentrated project risk.
- 2) Successful execution of pending Mexican energy reforms: With high hopes already reflected in shares of IENova, we remain confident the country will go the distance in executing on previously passed intentions to move forward with incremental private investments in its energy infrastructure

## International: Underappreciated to drive disproportionate growth

Among the most under-appreciated elements of the story remains its International growth. Despite stating it does not intend to invest further capital from Sempra parent at its recent Analyst Day, we see International growth across its three subsidiaries as the most important element of the story. With the South America segment driving ROEs in the mid-teens in recent years, and significant ability to lever up the segment (in addition to using cash on the balance sheet), we suspect this segment is likely to see continued mid-teens growth. We flag exact timing and competition around projects as problematic. While these businesses tend to trade at lower multiples vs. US peers, management is not injecting any capital from the US parent to execute on its plans. Rather, we see the potential for a Chilean IPO of Chilquinta as enabling continued growth without the injection from the parent, as well as emphasizing the underlying equity value of the business. An IPO would likely be executed around success in developing a contemplated Peruvian gas pipeline; however, this is likely to prove protracted (hence not necessarily a 2015 action, in our view).

**International business can achieve above-average growth without any further SRE parent capital contributions...**

**...however, substantial subsidiary equity is likely in coming years...**

**...coupled with a potential IPO of its Chilean subsidiary too**

## Mexico is the crown jewel: IENOVA and SRE's stake key to investment

We see the ongoing energy reforms in Mexico as among the most important opportunities globally in the utility/midstream universe, as the country is poised to allow for a greater role of private capital as well as enabling a transition of its energy economy towards cheaper natural gas, away from oil. Just as the US has experienced its own shale gas revolution, we suspect growing exports from the US, coupled with its own efforts to pursue fracking, are likely to drive down aggregate consumer energy costs vs. its conventional reliance on oil as its primary fuel source. With IENOVA's infrastructure primarily located in the north, enabling imports and development of E&P fields in the northern part of the country (near the Eagleford shale in Texas), IENOVA retains a clear advantage vs. peer developers (primarily foreign). Beyond the success of its IPO in the last year, we suspect delineation of growth opportunities has just begun, with the company poised to only really disclose the extent of its potential post-energy reform market share through the next ~18-month period (through 2015, in our view). Importantly, all disclosed growth projects are not predicated on execution of any energy reforms in the country.

**While dilution is a potential risk, the earnings pie should expand faster**

## Energy reform many avenues for growth

We perceive many investors have failed to fully appreciate the extent of growth available in Mexico: 1) the company is contemplating growth across a wide range of energy verticals, including pipeline, renewables, and gathering, to name a few; and 2) the extent of further opportunities available coming out of Mexican energy reform, totaling ~\$140bn, with ~\$22bn in further pipeline opportunities. Growing competition is likely to result in only a portion of projects being allocated by CFE back to IENova. We look for details on the secondary energy legislation to be forthcoming in the weeks ahead.

We caution the substantial growth in Mexico will likely lead to some dilution in its total ownership, with meaningful equity raises at the subsidiary level forthcoming to fund the substantial spend.

## What about Costa Azul? Mexican LNG Opportunity

Meanwhile, we also look for management to provide substantially greater detail by year end with respect to future intentions to convert this to an LNG export asset as well, following the same playbook from its Cameron asset. Management continues to moderate expectations around the size of this project, given its land position as well as the potentially prickly process of receiving a presidential permit to expand its existing gas pipeline interconnection with the US. While the project would not technically need DOE approval for exports to non-FTA countries, we believe the presidential permit could place tantamount restrictions on the project. The company continues to evaluate alternative LNG export opportunities at adjacent locations as well. Regardless, we suspect an export project could be used to ship volumes initially to Southern Mexico (given the lack of readily available gas infrastructure to the South), as well as to other South American countries, including Chile, and finally even Hawaii (given its oil based economy).

Costa Azul can capitalize on regional gas scarcity

## Mexico: Next steps towards growth

We see a number of opportunities before IENova to capture near-term infrastructure opportunities in the country to a host of other possible avenues. The Mexican government hopes to invest roughly \$50bn in power, natural gas, and electric transmission projects over the next few decades.

### Los Ramones II – Next slice of projects?

Following its success in winning the RFP for the Los Ramones I project as a JV with PEMEX, we look towards management's efforts to win further rights to develop this enormous ~\$1bn project.

### Awarding Baja California Wind Project in July

We look for a data point in July from the CFE (Mexican utility) regarding awards for up to 300 MW of renewables in Baja California. We suspect IENova is well positioned to capture this opportunity with land adequate to accommodate over ~1.2GW. This is on top of ongoing build of 155 MW to build with SDG&E as a counterparty.

### MexiCali CCGT: Primary merchant piece to IENova

IENova's MexiCali asset is among the primary assets management continues to contemplate as a potential sale candidate, given its merchant status, selling into the Southern California market. We understand the project is evaluating disconnecting from the California market, and selling into the Mexican market (a clear NPV positive move, in our view, given oil continues to drive much of the power economics in the country). We believe an offtake agreement with the state-run Mexican utility CFE is a clear possibility.

If management is unable to contract this asset (in Mexico), it will likely seek to sell it

### More acquisitions to come too? Exploring gas LDC opportunities

We look for data points as to whether management will be successful in the acquisition of a small gas LDC in northern Mexico of ~100k. The ongoing RFP appears to drive a decision in April around any win in this regard.

## South America: Growth outside of Mexico?

An important tactical shift from the Analyst Day was management's delineation of a range of further growth projects out of its South American utilities in Chile and Peru, including a potential public listing in Chile of Chilquinta. We believe cash generated from the businesses will largely be reinvested in the countries as the company seeks to accelerate investment across South America. While no explicit growth targets were delineated for this segment of the business, management provided details of three potential substantial new investments.

- **Peruvian gas pipeline:** This appears to be a multi-billion dollar (~1,000 km) opportunity to build a new pipeline from the central rainforest region to the Southern coast. While competition for the project is down to one other large competitor, execution is likely to prove challenging. *Importantly, it appears this growth project could be pursued through the Chilean subsidiary, using proceeds raised from an IPO rather than through the existing Peruvian sub.*
- **Peruvian generation investments:** We look for management to articulate growth plans in coming months around potential new CCGT and Hydro assets in the country (its latest Santa Teresa project, a ~100 MW project, is expected to reach in-service in July). We suspect the 200 MW new hydro project (at \$1,500/kW) would cost ~\$300m.

Similarly, we suspect the CCGT is also contemplated at ~500 MW, suggesting a construction cost of \$300-400m, in our view.

- **More transmission?** Management continues to evaluate further investment transmission, primarily in Chile, with two substantial projects underway for 2018 and 2019.

## Utility (SDG&E and SoCal Gas) highlights

### What about PSEP spending? Opportunity to accelerate

Depending on resolution of its current PSEP petition, we see strong potential for management to accelerate its post-2018 investments into the current horizon. Management flags PSEP spending is \$1-1.5bn in the period beyond 2018 (with an equal amount of O&M) for projects including: 1) Pre-1946 pipeline replacement; 2) continued automated valve installation; and 3) test/replace pipes, particularly those not up to the initial standards test.

### Transmission build-out at utilities (and competition)

In its latest update at the Analyst Day, management disclosed it was including several new projects approved by the CAISO for its SDG&E region, but was excluding two further projects worth ~\$250m subject to competitive solicitation by the CAISO. Given the difficulties of development in California, we believe SDG&E will remain the developer of many of the regional opportunities subject to CAISO's FERC 1000 policies for competitive solicitations. In addition, a further competitively bid Sycamore line was excluded (although capex on this project was not disclosed, likely for competitive reasons).

**Management is excluding ~\$250m of competitive transmission from its plan- projects we expect SRE can ultimately win**

## Addressing rate headwind

Management remains keenly aware of an untenable rate structure in place for its electric utility, and the need to revise downwards to reflect a more equitable allocation of rates across consumer classes. We suspect this subject is likely to gain momentum throughout the year, with investor concerns likely growing. Given the decoupled nature of sales, a pending collapse of the tiers (which should slow value proposition of DG substantially), and the raising of fixed charges (~\$5/month), we are less concerned. The exact future of its rate tiers remains unclear, although we expect a decision on this in the end (migration towards 2 or 3 rates remains unclear).

**Rate tier reform continues to remain unclear**

## What about growth at SoCalGas

Management cautioned that the segment's 12-14% rate-base CAGR was unlikely to drive parallel EPS growth, given two significant headwinds: 1) a tax expense uptick of \$30-35m in 2016; and 2) growing interest expense, as the segment recalibrates up its debt capitalization. Applying a ruler to the slide deck indicates an EPS growth CAGR of ~6% through the forecast period. However, given the large number of projects excluded, we see substantial further contemplated spend, including around incremental new generation projects in the region, although this could yet be quite long-dated vs. initial expectations. We suspect this could begin to be incorporated in 2015, at least at some of these projects, such as the latest Southern Gas System Reliability proposal.

## Midstream opportunities

### Figuring out a solution for the REX pipeline

Management appeared substantially more confident on resolving the economics for the 25% owned Rockies Express (REX) pipeline. Importantly, management intends to convert the latest non-binding open season into firm revenues by 2015. Judging from the basis between the Chicago region and Utica, we suspect pricing could very well be in the range of ~\$0.30MMBtu, which would be incremental to the currently authorized \$1.07MMBtu. A further key to the project remains the value of incremental value of re-contracting on the West-to-East portion from the Rockies to Chicago (for 2019). We suspect this will be substantially reduced off current levels, to the tune of ~\$0.15MMBtu (given the existing basis differential).

**Re-contracting the pipeline is a chief risk**

How to deal with the maturities? We suspect management is likely to move forward with refinancing its 2015 maturity next year for a ~5-year period (effectively pushing out the maturity until the end of the existing contract period). Management continues to see \$80-90m in distributions (likely higher once the new backhaul contracts are put in place). However, once the contract rolls off in 2019, we see limited ability to distribute any further cash; rather, we see incentive for management to use some of the added cash from the incremental backhaul contract in the interim to payoff project level debt.

Is this really "good enough" to drop into an MLP? That is among the chief questions for the future of the asset. We increasingly believe yes; however, the timing of any such drop remains unclear, as re-contracting timing and pricing is elusive. Additionally, with more limited distributable cash, it remains unclear if the long-term value of the project would be adequately valued within any structure.

**We think REX could be a candidate for the MLP, but questions remain**

What about expansion of the Eastern portion? We see further opportunity around an eventual expansion of its Eastern leg of the project, spending just very modest

capital (~\$15m) to interconnect a small lateral (200 mcf/d) from its existing delivery point of Covington, OH into the Utica. We suspect there is the potential for a further lateral network into the pipe.

### **Further LNG Opportunities? Absolutely**

Management appeared quite comfortable in discussing further expansions of its LNG Trains 4 & 5 to the Cameron site, totaling 1-2m tons/yr. While not expanding with actual construction cost details, it estimated it could achieve the brownfield expansion without further barge berthing investments and with minimal further storage tanks. Rather, management's primary caution on the expansion related to finding a relevant offtake for the incremental gas, emphasizing that the latest project could still be more geared towards FTA countries (including Europe, Korea/Japan, and South America) following the latest emphasis on providing greater energy security, given rising tensions with Russia over Ukraine). We look for expanded details here as well in coming months, with in-service of these assets more likely in the ~2019-20 timeframe.

### **And beyond? Still More LNG opportunities**

While the opportunity set is nascent, management also disclosed recently it had acquired land in Port Arthur, Texas to develop yet another LNG export site.

### **Rising Cash Flow and Net Income Profile of Cameron**

Management disclosed at its Analyst Day that Cameron's CF profile would improve as debt is amortized and has lower interest expense. This suggests net income is likely to approach \$400m/yr (~a \$75m/yr improvement off the mid-point of the initial range) within 10 years following project in-service (~2018).

Over time, as debt amortizes and interest expense declines

## **Cameron LNG export project**

As a reminder, Semptra has retained a 50.2% interest in the \$9-10bn MLP export project, with several other partners. We understand the final capital structure continues to target 65-70% leverage, with a bias towards "over-leveraging" the project up front (modest, but limiting the need for any Semptra equity to ~\$200m if at all beyond the initial drop down of the ~\$1.5bn existing Cameron *import* facility).

The crown jewel of growth for Semptra

### **We look for financing details later this year**

We look for a financing package to be announced around a future monetization strategy with the MLP by mid-2014. Management is currently finalizing loan commitments with Japanese export credit agencies. It just signed a commitment letter with commercial banks worldwide. While the entity and the financing is likely to be non-recourse and self-contained, management remains adamant in "optimizing" the equity value of the project, garnering the highest equity value possible. In addition, use of cash flows while the project is gradually brought online is key; as currently structured, we anticipate cash flow from trains brought online will fund the remaining equity investment needed to complete the project (hence the de-leveraging that occurs through project construction cycle)—and delaying any real *distributable* cash flows from the project until ~2019.

Currently finalizing loan commitments with Japanese export credit agencies

## How to think about MLP potential?

We believe an eventual MLP drop-down is practically inevitable, however, the exact structure and terms have yet to be delineated. The strongest possibility that we've considered below is for Sempra to purchase pipeline assets ahead of Cameron's dropdown in order to start the MLP and move the GP distribution into the high incentive splits; this is consistent with commentary at the Analyst Day. We believe the MLP is the clearest angle to drive "further value" for Sempra shareholders.

### Simplest form: Straight MLP

In its simplest form, Sempra could opt to create an MLP through its existing portfolio of assets, including the REX pipeline, gas storage assets, and ultimately an LNG export facility. This baseline structure, however, would likely need to see the LNG facility dropped down to drive into the higher IDR splits with the GP, rather than having an entity that was already at this point in 2019. Moreover, the question on *when* SRE would create this MLP structure would be relevant as well, with a timing mismatch between limited growth of its existing asset base (and *no* organic growth profile aside from the Cameron project).

This appears less likely following market pushback on asset quality of REX

### Acquiring some more assets to get "started"

This is our most likely scenario. Taking this basic form a step further, we see the potential for Sempra to move to acquire select quality midstream assets to "kick-start" its own MLP. This could very well be dilutive in the near term, given fierce competition for assets alongside existing MLPs with a lower cost-of-capital. But the payoff would be to drop Cameron into an MLP structure already at the 50% splits, enabling a greater NPV overall after the drop-down in 2018 of the Cameron LNG assets once they reach in-service. An interesting outcome of this strategy is that the MLP would not be able to make dilutive acquisitions by itself due to the need to cover cash distributions in the 1.0-1.1x range. For this reason, we would expect any dilutive acquisitions to take place at the Sempra parent level before being dropped in at an accretive transfer multiple (ie, the parent retains the dilution and the MLP retains the ability to cover its growing distributions). The maximum dilution that could be taken without economic harm to investors would be equal to the value accretion from dropping the assets and Cameron into the MLP. In our assumptions below, we assume that Sempra purchases \$100m of EBITDA at a 12.0x multiple and drops them into the early MLP structure for LP shares at a 9.0x value (ie, \$300m of dilution). The result is that Cameron is eventually dropped in at the 50% splits and the total accretion vs. a 9.0x EV/EBITDA multiple is still \$1.2bn, or \$4.61/sh, including the parent-level dilution.

We see acquisition of just \$100-200 Mn/yr of qualifying EBITDA as enough to 'kickstart' an MLP

We expect more details on the structuring of any such MLP acquisition to emerge in the coming year, as a decision to move forward would need to be swift to provide adequate runway to reach 50% splits under the GP in 2018 (assume a 3-year window to execute would drive a structure formed in early 2015).

### What size would be necessary?

We perform a scenario below to illustrate the necessary asset base to acquire to achieve an MLP implementation reaching the 50/50 splits as soon as possible. With little hard detail from management at this time, we include our initial math on what such a structure could look like.

Management laid out rough MLP plans, but just like for Dominion, the devil is in the details



## **Assumptions:**

- Initial phased dropdowns of acquired assets from 2014-17, reaching the high splits by 1Q18. We expect the company to start the MLP with about \$30m in distributable cash flow in 2014 – comparable to Dominion Resources' S-1 filing, but somewhat smaller than other recent MLP IPOs, including Valero in December 2013 at \$59m, Phillips in July 2013 at \$74m, and MPLX in Oct 2012 at \$105m.
- Full dropdown of Cameron export terminal in 2018 at the high splits, with all three trains coming online in 2018, followed by the first full year of commercial operations in 2019.
- LP distribution growth of 20% in the early years followed by 15%, then 10%, and eventually no growth once Cameron drops. The result is a 10% CAGR through 2022. In reality, we expect this to be a conservative assumption vs. the continued growth that management will presumably target.
- An initial LP yield of 3-5% by the time the MLP reaches the high splits in 2018. This compares to other recent 2012-13 MLP IPO yields of 3.7-4.8% for Valero, Phillips, and MPLX; it also compares to our MLP comp group average for more mature MLPs of 6.1%.
- For valuation purposes, we assume that SRE keeps all LP and GP shares, although it is likely that at least some significant portion of the LP units will be sold to the public to raise cash for the construction/expansion of Cameron beyond the initial three trains. Cash flows are discounted based on a levered beta since distributed cash flow is after interest expense and we assume 60% debt financing for Cameron vs. management's guidance of "up to 70% leverage".
- For the purposes of valuing the LP: We estimate the cost of equity at nearly 9%, near the mid-point of the range of equity cost for a variety of assets (8-10%). While our initial distribution implies a yield of 3-5%, this is justified by a substantial ~20% CAGR in initial distribution growth.
- For the purposes of valuing the GP: We apply a conservative ~2% *higher* cost of equity discount rate to reflect the capital markets risk in executing on drop-downs that only meaningfully will take place in 2018-19 as the Cameron export facility reaches in-service. Valuing this at the *same* rate as the LP would drive another \$1/sh in our SOP. We believe this portion of the value uplift from the MLP may take some time to fully reflect but anticipate at least a portion is reflected as investors more formally consider the GP along with the eventual S-1 filing.
- Taxation: We assume that 80% of distributions are taxed at a 20% capital gains tax throughout our NPV. The remaining 20% is taxed as regular income, offset substantially with depreciation deductions.

## **MLP assumptions:**

**Acquire \$100m of EBITDA at 12.0x and drop it in piecemeal from 2014-17 at 9.0x, with parent dilution as the cost of building the MLP up to a 50% GP split before Cameron; absorb \$300m of dilution to get to the 50% splits**

**Start the MLP with \$30m of distributable cash flow and build up from there**

**Drop Cameron in at the 50% splits from 2018-19**

**Realize \$1.2bn of LP & GP accretion (mostly from the GP value) on Cameron (\$4.61/sh).**



**Figure 11: Public Natural Gas Gathering and Processing MLP Comparisons**

UBS Estimate																
Ticker	UBS Rating	Unit Price		Market Cap (\$ billion)	Total EV (\$ billion)	Paid Distribn	Distribn CAGR	Ann Curr Yld	LP Unit Distribn Cover	Debt / NTM	Maint Capex / EBITDA	EV / LP's EBITDA*	Price / LP's DCP	GP's Share of Distribution	GP IDR Level	
		Current	Target			2014	3-Yr Fwd	2014	2014E		2013	2014E	2014E	2014E		
Nat Gas Gathering & Processing																
Access Midstream	ACMP	Buy	\$57.72	\$63.00	\$10.7	\$13.6	\$2.42	15.0%	4.4%	1.3x	3.2x	13%	15.7x	20.4x	19%	25%
Crestwood Midstream	CMLP	Neutral (I)	\$23.13	\$23.00	\$4.3	\$6.0	\$1.70	6.5%	7.5%	1.1x	5.9x	6%	13.1x	12.7x	6%	50%
DCP Midstream	DPM	Neutral	\$51.70	\$52.00	\$5.2	\$6.6	\$3.06	8.2%	6.1%	1.0x	4.1x	7%	16.5x	16.8x	27%	50%
MarkWest Energy	MWE	Neutral	\$64.15	\$65.00	\$11.0	\$13.5	\$3.56	7.4%	5.7%	1.1x	3.7x	3%	14.8x	15.9x	0%	No IDRs
Regency Energy LP	RGP	Buy	\$26.44	\$28.00	\$5.9	\$9.1	\$1.98	5.3%	7.6%	1.2x	4.3x	8%	12.5x	12.4x	6%	25%
Western Gas Partners	WES	Buy	\$66.08	\$72.00	\$7.8	\$8.9	\$2.70	15.6%	4.4%	1.2x	2.5x	7%	19.4x	22.1x	28%	50%
Midcoast Energy	MEP	Buy	\$21.47	\$23.00	\$1.0	\$4.0	\$1.35	16.0%	6.7%	1.2x	3.5x	0%	36.7x	14.6x	2%	2%
Average								10.6%	6.0%	1.2x	3.9x	6%	18.4x	16.4x	13%	
General Partners																
Energy Transfer Equity	ETE	Buy (UR)	\$46.38	\$44.00	\$25.7	\$63.7	\$1.55	16.2%	4.5%	30.0x	5.8x	0%	0.0x	30.0x	0%	0%
Crestwood Equity	CEQP	Neutral	\$13.94	\$14.00	\$2.6	\$9.5	\$0.58	18.9%	5.7%	24.1x	4.7x	0%	0.0x	24.1x	0%	0%
NuStar GP Holdings	NSH	Neutral	\$34.11	\$29.00	\$1.4	\$1.5	\$2.18	1.4%	6.4%	15.6x	8.1x	0%	0.0x	15.6x	0%	0%
Plains GP Holdings	PAGP	Buy	\$27.37	\$32.00	\$3.8	\$32.5	\$0.66	21.4%	3.2%	41.6x	84.1x	0%	0.0x	41.6x	0%	0%
Average								12.2%	5.5%	23.2x	6.2x	0.0%	0.0x	23.2x	0.0%	
Prices as of: 04/08/2014																

Prices as of: 04/08/2014

Sources: Company reports, FactSet, and UBS Research

NM = Not Meaningful, NA = Not Available, CBE = Core Banding Exception

Note: Averages are not market cap weighted. Propane and Marine Transport names are using Factset consensus est for leverage ratio.

Source: Company filings and UBS estimates

## Acquiring Assets to 'Build it Owns' MLP

We believe the most probable outcome is for management to acquire its own portfolio of qualifying midstream assets to kickstart its own MLP, separately acquiring an MLP management team to run the assets prior to the eventual drop down of Cameron. Specifically, we would expect any contemplated assets to still 'fit' with the underlying portfolio of Sempra assets including further assets in the Southeast (fitting with its existing Storage and Cameron asset) or along the border with Mexico in order to be contiguous with assets owned through its IENova subsidiary. Should REX gain sufficient long-term visibility on its cash flows, we see this asset too as eligible to be dropped down (most likely a ~2019 drop) assuming leverage can be addressed.

## What else? Acquire an entire Platform

We view outright *acquisition* of an entire midstream *platform* as unlikely as it would probably entail even more dilution than disaggregated asset purchases (including the sharing of GP interest). Ultimately, the goal would be to create an MLP that would have a "top tier" (high) teens-growth rate through the decade. We believe staying attuned to management's latest thoughts on *which* direction it intends to take its MLP acquisition strategy, as well as how it intends to structure it, is key. Ultimately, while the ability to extract GP IDR rents is worth only a few dollars per share in NPV value, the tactical decision to leverage the MLP asset to create an MLP platform could add materially more. Sempra is also open to potentially acquiring a small MLP to bridge the gap until it receives stable cash flows.

**"One-off" acquisitions would cause less dilution than buying a platform**

## Alternatively, could an MLP GP acquisition be in the cards?

We believe this is the most unlikely and potentially dilutive approach. Sempra could still be evaluating the acquisition of a GP interest in an MLP (or at least a stake in one) as part of an effort to be able to drop down the Cameron asset directly in the 50/50 splits without having to form its own MLP/grow one organically. That said, with valuations of GPs substantially above its own, this approach would prove especially challenging to make accretive.

## What does a stand-alone MLP look like for Sempra?

We include our best guess of a stand-alone model for SRE in the tables below, reflecting both the LP and GP takes, as we assume "gradual" drop-down of an MLP singularly predicated on selling stakes in the Cameron project. We see this as a baseline value "increment" for the company, with the expectation that management is likely to exceed the value delivered from this approach.

**Figure 12: Hypothetical Cameron MLP Scenario**

Sempra MLP	2015E	2016E	2017E	2018E	2019E	2020	2021	2022
LP Distribution Per Unit (Annualized)	\$ 0.12	\$ 0.14	\$ 0.17	\$ 0.20	\$ 0.22	\$ 0.23	\$ 0.23	\$ 0.23
<i>Growth rate per unit</i>		20%	20%	15%	10%	5%	0%	0%
Coverage	1.05x	1.06x	1.06x	1.05x	1.03x	1.05x	1.04x	1.03x
Terminal Value								\$ 6.37
Present Value of Distribution	\$ 0.11	\$ 0.12	\$ 0.14	\$ 0.14	\$ 0.14	\$ 0.14	\$ 0.13	\$ 0.12
Terminal PV								\$ 3.26
LP Equity Value Per LP Share								\$ 4.30
Implied Yield	2.8%	3.4%	4.0%	4.6%	5.1%	5.4%	5.4%	5.4%
<i>CAGR on Distribution Growth</i>								9.7%
<b>Value to Sempra</b>								
LP Distribution (\$M)	\$ 10	\$ 18	\$ 25	\$ 139	\$ 311	\$ 354	\$ 361	\$ 364
Terminal Value								\$ 10,031
Present Value of Distribution	\$ 10	\$ 15	\$ 20	\$ 99	\$ 205	\$ 214	\$ 201	\$ 186
Terminal PV	@ 14.1x terminal LP distribution							\$ 5,133
LP Equity Value								\$ 6,082
SRE Shares Outstanding								251
<b>LP Equity Value Per SRE share</b>								<b>\$ 24.21</b>
GP Distribution (\$M)	\$ 0	\$ 0	\$ 2	\$ 23	\$ 76	\$ 100	\$ 101	\$ 102
GP % of Total Distributions	2%	3%	7%	14%	20%	22%	22%	22%
Terminal Value								\$ 1,859
Present Value of Distribution	\$ 0	\$ 0	\$ 1	\$ 16	\$ 46	\$ 54	\$ 50	\$ 45
Terminal PV	@ 8.1x terminal LP distribution							\$ 822
GP Equity Value								\$ 1,034
SRE Shares Outstanding								251
<b>GP Equity Value Per D share</b>								<b>\$ 4.12</b>
2020 EBITDA								\$ 874
Approximate Debt assuming 67.5% debt (per guidance)								\$ 2,203
Debt/EBITDA coverage								2.5x
Total EV Implied from LP								\$ 8,285
Implied EV/EBITDA								9.5x
Accretion on LP vs. 9.0x EBITDA Multiple in SOP Valuation								\$ 422
Accretion from GP Structure								\$ 1,034
Parent-level dilution from pre-50% split asset purchases at 12.0x EBITDA								\$ (300)
<b>Total Incremental vs. UBSe No-MLP Assumption</b>								<b>\$ 1,157</b>
<b>Total Incremental vs. UBSe No-MLP Assumption (per Share)</b>								<b>\$ 4.61</b>

Source: Company reports and UBS estimates

Figure 13: Cameron MLP Deep Dive: Hypothetical Dropdown Schedule and Distribution Coverage, 2018-2020

Cameron		2015E	2016E	2017E	2018E	2019E	2020E
<b>EBITDA</b>					\$ 488	\$ 825	\$ 874
<b>Net Income before GP interests</b>					\$ 105	\$ 315	\$ 362
Equity earnings, net of distributions					\$ -	\$ -	\$ -
Depreciation					\$ 53	\$ 101	\$ 110
Other					\$ -	\$ -	\$ -
Provision for income taxes					\$ 73	\$ 219	\$ 251
Adjustment for maintenance capex					\$ -	\$ (212)	\$ (224)
<b>Total Distributable Cash Flow</b>					\$ 231	\$ 423	\$ 499
<b>% Dropdown</b>					75%	95%	100%
<b>Asset purchase #1</b>							
<b>EBITDA</b>		\$ 20	\$ 27	\$ 40	\$ 100	\$ 100	\$ 100
<b>Net Income before GP interests</b>		\$ 7	\$ 10	\$ 15	\$ 37	\$ 37	\$ 37
Equity earnings, net of distributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation		\$ 5	\$ 6	\$ 9	\$ 23	\$ 23	\$ 23
Other		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Provision for income taxes		\$ 4	\$ 5	\$ 8	\$ 20	\$ 20	\$ 20
Adjustment for maintenance capex		\$ (1)	\$ (1)	\$ (2)	\$ (5)	\$ (5)	\$ (5)
<b>Total Distributable Cash Flow</b>		\$ 15	\$ 20	\$ 30	\$ 75	\$ 75	\$ 75
<b>% Dropdown</b>		20%	27%	40%	100%	100%	100%
<b>Total (amounts in \$M, except per unit amounts)</b>		<b>2015E</b>	<b>2016E</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>	<b>2020</b>
Net Income before GP interests		\$ 7	\$ 10	\$ 15	\$ 142	\$ 352	\$ 398
Equity earnings, net of distributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation		\$ 5	\$ 6	\$ 9	\$ 75	\$ 124	\$ 132
Other		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Provision for income taxes		\$ 4	\$ 5	\$ 8	\$ 93	\$ 239	\$ 271
Adjustment for maintenance capex		\$ (1)	\$ (1)	\$ (2)	\$ (5)	\$ (217)	\$ (229)
<b>Total Distributable Cash Flow</b>		\$ 15	\$ 20	\$ 30	\$ 306	\$ 498	\$ 573
<b>Unit Structure</b>							
Common Units Outstanding		86	125	146	826	1,684	1,829
Issuance of New Common Units		115	13	24	1,302	325	76
Class B Common Units							
Redemption of Common Units							
<b>Total No. of Common Units Outstanding</b>		86	125	146	826	1,684	1,829
Beginning No. Subordinated Units Outstanding		-	-	-	-	-	-
Issuance of New Subordinated Units		-	-	-	-	-	-
Redemption/Conversion of Subordinated Units		-	-	-	-	-	-
<b>Ending Total No. Subordinated Units Outstanding</b>		-	-	-	-	-	-
<b>GP Interest Unit Equivalent</b>		2	3	3	17	34	37
Total Units Outstanding (including implied GP units)		88	127	149	843	1,719	1,866
<b>Total LP Units Outstanding</b>		86	125	146	826	1,684	1,829
Indicated Distribution		\$ 0.1206	\$ 0.1448	\$ 0.1737	\$ 0.1998	\$ 0.2197	\$ 0.2307
Annualized Indicated Distribution		\$ 0.1206	\$ 0.1448	\$ 0.1737	\$ 0.1998	\$ 0.2197	\$ 0.2307
% Increase yoy							
NPV LP Unit Price Per Share		\$ 3.02	\$ 3.02	\$ 3.02	\$ 3.02	\$ 3.02	\$ 3.02
LP Distribution Yield		4.0%	4.8%	5.8%	6.6%	7.3%	7.7%
Proceeds from Issuance of LP Units (\$M)		\$ 347	\$ 39	\$ 72	\$ 3,925	\$ 979	\$ 231
Date hit 50% splits	1Q2018E						
<b>Total Unit Distribution Coverage</b>		1.05x	1.06x	1.06x	1.05x	1.03x	1.05x

Source: Company reports and UBS estimates. (\$Mn unless otherwise indicated)

**Figure 14: Cameron MLP Hypothetical Incentive Distribution Structure and Cash Flow Analysis, 2018-2020**

Distribution Levels	2015E	2016E	2017E	2018E	2019E	2020
MQD	\$ 0.1206	\$ 0.1206	\$ 0.1206	\$ 0.1206	\$ 0.1206	\$ 0.1206
First Target	\$ 0.1206	\$ 0.1206	\$ 0.1206	\$ 0.1206	\$ 0.1206	\$ 0.1206
Second Target	\$ 0.1387	\$ 0.1387	\$ 0.1387	\$ 0.1387	\$ 0.1387	\$ 0.1387
Third Target	\$ 0.1508	\$ 0.1508	\$ 0.1508	\$ 0.1508	\$ 0.1508	\$ 0.1508
Thereafter	\$ 0.1809	\$ 0.1809	\$ 0.1809	\$ 0.1809	\$ 0.1809	\$ 0.1809
Incentive Distribution GP Sharing Percentage						
MQD	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
First Target	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Second Target	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Third Target	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Thereafter	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Structure						
Common Units	86	125	146	826	1,684	1,829
Subordinated Units	-	-	-	-	-	-
GP Interest Unit Equivalent	2	3	3	17	34	37
Total Units Outstanding (000's)	88	127	149	843	1,719	1,866
GP Share of Total Distributions	2.0%	2.6%	6.8%	14.5%	19.7%	21.9%
Total Distributions per Unit (assuming distributions are made based on Indicated)						
Common Units	\$ 0.12	\$ 0.14	\$ 0.17	\$ 0.20	\$ 0.22	\$ 0.23
Subordinated Units	NA	NA	NA	NA	NA	NA
GP Interest Unit Equivalent	\$ 0.12	\$ 0.19	\$ 0.62	\$ 1.66	\$ 2.64	\$ 3.17
Total Units	\$ 0.12	\$ 0.15	\$ 0.18	\$ 0.23	\$ 0.27	\$ 0.29
CASH IMPACT ANALYSIS						
Distributable Cash Flow for Total Units	\$ 15	\$ 20	\$ 30	\$ 306	\$ 498	\$ 573
Cash Flow Required for Common MQD	\$ (10)	\$ (15)	\$ (18)	\$ (100)	\$ (203)	\$ (221)
Excess/(Shortfall) Cash Flow after Common MQD	\$ 4	\$ 5	\$ 12	\$ 206	\$ 294	\$ 353
Cash Flow Required for GP MQD	\$ (0)	\$ (0)	\$ (0)	\$ (2)	\$ (4)	\$ (5)
Excess/(Shortfall) Cash Flow after GP MQD	\$ 4	\$ 5	\$ 12	\$ 204	\$ 290	\$ 348
Cash Flow Required for Subordinated MQD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Excess/(Shortfall) Cash Flow after Subordinated MQD	\$ 4	\$ 5	\$ 12	\$ 204	\$ 290	\$ 348
Additional Cash to Common Units based on Indicated	\$ -	\$ (3)	\$ (8)	\$ (65)	\$ (167)	\$ (201)
Additional Cash Flow to GP Units based on Indicated	\$ -	\$ (0)	\$ (1)	\$ (26)	\$ (86)	\$ (114)
Additional Cash Flow to Subordinated Units based on Indicated	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Excess/(Shortfall) Cash Flow	\$ 4	\$ 2	\$ 3	\$ 113	\$ 37	\$ 33
Total Distributions (assuming distributions are made based on Indicated)						
Common Units	\$ 10	\$ 18	\$ 25	\$ 165	\$ 370	\$ 422
Subordinated Units	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GP Interest Unit Equivalent	\$ 0	\$ 0	\$ 2	\$ 28	\$ 91	\$ 118
Total Distributions	\$ 11	\$ 19	\$ 27	\$ 193	\$ 461	\$ 540
Total Distributions to GP	\$ 0	\$ 0	\$ 2	\$ 28	\$ 91	\$ 118
Less MQD to GP	\$ (0)	\$ (0)	\$ (0)	\$ (2)	\$ (4)	\$ (5)
Incentive Distributions to GP	\$ 0	\$ 0	\$ 1	\$ 26	\$ 86	\$ 114
% of Net Income before GP Interests	0.00%	1.80%	10.04%	18.25%	24.57%	28.60%
COVERAGE RATIOS						
Common Unit MQD Coverage	1.1x	1.3x	1.6x	2.0x	2.3x	2.5x
Total Unit MQD Coverage	1.1x	1.3x	1.6x	2.0x	2.3x	2.5x
Common Unit Indicated Distribution Coverage	1.1x	1.1x	1.1x	1.1x	1.0x	1.0x
Total Unit Indicated Distribution Coverage	1.1x	1.1x	1.1x	1.1x	1.0x	1.0x

Source: Company reports and UBS estimates. (\$Mn unless otherwise indicated)

## The Renewables Strategy: Where to From Here?

With the opportunity around utility scale solar projects in California largely 'tapped' out the question has now become what next for the nascent developer of renewable assets. We believe the focus is likely to shift *back* towards wind development, moving beyond its seemingly defunct partnership with BP (who has indicated previously it was marketing its business), to capitalize renewable projects that were still seeking capital to execute on projects that already qualified for the PTCs. We expect developments on this front in coming months.

**Figure 15: Sempra US Gas & Power's Renewable Assets**

Name	MW <sup>1</sup>	Sold Down yet?	JV Partner
<b>Operating</b>			
Copper Mountain Solar 1 <sup>4</sup>	58	No	
Copper Mountain Solar 2	46	Yes	ConEd
Mesquite Solar 1	75	Yes	ConEd
Cedar Creek Wind 2	125	Yes	BP Wind
Fowler Ridge 2	100	Yes	BP Wind
Flat Ridge 2 Wind Farm	235	Yes	BP Wind
Mehoopany Wind	71	Yes	BP Wind
Auwahi Wind	11	Yes	BP Wind
<b>Under Construction</b>			
Copper Mountain Solar 2	75	Yes	ConEd
Copper Mountain Solar 3 <sup>4</sup>	125	Yes	ConEd
<b>Under Development<sup>2</sup></b>			
Rosamond Solar Plant - Phase 1 <sup>4</sup>	150	No	
Rosamond Solar Plant - Phase 2 <sup>4</sup>	150	No	
Broken Bow 2 Wind Farm	75	No	
Mesquite Solar 2+	425	No	
(1) Represents Sempra's Current Ownership share			
(2) All under development except Broken Bow 1, which is already online.			
(3) May not get JV partner due to its small size			
(4) Will not seek JV partner due to Investment Tax Credit issues			

Source: Company Reports

### Another Big Solar Contract in the Near Term?

Despite not providing any significant new contract wins in this segment, management assumed the development of its Rosamond solar project in the California desert in its formal projections, with a utility-scale contract seemingly at hand (this project too would be sold down). This is the only project included in management's forecast without a contract in hand, suggesting a deal is likely forthcoming (likely as part of SDG&ESCE's pending RFOs for incremental renewables).

**SRE assumed another big win at its Analyst Day, indicating significant confidence**

### No more renewables quite yet, but a modest amount still likely

Interestingly, management did not disclose any further solar or wind projects beyond those underway, however, alluded to potential further developments on the come (although details are not yet clear- likely wind in our view). We continue to see management as tactically a seller of solar assets given their limited EBITDA and EPS contributions beyond initial FCF benefits, whereas wind remains modestly appealing given the steady stream of PTC benefits generated. Altogether, this strategy does not exactly coincide with a company focused on P/E—and see SRE as a net seller of assets once fully developer and operational (potentially to YieldCo's?).

### Potentially acquiring BP Wind?

What would BP Wind look like? We understand the portfolio would be a 3.7GW development pipeline, with 1.5 GW ready to construct; this would appear particularly attractive to Sempra, who already has the majority of its projects as JVs with BP. We understand BP Wind had previously contemplated selling its whole business, but appears to be just selling its development business per media reports. We believe SRE may be interested in acquiring the balance of the business given its historic relationship with the company. Should management desire to get 'bigger' in renewables, we think this would have been the appropriate way in which to execute. Rather, we understand that NextEra appears the most likely acquirer of this specific portfolio of assets (as per recent media articles).

We see future growth as biased towards wind rather than solar

We believe the company could yet monetize its existing renewable assets should valuations remain robust

BP wind looks like a good fit given SRE's existing relationship but we see Next Era as a more likely counterpart

Figure 16: BP Wind Energy's Operating Wind Assets

Name	State	MW	JV with SRE?
Edom Hills	CA	20	No
Cedar Creek 1	CO	301	No
Cedar Creek 2	CO	251	Yes
Auwahi Wind	HI	21	Yes
Goshen North	ID	125	No
Fowler Ridge 1	IN	301	No
Fowler Ridge 2	IN	200	Yes
Fowler Ridge 3	IN	99	No
Flat Ridge 1	KS	50	No
Flat Ridge 2	KS	470	Yes
Mehoopany	PA	141	Yes
Titan 1	SD	25	No
Sherbino 1	TX	150	No
Sherbino 2	TX	150	No
Silver Star 1	TX	60	No
Trinity Hills	TX	225	No
<b>Total</b>		<b>2588</b>	

Source: Company Reports

### Renewable sell-down strategy illustrates desire to push away

We see the sell-down strategy as both a way to limit consolidation of debt and ability to monetize capital projects to fund further projects. While we appreciate the need to avoid 'consolidating' debt onto the balance sheet, we believe the key remains how rating agencies will treat these non-recourse entities for consolidation purposes (as it stands today, we understand the agencies simply treat the

Rating agencies could have the final word.

distributions to the parents rather than consolidating the entities). While we believe the strategy for the sake of removing this debt from the balance sheet is bit odd (albeit we appreciate some frustration in fully valuing these entities, even if not consolidated), we appreciate that renewable strategy is likely to play well in the context of the proliferation of so-called YieldCo structures in 2014, looking for capital to deploy in the space for already-developed assets (precisely the kind of Buyer presumably SRE would be seeking to sell down to). The next table highlights the renewable assets have/ have not been sold down. Management hopes to develop an additional ~75 MW at Broken Bow. For more details regarding these assets please refer to the renewables section.

### Would SRE pursue its own YieldCo?

No, not as of yet. We believe the focus to develop and grow its own MLP remains the top priority (which is ultimately more lucrative given the GP IDR structure). Rather, we reiterate our belief that the proliferation of YieldCo structures will help result in a premium valuation for these assets especially as it is diligent in selling down interests in all of its renewable portfolio. Moreover, while management is likely to announce more wind deals in 2014, we do not see a meaningful pipeline of 'drop downs' beyond 2014 to fund prospective acquisitions.

**For Sempra, MLP > YieldCos as it lacks the renewable runway**

We see management as a net seller of assets. Rather than seeing management as poised to create a YieldCo, we see SRE as a prime candidate to sell down its interests in a variety of its renewable projects to capitalize on multiples being paid of late for renewable assets. While this will fall a bit short of the full value potentially garnered by creating such a separate structure, without an organic growth pipeline, it remains an unlikely avenue.

### Most elusive segment to model

We continue to see this segment as the most elusive in our model, providing the least 'clarity' in disclosures (to SRE management's detriment) as we perceive the assets likely suffer from an inability to fully recognize their value relative to both the Street's earnings (P/E) approach as well as EV/EBITDA multiples given their disproportionate cash flow and tax benefits. Akin to the valuation discrepancy experienced by NRG prior to its spin of YieldCo, we perceive a growing opportunity to disclose greater value and/or to transact to a party for greater value.

### What's the future of renewable subsidies

As part of a view on the future build out of the renewable sector, Sempra management also appears biased to favor the phasing out of the PTC in an effort to stem its competition in the sector. We continue to believe the wind PTCs will be extended in the current lame duck session as part of any tax extenders package by Congress.

The Senate Financing Committee just passed a \$85.3 billion tax-extendors bill on April 3<sup>rd</sup>. Among many provisions, this bill extended the current renewable tax incentives through the end of 2015 [effectively providing a 2-year extension with a subsequent window to complete projects for those already under way]. The current renewable incentives include: renewable energy production tax credits and the 2.3 cent/kWh tax credit for renewable electricity produced for a 10-year period from a plant that began construction by the end of 2013.

**The broader question remains the future of subsidization schemes for the renewable sector.**

## How to inject capital into a renewable company?

While it would appear intuitive that Sempra would be looking at buying under-capitalized renewable projects (with existing turbine arrangements and PPA contracts), another avenue we believe relevant are efforts to 'lend' through tax equity structures. It continues to pursue such a structure in Montana, seeking to benefit from RECs generated to meet California RPS compliance.

## Broken Bow I and II

Sempra recently agreed to acquire the Broken Bow wind farm from EME (75MW) as well as rights (and turbine deliveries) to develop the subsequent 75MW expansion (which has a 25-year contract with the NPPD). We understand the project had been distressed in the EME portfolio (and is still listed in some of the sale assets).

## US Power & Gas

Here too we sense possibility, although see incremental investment opportunity as centering.

## How to fund the growth? Question of equity looms too

Management appears confident it will *not* tap equity markets to fund growth, even with a number of additional growth projects included in the plan. We flag a number of potential levers to raise additional capital:

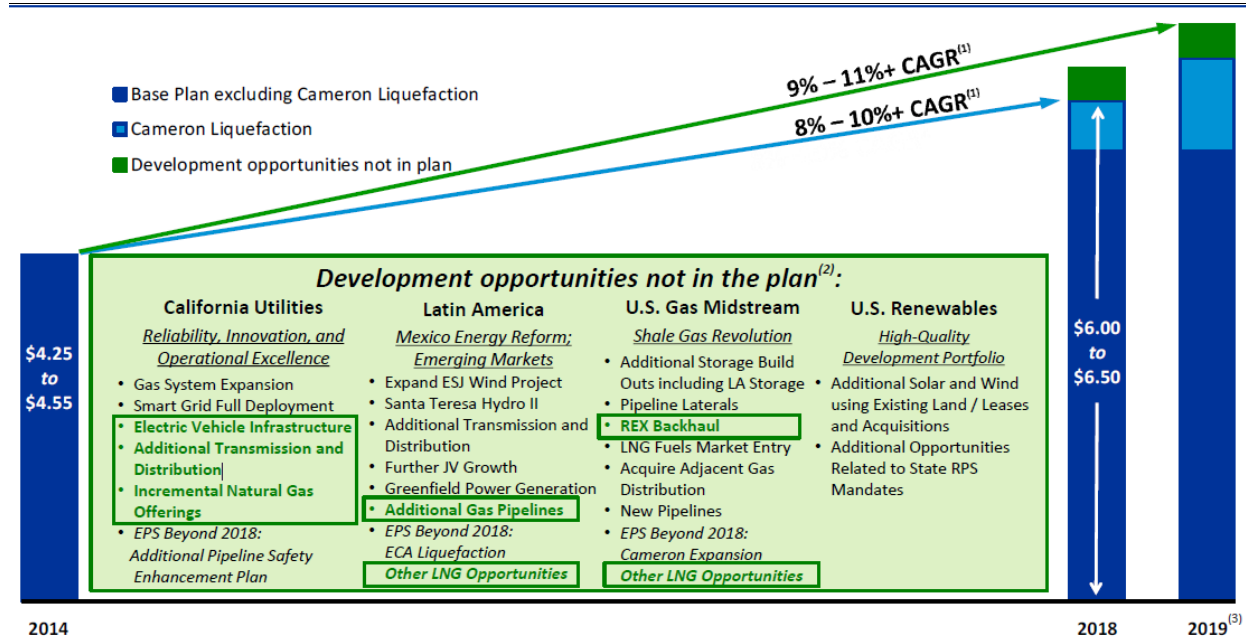
- **Selling the remainder of Mesquite:** *We look for SRE management to look to sell down the remainder of its ownership in the 625 MW merchant CCGT in Arizona in the near term. We estimate the plant is worth ~\$300 Mn, assuming the plant is sold to a utility and eventually placed into ratebase.*
- **Selling down 50% interest in remaining renewable assets:** *Seeking a ~50% JV partner for its interest in its recently acquired Broken Bow project as well as its ESJ wind farm in Mexico (output sold to SDG&E). While the benefits to the balance sheet would primarily be forgone capital investment, we anticipate a modest improvement in the equity return on the initial ownership retained in the project (having taken the project through development risk, etc.)*



## What's NOT in the Growth Plan Yet!

The chart below showcases the breakdown of Sempra's growth plan. Projects outlined in green are ones that have been added since the 2013 Analyst Day. Management's 9-11% EPS growth through 2019 simply takes the 8-10% CAGR through 2018, and adds an additional year with *just* the full-year benefit of the Cameron LNG export terminal, making this metric exceedingly conservative. We continue to expect management to hit above this range given the number of opportunities before it.

Figure 17: What's in the growth plan? Incremental Opportunities



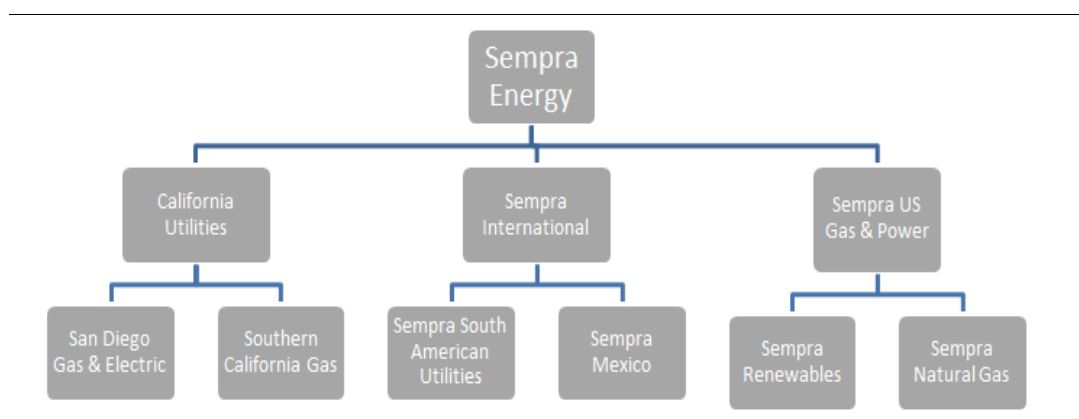
Source: Company Reports

# Company Overview

Sempra Energy is the parent company of four subsidiaries: San Diego Gas & Electric, Southern California Gas Company, Sempra International and Sempra US Gas and Power (corporate structure below for reference). San Diego Gas & Electric serves over 3.4 million customers, while Southern California Gas Company serves 21 million gas customers. Sempra US Gas & Power has over 1,500 MW of solar, wind and natural gas plants throughout the US. Sempra International is comprised of Sempra South American Utilities, which provides electricity to over 1.5 million customers in Chile and Peru, as well as Sempra Mexico, which owns and operates natural gas, wholesale electricity and liquefied natural gas operations in Mexico.

**Sempra consists of:**  
**(1) SDG&E**  
**(2) SoCal Gas**  
**(3) International**  
**(4) US Gas and Power**

**Figure 18: Corporate Structure**



Source: Company Reports

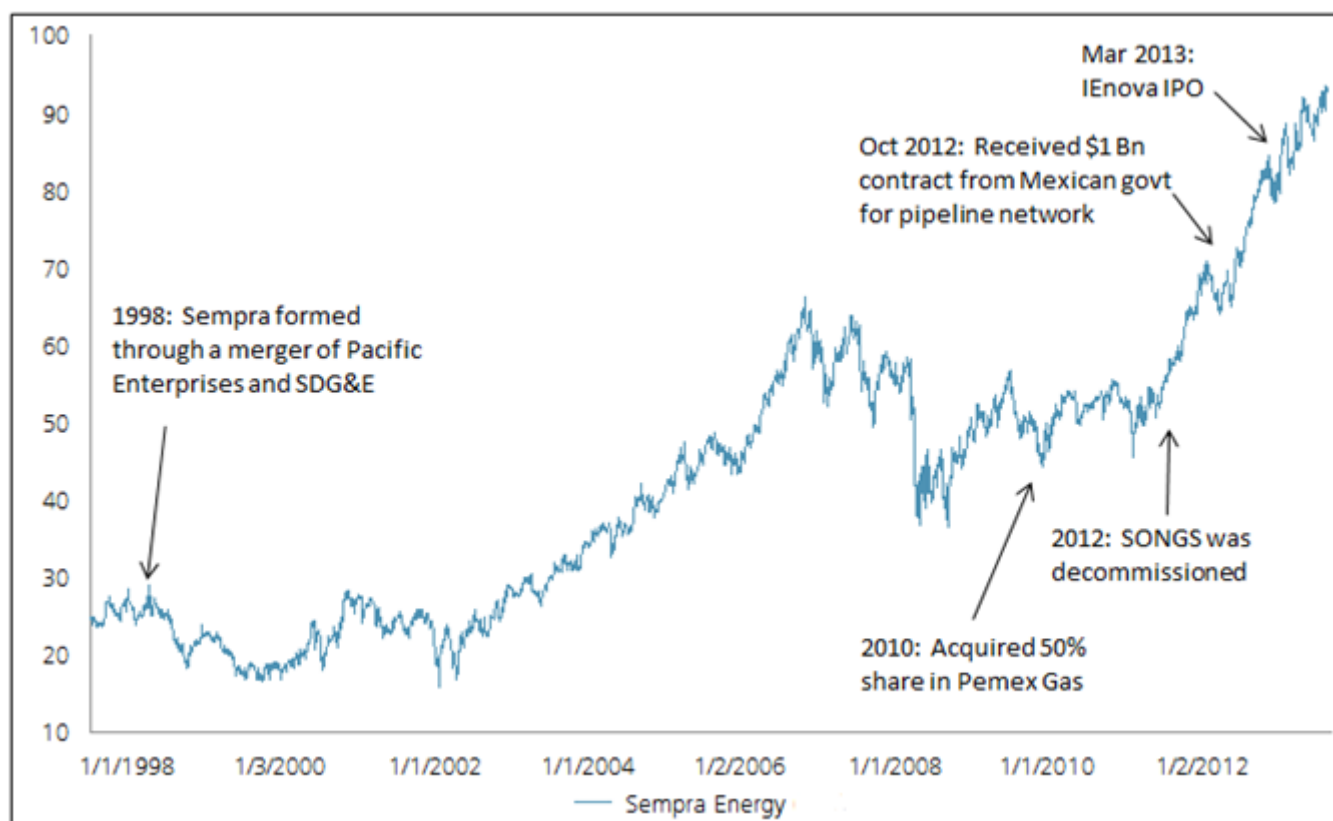
## Company History

Sempra Energy was founded in 1998 by merging Pacific Enterprises, the parent company of Southern California Gas, and Enova Corporation, the parent company of San Diego Gas & Electric. Pacific Enterprises also owned natural gas distribution operations in Latin America and IENova owned assets in Mexico.

## Historical Share Price Performance

We include a historic chart of Sempra's share price performance along with relevant events that impacted the stock's performance during this period.

**Figure 19: Sempra Energy's Equity Performance and Major News Events**



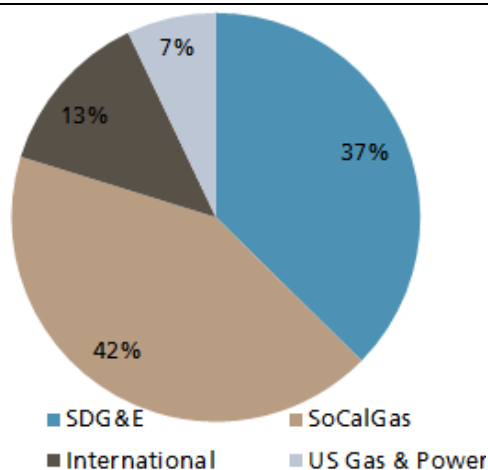
Source: Factset

## Capital Expenditure Plan

Sempra plans to invest \$14.65 billion in capital expenditures through 2018, excluding capex. funded by JV entities, which follows ~\$2.59 billion of spending last year. Of this spending plan the vast majority (80%) is dedicated to the California utilities with 12% on Latin American initiatives and the balance on US renewables/midstream projects.

**The bulk of spending is focused on the regulated utilities.**

**Figure 20: Five Year Capital Expenditure Plan**



Source: Company Reports

## Dividend Outlook: Where to from here?

Management's latest dividend policy suggests a ~6% growth rate, up from 4-5% previously as the payout ratio will likely slip downwards relative to EPS CAGR of 8-10% through 2018; that said, this latest guidance appears to be somewhat inconsistent with the more conservative ~4% growth implied in its cash flow guidance at the Analyst Day. We do not anticipate a further significant dividend increase ahead of Cameron coming on-line and the implementation of an MLP strategy (with disproportionate cash flows accruing to Sempra due to its GP structure).

From 2000-2010, Sempra had a trading business that represented up to 50% of earnings with cash consistently being reinvested back into operations here. Following the sale of the trading business the payout ratio jumped from ~35% to north of 50% today.

### IENOVA's dividend: likely just ~4% given tremendous growth

With our expectations for 'mid-teens' EPS growth through the decade, we see IENOVA's annual common dividend policy of 4% growth as reasonable given the growth prospects. We suspect a sizable increase in payout once the entity has matured. Given the ramifications of dividends for SRE parent and a likely desire by Mexican regulators to see continued re-investment in the economy, we see little reason for a re-assessment at present.

**Dividend growth should be in the 6% range but remain below EPS growth to drive the payout ratio into the desired range.**

**Relatively modest dividends at IENova while in high-growth phase.**

# Cameron LNG terminal

Sempra's Cameron LNG receipt terminal is located in Hackberry, Louisiana, which is 18 miles from the Gulf of Mexico. It is also within 35 miles of five major pipelines, which serve almost two-thirds of the country. It is capable of processing 1.5 Bcf of natural gas per day and generates revenue under a terminal service agreement of approximately 3.75 Bcf of natural gas storage and send-out rights of 600 million cubic feet of natural gas per day through 2029.

**Cameron terminal: The centerpiece of the MLP strategy**

## Upcoming Export Facility

Consistent with Sempra's planning, we assume the current Cameron LNG import facility will be converted into a liquefaction and export asset. The expected completion date is during 2H17 with the commercial operation of the first train with all three initial trains expected to be complete by 2018. The two additional trains will be coming online in six-month increments thereafter in 2018.

Sempra states the project timeline is difficult to predict before construction commences. In May, Cameron signed a twenty-year tolling capacity and joint-venture agreements with Mitsubishi Corporation, Mitsui & Co., Ltd. and Gaz SUEZ S.A. This facility will eventually export \$8.6 billion worth of LNG exports. It will be comprised of 13.5 million tonnes per annum (MTPa) of LNG, with the three trains worth 4.5 MTPa each. Its total export capability will be roughly 1.7 Bcf per day. All three partners indicated that they will mostly serve customers in Japan as well as a sizeable number in Korea and Singapore.

**Construction is expected to begin early next year, with a COD by 2018**

Since the contracts for this venture are almost like a take-or-pay agreements, with customers who are also JV partners and who assume commodity risk and provide feed gas, we see limited risk to SRE's forecast that the venture will generate \$750-\$875mn of EBITDA and \$300-\$350mn of earnings per year, assuming the requisite regulatory approvals and completion of the project. We exclude the financial impact from our earnings estimates and treat the operation separately for valuation purposes on a discounted basis given the time lag.

## EPC Contractor

Management recently selected an EPC contractor—CBI Chiyoda, which has experience with ~43 LNG trains worldwide. The contract effectively is a lump sum turnkey project that shifts the construction risk to the EPC contractor. They reviewed bids from two groups from a tender process earlier this year.

## Project Costs

### Financing the Project: Limited needs from Sempra itself

With a total estimated cost of \$9-10 Bn, we understand the project will be approximately ~70% project financed. Owning just 50% of the project, we do expect any contributions to the project entity itself aside the current LNG import site itself, estimated to be worth ~\$1 Bn per disclosures from management as part of its deal with its partner. Should construction costs reach the upper end of the range at ~\$10 Bn Sempra could need to contribute ~\$500 Mn in equity. That said, we perceive any such equity needs could be potentially be contributed at the project level with initial cash flows (distributable pre-tax consolidated cash flows equate to ~\$500-600 Mn in 2018 alone).

In early 2013, the company initiated the financing process with the Japan Bank for International Cooperation, Nippon Export and Investment Insurance, and commercial banks. Cameron expects to secure financing for the project in the first half of this year. It is currently finalizing loan commitments with Japanese export credit agencies. It just signed a commitment letter with commercial banks worldwide.

Currently working with Japanese export credit agencies to finalize loan commitments

Figure 21: Cameron Projections, by Year (Including Financing)

Cameron LNG	2018E	2019E	2020E
Total Investment (\$MM)	9000		
Construction Starts	1H14		
Leverage	68%		
Guidance - SRE's Share (50.2% equity)	65%-70%		
Interest Rate	5.0%		
Henry Hub Price	\$4.4	\$4.4	\$4.4
Pipeline Transport	\$0.1	\$0.1	\$0.1
Liquefaction Costs	\$3.3	\$3.3	\$3.3
Shipping Costs	\$1.6	\$1.6	\$1.6
Total	\$9.4	\$9.4	\$9.4
Volumes (Bcf/d)	1.1	1.7	1.7
Volumes (MMBtu/d)	1,133,333	1,700,000	1,700,000
Number of Trains (Average)	2.0	3.0	3.0
Revenues	\$1,954	\$3,750	\$3,798
Cost of Sales	\$1,465	\$2,925	\$2,925
Gross Margin	\$488	\$825	\$874
Margin	25%	22%	23%
D&A	\$94	\$107	\$110
Guidance - SRE's Share (50.2% equity)		\$100-\$115	
EBITDA	\$488	\$825	\$874
Guidance - SRE's Share (50.2% equity)		\$750-\$875	
EBIT	\$394	\$718	\$764
Interest	\$131	\$152	\$148
Guidance - SRE's Share (50.2% equity)		\$135-\$160	
EBT	\$263	\$566	\$616
Tax @ 41%	\$108	\$232	\$252
Guidance - SRE's Share (50.2% equity)		\$215-\$250	
Net Income	\$155	\$334	\$363
Guidance - SRE's Share (50.2% equity)		\$300-\$350	

Source: Company reports and UBS estimates. (\$Mn unless otherwise indicated)

## Execution is Now the Key Risk

We think the principal risk around Cameron is now firmly the development risk around an on-time and on-budget project; we see financing and FERC approval risk as limited. In addition, cost overruns will be funded proportionately, and if they occur once the first train is operational may be funded out of project cash flows.

Based on discussions with our E&C analyst Steve Fisher we do see some risk around wage rates and labor availability given the level of planned project activity in the US energy space. About 50% of a typical project relates to construction so the potential for cost overruns related to wages and/or man hours could be high. In particular, we see some risk that welders may be in short supply. A significant number of welders currently are engaged on big nuclear projects and we suspect they will likely not go on to other nuclear projects when current assignments are complete given the diminished outlook for nuclear so there may be an incentive to delay new projects until welding capacity frees up in the wake of nuclear project

completions. This could also indirectly impact Cameron by pressuring wage costs during a period of tighter supply.

We see limited project risk from a technology perspective given the Air Products equipment Cameron plans to use. The additional time on FEED work also should diminish the technological risk.

## Permitting risk

SRE just received approval to export LNG to non-Free Trade Agreement countries in Europe and Asia for the entire 1.7 Bcf/d that Sempra had sought on February 11<sup>th</sup>. This was a major milestone in its development. Sempra has also obtained approval from the DOE to export its total export capacity to all current and future Free Trade Agreement nations.

**The Final EIS due on April 30, 2014 is the last main step to secure FERC approval**

Cameron LNG initiated the pre-filing process with the Federal Energy Regulatory Commission (FERC) in April 2012, and filed its formal application in December 2012 for approval to construct the new facilities. A separate application was also filed for the new 21-mile natural gas pipeline, compressor station and modifications to existing pipeline interconnections.

Commencing construction is contingent upon the final Environmental Impact Study (EIS), which will be issued on April 30<sup>th</sup>, 2014 with a final FERC order expected 60-90 days later. Sempra is first in the FERC queue to begin construction of its LNG terminal. Management will have a better sense of its development timeline once construction begins.

Second, a study by NERA has concluded that increased LNG exports will result in a net economic benefit to the US economy, even though it will mean higher natural gas prices. We believe that the substantial levels of shale gas in the US, with estimates of future production being regularly revised upwards, and a large number of shut-in wells in dry gas plays even at current prices, will help limit the extent of price pressure as export levels rise.

**The final EPC selection will be made by early 2014.**

## Project overview

The liquefaction project will use Cameron LNG's existing facilities, including two marine berths capable of accommodating Q-Flex sized LNG ships, plus three LNG storage tanks with a combined storage capacity of 480,000 cubic meters. The completed liquefaction facility will be comprised of three liquefaction trains with a nameplate of 4.5 million tonnes per annum (Mtpa) of capacity each, 13.5 Mtpa total. In addition, a new 21-mile natural gas pipeline, a compressor station and modifications to existing pipeline interconnections are proposed. Cameron also includes vaporization capability for regasification services of 1.5 Bcf per day, which are part of the existing LNG import operation. It generates revenue under a terminal service agreement of approximately 3.75 Bcf of natural gas storage and send-out rights of 600 million cubic feet of natural gas per day through 2029.

Cameron LNG awarded an engineering services contract to Foster Wheeler AG for project development, front-end engineering design to support permit applications to the FERC and support for engineering and construction contracting. In January 2013, Cameron LNG initiated a tender process for the engineering, procurement and construction contract for the project and expects to award the contract in late 2013. It may purchase LNG for storage and regasification at its terminal for sale. Management continues to hold storage assets for development adjacent to its site

## Cameron Valuation:

We value Cameron off a 2019 EBITDA estimate to reflect the first full year of operations, applying a 9x multiple to effectively account for it discount back to the present year. Meanwhile, we apply a further \$5/share upside to reflect the incremental value of a GP structure as part of any MLP. We continue to suspect management will seek to acquire midstream assets (even modestly sized at ~\$200-300 Mn of total EBITDA/yr) to enable a run-way to achieve the higher splits (rather than any other contemplated strategy). Our valuation below reflects...

## What about the existing project? LNG Import still in place

The existing Cameron LNG import facility is still in place until the first import contract takes effect. The project has a single existing customer, Eni. Management's rough guidance suggests it produces cash flow of ~\$40 Mn, equal to the D&A of the project, but negligible net income. We include an abbreviated income statement from the project from its FERC Form 2 filings.

**Figure 22: Cameron LNG Import facility projections: Negligible Earnings, but there's still cash flow**

Cameron LNG Import Terminal	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Processing Capacity (BCF)	1.5								
Storage Capacity (BCF)	3.75								
Send Out Capacity (MMCF/d)	600								
Revenues	Capacity Reservation + Usage fees								
Purchase agreement (MMCF/d)	500	500	500	500	500	500	500	500	500
Annual Purchases (BCF)	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5
Delivery Price- SoCal border index for Natural gas									
SoCal Gas Price	\$3.80	\$3.64	\$4.34	\$4.38	\$4.28	\$4.32	\$4.43	\$4.45	\$4.47
Basis discount embedded in contractual price		(\$0.22)	(\$0.67)	(\$0.75)	(\$0.69)	(\$0.71)	(\$0.71)	(\$0.31)	(\$0.33)
Contractual Delivery Price		\$3.42	\$3.67	\$3.63	\$3.58	\$3.61	\$3.72	\$4.13	\$4.13
Revenues	\$542	\$650	\$695	\$687	\$679	\$683	\$703	\$780	\$780
Cost of sales	\$517	\$625	\$670	\$662	\$654	\$658	\$678	\$755	\$755
Gross Margin	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Depreciation	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Operating Income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EBITDA	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25	\$25
Interest	\$3	\$6	\$9	\$6	\$3	\$0	\$0	\$0	\$0
EBT	(\$3)	(\$6)	(\$9)	(\$6)	(\$3)	\$0	\$0	\$0	\$0
Tax	(\$1)	(\$2)	(\$3)	(\$2)	(\$1)	\$0	\$0	\$0	\$0
NI	(\$2)	(\$4)	(\$6)	(\$4)	(\$2)	\$0	\$0	\$0	\$0

Source: Company reports, FERC, and UBS estimates. (\$ Mn unless otherwise indicated)



## Cameron Pipeline Projections

We include the pipeline lateral in the projections. We expect a step-up in cash flows from this project along with the in-service of the export project. We see even a modest rate of ~\$0.10/mcf providing a modest uptick in 2018 (an uptick of \$20 Mn/yr in EBITDA).

Figure 23: Cameron Interstate Pipeline Projections

Cameron Interstate Pipeline	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Operating Revenues	\$9.0	\$8.4	\$9.2	\$10.2	\$11.2	\$12.4	\$43.6	\$43.6	\$43.6
(O&M)	(\$0.9)	(\$1.0)	(\$0.9)	(\$0.9)	(\$0.9)	(\$0.9)	(\$1.0)	(\$1.0)	(\$1.0)
(D&A)	(\$4.3)	(\$4.2)	(\$4.2)	(\$4.3)	(\$4.3)	(\$4.3)	(\$4.4)	(\$4.4)	(\$4.5)
(Loss on long-lived assets)	\$0.0	\$0.2	\$1.0	\$0.4	\$0.6	\$0.7	\$0.5	\$0.6	\$0.6
(Taxes other than income taxes)	(\$3.5)	(\$3.5)	(\$3.7)	(\$4.1)	(\$4.5)	(\$5.0)	(\$17.6)	(\$17.6)	(\$17.6)
<b>Operating Income</b>	\$0.3	(\$0.0)	\$1.4	\$1.3	\$2.0	\$2.8	\$21.1	\$21.1	\$21.1
Earnings from unconsolidated affiliates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Other income, net	\$1.6	\$0.4	\$0.5	\$0.6	\$0.7	\$0.5	\$0.6	\$0.6	\$0.6
(Interest & debt expense)	(\$6.4)	(\$5.1)	(\$4.7)	(\$4.6)	(\$4.5)	(\$4.6)	(\$4.7)	(\$4.8)	(\$4.9)
Affiliated interest income, net	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
(Income taxes)	\$1.8	\$1.9	\$1.1	\$1.1	\$0.7	\$0.5	(\$6.8)	(\$6.8)	(\$6.7)
<b>Net Income</b>	(\$2.7)	(\$2.8)	(\$1.7)	(\$1.6)	(\$1.0)	(\$0.8)	\$10.2	\$10.1	\$10.1
ROE:							17.8%	17.3%	16.8%
							Mid-Teens Returns Targetted		
<b>EBITDA</b>	<b>\$6.194</b>	<b>\$4.526</b>	<b>\$6.106</b>	<b>\$6.136</b>	<b>\$7.090</b>	<b>\$7.639</b>	<b>\$26.109</b>	<b>\$26.141</b>	<b>\$26.149</b>
Tax Rate	40.1%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
Throughput (MMcf/d)	12	9	12	12	13	13	110	311	1,654
Revenue / MMcf	\$2.13	\$2.59	\$2.17	\$2.28	\$2.40	\$2.52	\$1.08	\$0.38	\$0.07
Unit Revenue Growth	33.2%	1.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Operating Income / Unit	\$0.08	(\$0.00)	\$0.34	\$0.29	\$0.44	\$0.56	\$0.52	\$0.19	\$0.03
O&M Growth	-28.8%	-8.0%	-5.0%	-2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
D&A Growth	-0.8%	-3.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Non-Income Tax & Other % of Rev	38.5%	41.4%	39.9%	40.7%	40.3%	40.5%	40.5%	40.5%	40.5%
Throughput Growth	-26.2%	1.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Throughput Max							1,700	1,700	1,700
New Assumption post-Export Facility							0.07	0.07	0.07
Stated Capacity (MMcf/d)									
Capacity Utilization									
Firm Contract Commitments (MMcf/d)									
Contracted Capacity									
Effective Tax Rate		40%	40%	40%	40%	40%	40%	40%	40%
Total Debt	\$131	\$101	\$98	\$95	\$97	\$99	\$101	\$103	\$105
Total Debt : Capitalization	62%	64%	64%	64%	64%	64%	64%	64%	64%
Avg. Interest Rate	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
Total Equity	\$80.531	\$57	\$56	\$54	\$55	\$56	\$57	\$59	\$60
Implied 12-month ROE	-3.9%	-4.1%	-3.0%	-3.0%	-1.9%	-1.4%	18.0%	17.5%	17.0%
Total Capex	(\$1)								

Source: Company reports, FERC, and UBS estimates. (\$Mn unless otherwise indicated)

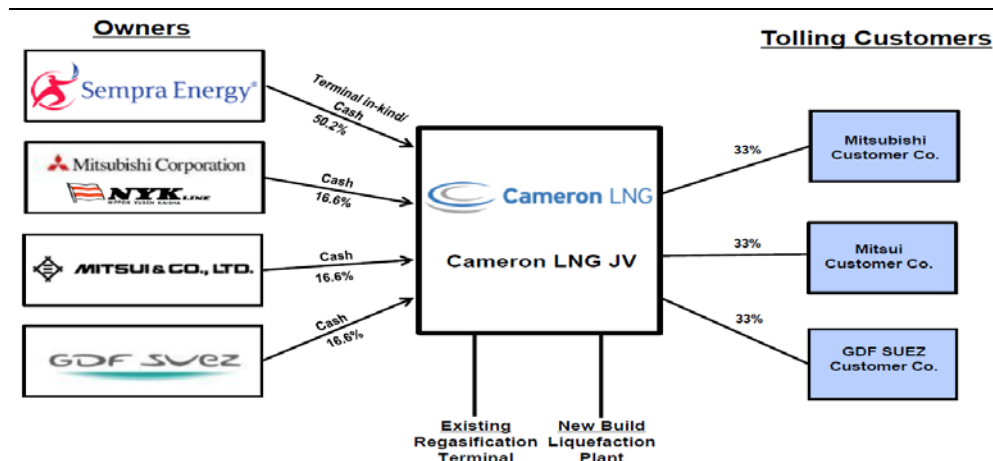
## Cameron Projections: Just How Good Is It?

We include our latest projections for Cameron in the table below incorporating all of management's guidance on revenues, financing and costs. The first train is slated for operation at the end of 2017, with each subsequent train in operating in the 6-month period following (three trains in total). We calculate the project is likely to generate ~\$1.25 Bn/yr in distributable cash flow once fully operational in 2019.

## Ownership Structure

Cameron will be wholly owned by Cameron LNG Holdings, LLC, which will be 52.2% owned indirectly by Sempra Energy. As indicated by the chart below, GDF Suez S.A., Japan LNG Investment, LLC and Mitsui & Co., Ltd. (Mitsui) will each own an additional 16.6%. Japan LNG Investment, LLC is a joint venture entity formed by subsidiaries of Mitsubishi Corporation and Nippon Yusen Kabushiki Kaisha (NYK). Sempra Natural Gas will contribute \$600 million to the joint venture. Sempra will own 50.2% and other JV partners will own 16.6% each.

Figure 24: Cameron LNG ownership structure



Source: Company Reports

## Sempra International

Sempra International has two subsidiaries, Sempra Mexico and Sempra South American Utilities (SSAU), which is based in Chile and Peru. Mexico, Chile and Peru have the highest credit ratings in Latin America according to S&P, BBB+, AA- and BBB+ respectively. All of Sempra's international operations are self-funding, from a debt and equity perspective, such that resources only flow from the parent to the subsidiary, thereby reducing overall risk.

Management emphasizes it is well-positioned to support Latin America & Mexico's growing demand for energy.

### What are good comps?

#### IENova

Our Latin American Utilities colleagues, Lilyanna Yang and Carlos Herrera, believe that finding an exact comparable for IENova is impossible because it is the by far the largest and most diversified energy company in Mexico. We believe the following Chilean companies are the best comps. For its gas operations, the most appropriate comp is Gasco (ticker: GASCO-CL), a gas company that also has stakes in gas pipelines through its subsidiary Metrogas. For its electric operations, the most comparable company is Chilean AES GENER, one of the Latin American gencos most exposed to thermal generation (ticker: AESGENER\_CL).

#### Chilquinta Energia

For Sempra's Chilean subsidiary, Chilquinta Energia, they believe the best transmission & distribution comp is Chilectra, the largest electric distribution company in Chile (ticker: CHILECTRA). The table below showcases these comps. We do not cover these companies, so we have not provided projected earnings estimates.

**Figure 25: Latin American Comps**

		Consensus																	
		Market Cap.	Price	Annual	Price to Earnings			EPS			EPS		EV 2013						
Ticker		\$ in millions	4/9/2014	Dividend	2013	2014E	2015E	2013	2014E	2015E	2013	2014E	2013	2014E	2015E	(\$ in millions)	2013	2014E	2015E
AES Gener	AESGENER-CL	2,520,807	299.92	0.00	29.4	na	na	0.02	na	na	0.02	0.03	623.03	690	678	6612	10.6	9.6	9.8
Chilectra S.A.	CHILECTRA-CL	1,783,650	1550.00	45.00	7.9	na	na	0.40	na	na	na	na	na	na	na	3351	na	na	na
Gasco	Gasco-CL	970,284	5775.50	0.00	12.5	na	na	437	na	na	547	578		146,874	151,242	2,956	na	0.02	0.02
Ienova	IENOVA-MX	78,116	67.69	1.32	31.4	na	na	0.02	na	na	1.93	1.68	259	307	373	4551	17.6	14.8	12.2

Source: Company Reports, UBS estimates, Factset

## Sempra Mexico

IENova, its Mexican subsidiary or Infraestructura Energetica Nova, S.A.B. de CV, owns and develops natural gas transmission pipelines, propane and ethane systems in Mexico. As the largest publically traded energy infrastructure company in Mexico, it is the largest private gas pipeline owner, the largest terminal operator, the fifth largest LDC owner and the fifth largest private power plant operator. Its facilities are contracted through US dollar-denominated, take-or-pay contracts with state and private enterprises. IENova also owns a 50% interest in Gasoductos de Chihuahua, a JV with PEMEX, which operates pipelines and propane systems in northern Mexico. We provide a detailed breakdown of its asset portfolio in subsequent pages. Management anticipates its dividend growth will be roughly 4-6%. In 2013, it paid \$156 million in repatriations.

**Largest publically traded energy infrastructure company: main focus is midstream infrastructure**

**~\$1.3 billion worth of assets coming online in 2014.**

**Dividend growth will be ~4-6%**

SRE management projects a net income CAGR for starting 2016 to be 12-14% from its stake in the IENova business. Lastly, it's worth comment that ROEs in Mexico are a bit lower than those from Sempra's Latin American investments, in the low-teens, versus the mid-teens in Latin America.

### What is the difference between IENova and SRE Mexico?

We caution investors in the difference in the accounting between the publicly-listed IENova subsidiary and Sempra Mexico segment. The primary difference in results is attributable to differences in SG&A (making EBITDA comparisons more readily apt), whereas differences in tax recognition of items creates more meaningful discrepancies between the IFRS-reported IENova net income and the GAAP-reported SRE-Mexico subsidiary. While IENova shares trade on the Mexican Stock Exchange, its business is almost entirely conducted in US Dollars, limiting FX risk (SRE's real FX exposure is primarily to the Peruvian Sol and Chile's Peso).

**Figure 26: IENova vs. Sempra Mexico**

	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Sempra Mexico- Adjusted EBITDA (UBS)</b>	<b>\$317</b>	<b>\$307</b>	<b>\$387</b>	<b>\$465</b>	<b>\$530</b>	<b>\$605</b>	<b>\$666</b>	<b>\$754</b>	<b>\$843</b>
Adjusted EBITDA- (Ienova disclosures)									
Gas Segment	\$315								
Power Segment	\$17								
Corporate	\$(2)								
Total Adjusted EBITDA (Ienova disclosures)	\$330	\$336	\$424	\$509	\$579	\$661	\$728	\$825	\$922
<b>Net Income (UBS)</b>	<b>\$157</b>	<b>\$122</b>	<b>\$174</b>	<b>\$202</b>	<b>\$227</b>	<b>\$257</b>	<b>\$286</b>	<b>\$331</b>	<b>\$377</b>
Net Income (Ienova disclosures)	\$194	\$131	\$187	\$217	\$244	\$276	\$307	\$356	\$404
Net Income Discrepancy	\$37								
% Net Income Discrepancy as of UBS	24%	7%	7%	7%	7%	7%	7%	7%	7%
Average Net Income Discrepancy Percentage									
EBITDA Discrepancy	\$13								
% EBITDA Discrepancy	4%	9%	9%	9%	9%	9%	9%	9%	9%
Average EBITDA Discrepancy Percentage									

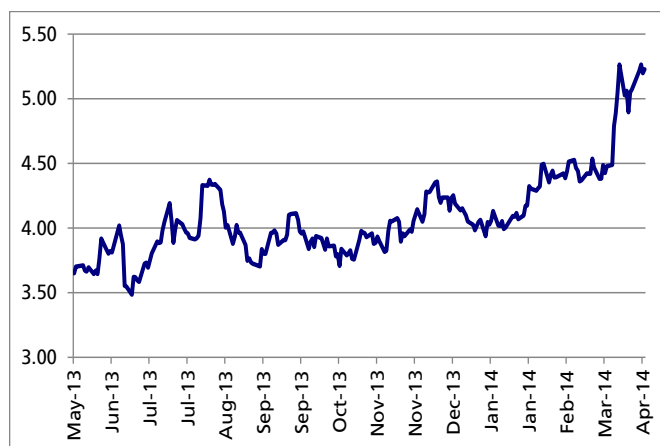
Source: Company Reports, UBS estimates. (\$Mn unless otherwise indicated)

## Recent IPO

IENTova conducted the first energy IPO in Mexican history on March 2013. It sold off 18.9% of its ownership interest, raising \$575 million through a private offering of 91.04 million shares of Class II, Single Series common stock and an initial public offering registered in Mexico of roughly 98.6 million shares of common stock at roughly \$2.75/sh (in USD). The chart illustrates the sharp increase in its stock price since then. Shares were valued at 10.7x 2013E EBITDA. Prior to the IPO, IENTova issued \$400 million of debt, which was swapped into US dollars.

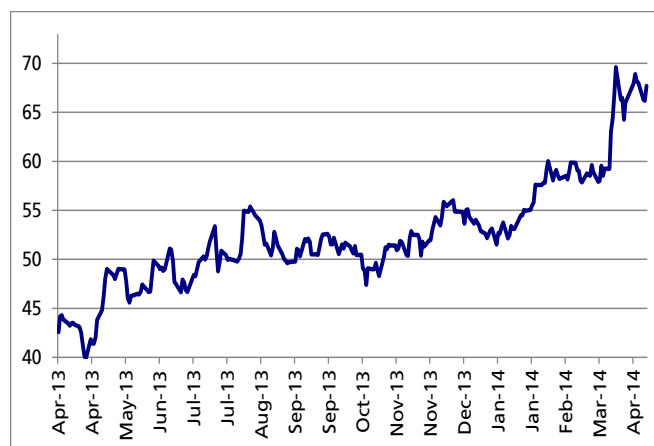
Significant outperformer

Figure 27: IENTova Stock Price since recent IPO (US\$)



Source: Factset

Figure 28: IENTova Stock Price since recent IPO (Pesos)



Source: Factset

Given the substantial capital needed to adequately grow the business, the listing was an appropriate solution to funding future international growth for SRE without requiring equity injections from SRE abroad. Rather, we expect its existing 81.1% ownership stake to be gradually diluted down through public equity issuances, much the way AES has funded growth at AES Gener in recent years. Additionally, we see the listing as enabling multiple expansion for the business given the scarcity value of such an infrastructure story in the country, amidst much fanfare of further energy market restructuring (we've historically applied a 6x EV/EBITDA multiple against private Latin American subsidiaries, consistent with multiples of publically traded LatAm utilities).

We expect its existing 81.1% ownership stake to be gradually diluted down through public equity issuances

## JV with PEMEX could yet evolve; acquisition of remainder?

While we perceive IENOVAs as advantaged given its existing JV with PEMEX, we believe the company could yet see its JV disbanded. We would suspect this would drive IENOVAs to acquire PEMEX's share of the business, subsequently selling down the stake to a new partner, or separately selling down projects with disproportionate leverage. Management at IENOVAs is consistent in its policy as Sempra in allowing disproportionate leverage only at unconsolidated subsidiaries on a non-recourse basis (more in the 70% debt range vs. projects on-balance sheet in the ~50% range). We remind investors that the segment remains relatively under-levered, with no debt anticipated as of now secured against either its Los Ramones I or Ethane projects at the JV. Off these cash flows, we suspect an incremental ~\$500 Mn in leverage the segment could tap. Lastly, with robust cash flows at the JV of ~\$200 Mn/yr by end of 2015 (\$100 Mn to IENOVAs), the JV does not currently anticipate any investment needs from the parent.

Figure 29: Sempra Projections: Pemex JV

PEMEX JV Details	2014E	2015E
<b>Debt @ JV</b>		
Existing (@ 50% Ownership)	238	
Los Ramones II	175	
<b>Total</b>	<b>413</b>	
<i>Will eventually include Ethane as already funded from B/S</i>		
<b>EBITDA from PEMEX JV (SRE's Share)</b>	55	55
Existing		15
Ethane		26
Los Ramones I		21
Los Ramones II		117
<b>Pro-Forma Leverage (Debt/EBITDA)</b>		3.54
<i>Only secured against existing assets... NOT including Los Ramones I and Ethane</i>		

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

### What about equity? We think more is coming, but more projects first

We understand the company continues to evaluate broader public equity to support continued growth. With meaningful further growth projects anticipated in coming months (pace of \$2-4 Bn/yr in natural gas projects along up for bid annually), we suspect IENOVA will tap capital markets consistently to fund this growth. Sempra has been clear in its desire not to fund any incremental growth at the subsidiary with parent equity. Given the desire to increase liquidity and address hurdles in raising further capital in Mexico, we suspect any future offering will likely be sized to ~\$500 Mn (more of a ~2015 event), only to address incremental projects beyond those included in its current plan. As a reminder, IENOVA targets a 3x Debt/EBITDA figure at the parent (excluding JV with Pemex); credit rating agencies appear OK to see this creep higher around timing of any future offering, particularly given its large size. The company has largely executed on much of its 2014/15 growth ambitions using incremental leverage capacity at the parent. Needs for any further offering would be also dictated by the potential to fund any potential gas LDC acquisitions the company has been contemplating.

Figure 30: Projected Leverage/ Equity

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Income attributed to Sempra Mexico	\$122	\$174	\$202	\$227	\$257	\$286	\$331	\$377
% Change in Income attributed to Sempra Mexico		42%	16%	12%	13%	11%	16%	14%
Shares Outstanding	1662	1,681	1,700	1,709	1,709	1,709	1,709	1,709
New Shares Issued		19	19	9	19	19	19	19
Shares owned by SRE	1346	1346	\$1,346	\$1,346	\$1,346	\$1,346	\$1,346	\$1,346
<b>% Shares owned by SRE</b>	<b>81%</b>	<b>80%</b>	<b>79%</b>	<b>79%</b>	<b>79%</b>	<b>79%</b>	<b>79%</b>	<b>79%</b>
Total Shares	3008	3046	3065	3065	3074	3074	3074	3074
Net Income	\$122	\$174	\$202	\$227	\$257	\$286	\$331	\$377
D&A	\$63	\$69	\$82	\$87	\$91	\$99	\$103	\$107
CFO	\$185	\$243	\$284	\$314	\$348	\$385	\$435	\$484
<b>Growth Capex spent per year</b>	<b>\$630</b>	<b>\$810</b>	<b>\$454</b>	<b>\$271</b>	<b>\$550</b>	<b>\$550</b>	<b>\$850</b>	<b>\$900</b>
Maintenance		81	45	27	55	55	85	90
EV/EBITDA Creation Multiple		6	6	6	6	6	6	6
<b>Debt Issuing</b>		<b>473</b>	<b>249</b>	<b>149</b>	<b>303</b>	<b>303</b>	<b>468</b>	<b>495</b>
<b>Equity Issued</b>		<b>100</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Beginning Debt Balance	\$810	\$810	\$1,174	\$1,310	\$1,341	\$1,518	\$1,689	\$2,018
Debt Issuance		\$473	\$249	\$149	\$303	\$303	\$468	\$495
Debt Repayment		\$108	\$113	\$119	\$125	\$131	\$139	\$148
Total Debt Balance		\$1,174	\$1,310	\$1,341	\$1,518	\$1,689	\$2,018	\$2,365
<b>Debt/EBITDA</b>	<b>3.3</b>	<b>3.2</b>	<b>3.0</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>	<b>2.8</b>	<b>3.0</b>

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

## Mexican Energy Reforms Have Yet to Yield Fruit

On Dec 21<sup>st</sup>, 2013, the Mexican government issued a reform proposal, which liberalizes the oil, gas and electric sectors for private investment. This is one of the most significant reforms in the industry since 1938, breaking the oil monopoly of Petroleos Mexicanos (PEMEX) and the effective electric monopoly of Comision Federal de Electricidad (CFE). The reform allows for PEMEX and CFE to work with the private sector for the first time since these entities were nationalized in 1938. Contracts that were offered by PEMEX will now be distributed by the government. The natural gas pipeline network and electricity grid will be centralized as subsidies, particularly for gasoline, will be phased out.

The Mexican government hopes for ~\$10 billion of revenue per year for the economy from the privatization of its oil industry. It also calls for the creation of a wholesale power generation market.

Private investment should compensate for Mexico's current limited resources to develop its ~681 trillion cubic feet of shale gas reserves—one of the largest in the world. Management expects much pipeline development in the Burgos area, which is where much of these reserves are concentrated.

The Mexican government, through CFE and PEMEX, also hopes to invest roughly billions in the power, natural gas and electric transmission projects over the next few decades. As the largest and most diversified energy company in Mexico, IEnova is well-positioned to harness this.

### Timeline of Reforms

The reform will take place over the next two years with multiple ministries negotiating the terms. Secondary legislation will be released at the latest by April 20<sup>th</sup>, a deadline imposed by Congress. It will determine much of the details regarding the deregulation process, the administration of energy contracts and investments per sector. We are especially interested in details regarding energy contract structures. Certain private oil agreements will be announced by early 2015. IEnova management wouldn't be surprised if many new bids for gas pipelines emerged this year. Foreign oil producers will only be allowed to bid for oil contracts until after late 2015.

**Much rests on secondary legislation, which will be released in April.**

**Private oil agreements will be announced by early 2015.**

### Biggest Opportunities for IEnova

We believe the biggest opportunities for IEnova have yet to take form, with 16 anticipated pipelines up for bidding through the deregulation process, with an aggregate projected cost of ~\$22 Bn. We suspect to see details from initial RFPs as plans and rules on deregulation are finalized; while Mexico has nominally passed 'energy reform' nationally, it is not in the process of defining how in which it enable private-sector participation in the energy sector. Management expects the first wave of pipeline construction to be oriented towards addressing Guadalajara's regional needs, which currently imports LNG to serve gas needs.

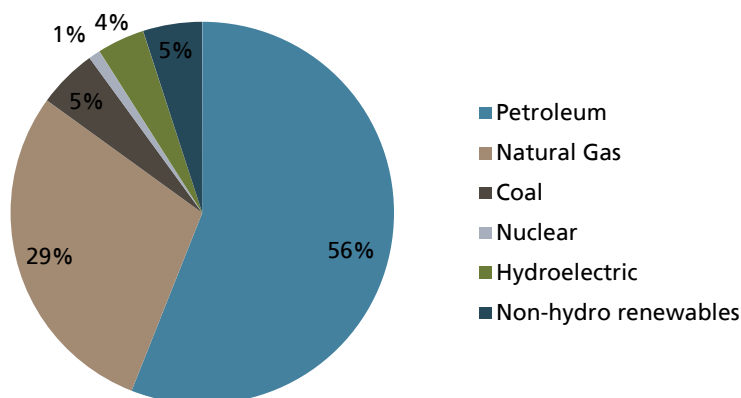
### Converting the economy to gas from oil

Of the 63 GW of electric capacity in the country, ~30% is powered by fuel oil. With gas prices largely priced off Houston Ship Channel and Henry Hub, there remains an enormous economic advantage in using cheaper natural gas across the country, rather than relying on more expensive oil products for the generation sector. We expect corresponding investment opportunities in gas-fired generation

**IEnova's new pipelines are poised to capitalize on oil switching**

to take root along paths served by IENova's new pipelines (enabling further growth/ compressor additions down the line); this is a particularly appealing investment opportunity AES, with its existing foothold in the country through three existing assets.

**Figure 31: Total Energy Consumption in Mexico, by type (2010)**



Source: EIA

Meanwhile, with ~30% of the country's gas imported from the US, we also expect to see expanded gathering network opportunities as gas is more fully developed within Mexico itself. Specifically, work is ongoing around implementing fracking technologies in Northern Mexico, near Texas' existing Eagleford Shale formation.

### **Tax Reform down the Line too in Mexico? A distant potential.**

A further 'kicker' remains the opportunity around potential tax reform on the status of energy infrastructure in the country. While privatization of assets has proven substantially controversial, there remains a possibility to gain a tax-advantaged status.

The government recently enacted tax reform to keep the Mexican corporate tax rate at 30%, undermining a previous law planning to reduce it to 28%. Sempra believes this will have a minimal impact on ongoing earnings.

### **Mexico's Regulated Rate of Return Profile:**

For energy assets, Mexico offers a regulated rate of return of 10.14%, which is *real, unlevered after-tax* in US dollars. This return is adjusted every year for various macroeconomic factors such as inflation, etc. The ROE was revised down from a previous 11.33% real, unlevered return. Sempra emphasizes the return process is stable and transparent—the ROE remained at this level for nearly 10 years.

Mexico has a five-year rate review cycle. During the review process, regulators review the depreciated asset base, the historical O&M, SG&A, taxes and other metrics and compare these figures with key projections, such as energy demand forecasts and customer levels. They come up with a tariff based on a real rate of return, based on your depreciated asset base.

Regulated tariffs for all assets in Mexico are negotiated privately among parties, where regulators have limited say. They are set for the lifetime of the contract. In some cases, the negotiated tariffs are based on a regulated rate of return. The government has to approve direct assignments of the regulated returns in some cases for gas transportation or gas distribution.

**Sempra's distribution business—only one receiving regulated return. Rest have negotiated tariffs**



Sempra's distribution business is the only place where it received regulated return, which represents 7% of its adjusted EBITDA. The rest of the projects have negotiated tariffs.

### Lots of opportunities to limit public equity dilution

We look for IENova to raise greater amounts of leverage at the parent to fund future growth. We see meaningful opportunity to raise leverage to its target 3x Debt/EBITDA; we estimate current incremental capacity is ~\$600 Mn. In addition, we look for either the partial sell-down of its ESJ facility as well as potential divestment of Mexi-Cali CCGT to yield further revenues. We estimate external equity needs only in late 2014, only if management is successful in its bid for the gas utility (up to ~\$200 Mn) and if it is successful in its wind RFP bid in Baja California (an incremental ~\$600 Mn gross capex, with ~\$200 Mn equity contribution likely to be financed). Assuming the implied EV/EBITDA multiple remains constant at 6x, we see IENova earnings growing at a CAGR of ~14% through 2020.

**We see ~\$600 Mn in latent debt capacity hit its leverage metrics**

**Potential need for external equity is as soon as late 2014. This could be up to ~\$300 Mn**

### What is Sempra's 'Mexico Strategy'?

In a nutshell, this is the bulk of the non-LNG midstream growth for Sempra, with substantial opportunities expanded by the prospects of energy-sector reform. As the largest publically traded energy infrastructure company in Mexico, we see a substantial incumbent advantage in garnering such contracts, particularly through its 50/50 JV with Pemex Gas. We see a meaningful investment opportunity as the Mexican economy transitions to rely on natural gas (in lieu of more expensive of oil-based products), particularly along the border region with US-Mexico (part of a broader theme of exporting gas from the US to Mexico under existing free-trade authority). Due to its leading diversified energy operations, IENova is well-positioned to benefit from all upcoming energy reforms.

**Well positioned to capitalize on \$22 Bn Mexican energy reforms due to large, diversified energy operations**

Figure 32: IENova Asset Details

	Ownership	Capacity	Capacity under Long term Contract	Contract term (yrs)	COD	Customers
		(MMcfd)				
<b>Natural Gas Systems</b>						
Baja East Pipeline System	100%	3450	90%	20	Aug-02	Shell, Gazprom, Sempra LNG Marketing Mexico, InterGen North Baja Pipeline (TransCanada), TdM power generating facility (affiliate company)
Baja West Pipeline System	100%	940	100%	20	Jun-00	
Aguaprieta Pipeline	100%	200	25%	25	Nov-02	Kinder Morgan
San Fernando Pipeline	50%	1000	100%	20	Nov-03	Pemex Gas
Samalayuca Pipeline	50%	272	51%	Annual	Dec-97	Pemex Gas, CFE
Naco Compression Station	100%	90	100%	20	Sep-01	Pemex Gas
Gloria a Dios Compression Station	50%	60	100%	20	Oct-01	CFE
Los Ramones	50%	2100		20	2H 2014	Pemex Gas
<b>LPG System</b>		(Bld)				
TDF Pipeline	50%	30,000	100%	20	Dec-07	Pemex Gas
<b>LPG Storage Facilities</b>		(Bbld)				
Guadalajara LPG Storage Terminal	50%	80,000	100%	15	1H13	Pemex Gas
<b>Sonora Pipeline Expansion</b>		(MMcfd)				
Sasabe-Guaymas	100%	770	100%	25	Oct-14	CFE
Guaymas-El Oro	100%	510	100%	25	Oct-16	CFE
<b>LNG Facilities</b>		(Bcf/d)				
Energia Costa Azul	100%	1	100%	20	May-08	CFE, Gazprom & Shell
<b>Ethane Transportation</b>		(MMcfd)				
Ethane Pipeline	50%	152	100%	21	3Q 2014	Pemex Gas

Source: Company Reports



## What does IENova own?

The table showcases the breakdown of EBITDA. Its LNG and pipelines provide firm services for reserved capacity under ~14 year contracts. Its LDC segment (5% of 2012 EBITDA) receives regulated returns, which are reviewed on a forward-basis every five years.

The bulk of IENova's current Adjusted EBITDA is derived from its LNG *Import* facility, Costa Azul.

**Figure 33: Sempra Mexico EBITDA by Project**

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Total Adjusted EBITDA- SRE Mexico</b>	<b>\$307</b>	<b>\$387</b>	<b>\$465</b>	<b>\$530</b>	<b>\$605</b>	<b>\$666</b>	<b>\$754</b>	<b>\$862</b>
<b>EBITDA for certain projects:</b>								
Costa Azul	\$175	\$175	\$175	\$175	\$175	\$175	\$175	\$175
Mexi-cali	\$21	\$32	\$31	\$27	\$27	\$27	\$26	\$26
Sonora Pipeline, Segment 1		\$24	\$49	\$49	\$50	\$50	\$51	\$52
Sonora Pipeline, Segment 2		\$3	\$8	\$40	\$55	\$55	\$56	\$57
Energia Sierra Juarez	\$3	\$6	\$26	\$26	\$26	\$27	\$27	\$27
Los Ramones I			\$13	\$21	\$21	\$21	\$21	\$22
Los Ramones II (Norte)			\$13	\$21	\$21	\$21	\$21	\$22
Ethane Pipeline			\$15	\$15	\$15	\$15	\$15	\$15
Guadalajara Propane Facility	\$2	\$3	\$3	\$3	\$3	\$3	\$3	\$4
Generic Growth Capex - Full Ownership - Key Future Growth Assu			\$9	\$19	\$65	\$112	\$186	\$279
Generic Growth Capex - JV					\$7	\$13	\$20	\$26

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

**Figure 34: Sempra Mexico Net Income by Project**

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Total Net Income- Sempra Mexico</b>	<b>\$122</b>	<b>\$174</b>	<b>\$202</b>	<b>\$227</b>	<b>\$257</b>	<b>\$286</b>	<b>\$331</b>	<b>\$387</b>
<i>Guidance (UBS- half of average of International guidance range)</i>		<i>\$185</i>	<i>\$203</i>					
<b>Net Income for certain projects:</b>								
Sonora Pipeline, Segment 1		\$5	\$29	\$30	\$30	\$31	\$32	\$32
Sonora Pipeline, Segment 2			\$15	\$29	\$30	\$30	\$31	\$31
Energia Sierra Juarez			\$8	\$11	\$11	\$11	\$11	\$11
Los Ramones I			\$13	\$13	\$13	\$14	\$14	\$14
Los Ramones II (Norte)			\$1	\$8	\$9	\$9	\$9	\$9
Ethane Pipeline			\$6	\$6	\$6	\$7	\$7	\$7
Guadalajara Propane Facility	\$0	\$2	\$2	\$2	\$2	\$2	\$2	\$2
Generic Growth Capex - Full Ownership - Key Future Growth Assumption			\$3	\$7	\$23	\$40	\$66	\$99
Generic Growth Capex - JV					\$2	\$3	\$5	\$7

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

**Costa Azul LNG Import Terminal** – This \$1.2 Bn LNG import facility is contracted through 2028, generating EBITDA of \$175 Mn/yr. It is capable of supplying roughly one-eighth of Mexico's 2012 domestic natural gas demand, with its storage capacity of 320,000 cubic meters. We caution *an undisclosed* quantity is reflected in SRE's LNG Marketing segment (under Natural Gas segment), making this figure slightly *less* for IENova. Management continues to explore new cooling techniques, which minimize the need to receive 'uneconomic' cargoes to keep the LNG terminal in-service.

Located in Baja California, it receives and stores LNG from various customers, regasifies it and delivers the natural gas to its Baja East pipeline system. Management also purchases LNG to regasify and sell to third parties. Its capacity is fully contracted for 25 years with Sempra's US LNG affiliate and 50% to Shell and Gazprom. Its US LNG affiliate has a contract with BP, which is the majority owner of an LNG field in Indonesia.

## Power Segment: Mexicali CCGT

Its power segment consists of only one asset, the Termoelectrica de Mexicali (TDM), a 650 MW CCGT. It was constructed for \$350 Mn (~\$550/kW), following a PPA signed in 2001 with the California Department of Water Resource (CDWR) in an effort to address California's energy shortage in the early part of the last decade. The plant became merchant in 2012, as its 10-year above-market contract with CDWR expired. With just one asset in its Power Segment, IE Nova disclosed Adjusted EBITDA of \$17 Mn in 2012 (vs. \$70 Mn in 2011 while the plant was under contract), consistent with our expectations for an uncontracted plant dispatching into the California grid. We expect to see *compression* to this \$17 Mn in subsequent years (at least until late in the decade), as growing solar penetration clip peak energy rents and pervasive capacity over-supply limit any meaningful capacity value. SRE Generation (the Parent) markets the power from this asset through a services arrangement, providing some additional value to the parent. We see the greatest upside to this plant as attributable to any potential contracts to re-connect the asset to the Mexican grid, where prices are driven by oil, and the supply/demand more attractive. While this would necessitate a transmission solution, the corresponding capital requirement would be readily justifiable from our understanding (and perhaps funded through an offtake contract).

Ultimately, we do not believe IENova intends to maintain this asset should it remain merchant, making it a divestment candidate should its contracting efforts not succeed.

We include our EBITDA estimates for the asset below.

**Figure 35: Mexi Cali CCGT Projections**

Mexi-Cali CCGT (Interconnected into CAISO)	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<i>Had a contract which rolled off already with CDWR</i>								
Capacity (MW)	625	625	625	625	625	625	625	625
SP15 Onpeak Price (\$/MWh)	40.00	49.15	48.95	47.90				
SoCal Gas Price	3.64	4.34	4.40	4.30				
Spark Spread (\$/MWh)	13.77	17.92	17.24	16.95	16.75	16.55	16.35	16.15
Capacity Factor (%)	30%	35%	35%	35%	35%	35%	35%	35%
Generation (TWh)	1.64	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Capacity Payments (\$/kw-mo)	1.00	1.00	1	1	1	1	1	1
Gross Margin (\$ Mn)	30	42	41	40	40	39	39	38
O&M (\$/kW-yr) -- Assume Low for Mexico	15	15	15	20	20	20	20	20
O&M (\$ Mn)	9.4	9.4	9.375	12.5	12.5	12.5	12.5	12.5
EBITDA (\$ Mn)	21	32	31	27	27	27	26	26

Source: Company Reports & UBS estimates

**ECO Gas:** IENova also owns a modest sized gas utility with 3,075 km of pipelines serving three separate regions. These are Sempra's original assets in the country following industry restructuring. In connection with a recent permit it received to operate its Baja East pipelines, Sempra is required to divest components of this business.

### Other Midstream assets:

**Baja East Pipeline:** This fully bidirectional system (302 km) allows the transportation of natural gas supplies from either the US domestic natural gas market or Sempra's LNG terminal. It extends from an interconnection point at the North Baja Pipeline's system at Mexico-US border west to an interconnection point near its LNG terminal. It also has a 30,000 horsepower compression station. It has

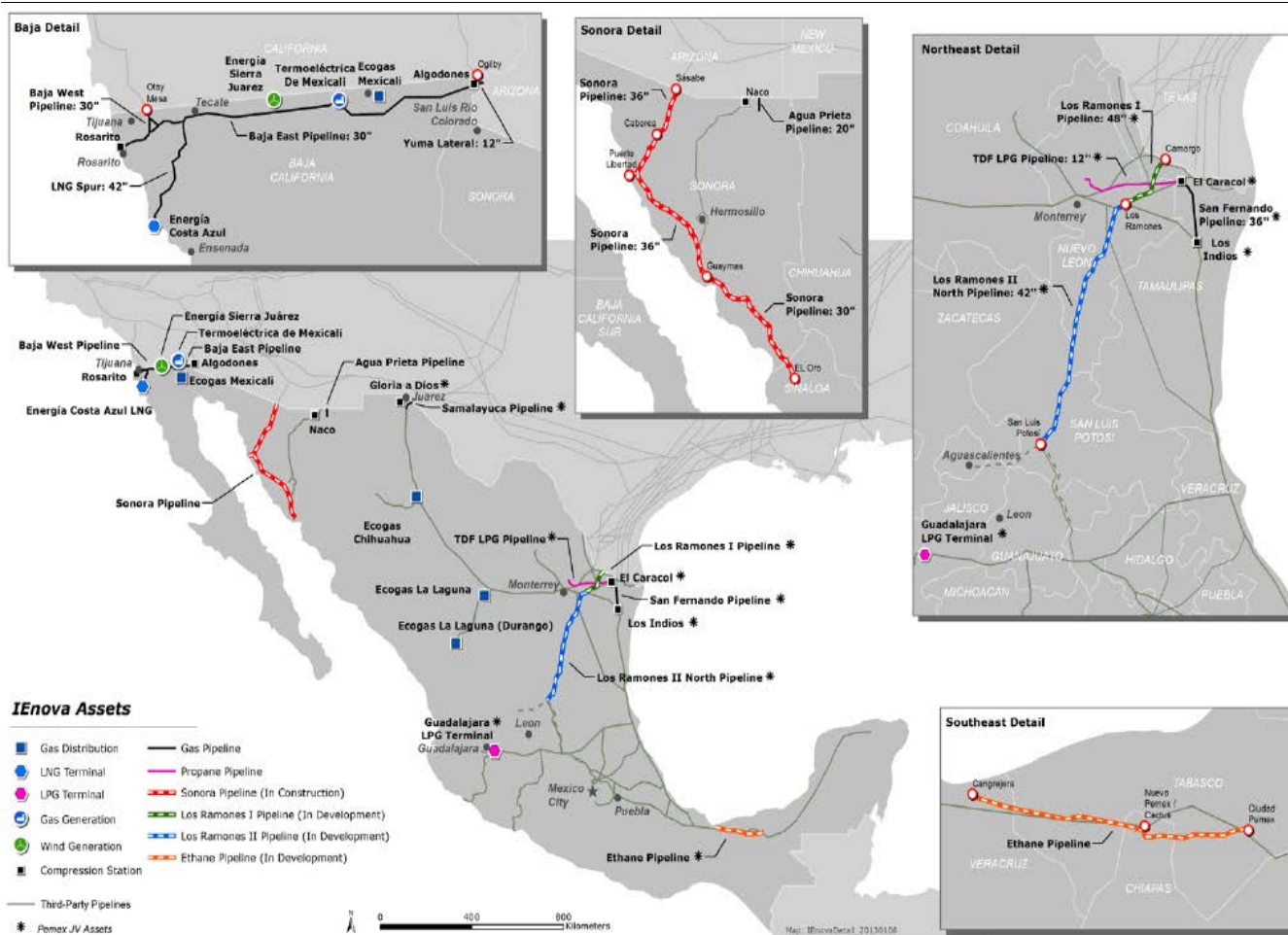
three pipelines, Rosarito Mainline, the LNG Spur and Yuma Lateral. 90% of its 3,450 MMcfd design capacity is contracted on a firm basis, with 16 long-term transportation service agreements.

**Baja West Pipeline:** This bi-directional pipeline has a capacity of 940 MMcfd with a 30-inch diameter pipeline and 8,000 horsepower compression station. It is contracted until 2028 with firm transportation service agreements. It interconnects with Baja East pipeline system in Tijuana north to the interconnect with SDG&E at the Mexico-US border and southwest to the Mexican Federal Electricity Commission's 1,300 MW plant in Rosarito.

**Agua Prieta Pipeline:** This 20 in diameter pipeline with design capacity of 200 MMcfd, transports natural gas from the Mexican-US border to the Nogales CCGT located in Agua Prieta, a city in the southeast. 25% is under a 25 year firm contract. It was built to accommodate for two of Mexican Federal Electricity Commission's power plants, one under construction and the other under development.

**Naco Compressor Station:** Installed on Pemex's Gas Naco Hermosillo gas pipeline in Naco, Sonora, it has 100% contracted capacity with Pemex Gas for 90 MMcfd of firm compression services until 2021, with a five year extension option.

Figure 36: Mexican assets



Source: Company Reports

## The Pemex JV Assets:

IENova acquired several assets from El Paso in 2010 for ~\$300 Million. These assets were all in a Joint Venture portfolio structure with Pemex. All of these assets are included on a 50% basis in the company's Adjusted EBITDA disclosures (although are formally accounted for as equity method investments). It has generated roughly \$100 million in free cash flow every year. Many of the current projects have been built with cash from operations and some debt at the corporate or project level. Management does not anticipate equity partners to contribute additional capital distributions, with \$100 million of annual FCF generation.

**San Fernando Pipeline:** This 36 inch diameter pipeline has a transportation capacity of 10.4 MMThd and compression capacity of 15.2 MMThd. It has two compression stations of 90,000 horsepower. It is fully contracted on a firm basis with PEMEX through 2023. PEMEX Gas also buys extra capacity as part of an interruptible transportation services contract.

**Samalyuco Pipeline:** This 24 inch diameter pipeline is the first privately-owned natural gas pipeline in Mexico and has a capacity of 272 MMcfd. It serves Mexico's FEC's Samalayuca power plant, interconnecting with a 16-inch diameter pipeline owned by PEMEX gas. 51% of its capacity is contracted on a firm basis.

**TDF LPG Pipeline:** This LPG system has ~190 km of 12 inch diameter pipeline as a pumping station near the pipeline's point of reception and delivery facility with storage spheres of a capacity of 40,000 Bbl. the first private LPG pipeline, it runs from Pemex Gas's Burgos LPG production area to a delivery facility near Monterrey, Nuevo Leon. It is contracted on a firm basis through 2027 with PEMEX gas with a 30,000 Bbl/d of aggregate average daily quantity.

**Gloria a Dios Compressor Station:** This compression station is under a firm compression and transportation services agreement with the Mexican Federal Electricity Commission through 2021 for its entire capacity of 60 MMcfd.

**Guadalajara LPG Storage Facility:** IENova singlehandedly constructed this 80,000 Bbl LPG storage facility near Guadalajara, Jalisco for \$65 Mn and a 13% project return. It came online in early 2013. It contains four storage spheres, with a capacity of 20,000 Bbl and an interconnection to Pemex Gas's LPG pipeline system. It has a 15-year storage services agreement with PEMEX Gas.

## Where's the Growth? Lots to Track Here:

We highlight the capital expenditure, the expected completion dates and contract years for IENova's upcoming assets in our next table.

Figure 37: Upcoming Assets

Project	Capex (\$Mn)	COD	Contract Term (years)
Wholly-Owned Projects			
Sonora Pipeline	~\$1000	4Q 2014 (segment 1), 3Q 2016 (segment 2)	25
Energia Sierra Juarez (ESJ)	~\$300	1Q 2015	20
PEMEX-JV Projects (total for JV)			
Los Ramones I pipeline	~\$250	4Q 2014	25
Los Ramones II pipeline	~\$500	4Q 2015	
Ethane Pipeline	~\$165	3Q 2014	21

Source: Company Reports

## Wholly-Owned Projects

### Sonora Pipelines:

The \$1 billion project will be constructed in two phases, entering service in the second half of 2014 and the second half of 2016, respectively. As IENova's biggest project to date, it extends from Sasabe, Arizona to El Soro, Mexico. Similar to many of its assets, management will employ a long-term take-or-pay contract for all of the pipeline capacity and will pay a usage fee regardless. Once completed these pipelines will almost *double* IENova's fixed assets. Construction resulted from two natural gas transportation service agreements with the Mexican Federal Electricity Commission (Mexican FEC) from October 2012. Contractual penalties will apply if management deviates from the construction schedule. The projects have 25 year take-or-pay contracts with the Mexican CFE from the date of operation of the two segments. Management plans to finance it through cash from the recent IPO and external capital. It plans to maintain a 60/40 debt to equity structure and raise debt to ~ 7x EBITDA. We estimate the project earns a 13% unlevered ROE. The Sonora pipelines will be located in the states of Sonora and Sinaloa with a total combined capacity of 1,280 MMcfd. The first segment will be a 36-inch diameter pipeline with 770 MMcfd of capacity and the second is a 30-inch pipeline with 510 MMcfd of capacity.

Due to its take-or-pay contract, IENova paid \$155 million for two irrevocable stand-by letters of credit to the Mexican FEC. (If the Sonora Pipeline does not receive the necessary permits, the Mexican FEC may be able to draw on the funds from these letters of credit).

Annual EBITDA on segments 1 & 2 could surpass \$100 Mn by 2017

Figure 38: Sonora Pipeline Segment 1

	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Capex Spent per year	\$250						
Equity	\$113	\$225					
Net Income	\$5	\$29	\$30	\$30	\$31	\$32	\$32
Interest	\$13	\$13	\$13	\$13	\$13	\$13	\$13
EBIT	\$18	\$42	\$43	\$43	\$44	\$45	\$45
D&A	\$6	\$6	\$6	\$6	\$6	\$6	\$6
EBITDA	\$24	\$49	\$49	\$50	\$50	\$51	\$52

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

Figure 39: Sonora Pipeline Segment 2

	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Capex Spent per year	\$100	\$229	\$171				
Equity	\$45	\$103	\$77	\$225	\$-	\$-	\$-
Net Income			\$15	\$29	\$30	\$30	\$31
Interest	\$3	\$9	\$13	\$13	\$13	\$13	\$13
EBIT	\$-	\$-	\$28	\$42	\$43	\$43	\$44
D&A	\$3	\$8	\$13	\$13	\$13	\$13	\$13
EBITDA	\$3	\$8	\$40	\$55	\$55	\$56	\$57

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

We look for a sell-down of its interest in ESJ to fund further growth projects

**Energia Sierra-Juarez (ESJ) Wind Project:** This 155MW wind project in Baja California (expandable to 1.2GW at the site) is anticipated to reach in-service in 1Q 2015, at a cost of ~\$300 Mn (~\$2,051/kW implied), likely more expensive due to the interconnect into SDG&E service territory and could also connect directly with the Mexican power grid. The initial phase is contracted with SDG&E for 20 years to serve its renewable needs under California's RPS. From a financing perspective for this project, management estimates it may need an additional ~\$100 million of additional parent debt as well as the ~\$220 million project financing with an 18 year tenor at 4-4.5% interest rate raised. Management is targeting a 9-12% return. It is currently searching for a joint venture partner.

**Figure 40: Energia Sierra-Juarez**

Assuming 2013 Capex	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Capex Spent per year	\$110						
Debt							
Equity	\$30	\$83	\$83	\$83	\$83	\$83	\$83
Net Income		\$8	\$11	\$11	\$11	\$11	\$11
Interest	\$11	\$11	\$11	\$11	\$11	\$11	\$11
EBIT	\$-	\$19	\$22	\$22	\$22	\$22	\$22
D&A	\$6	\$14	\$14	\$14	\$14	\$14	\$14
EBITDA	\$6	\$33	\$35	\$35	\$35	\$35	\$35

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

### More wind to come?

The CFE has issued an RFP for the second phase of this initiative and management submitted three 100 MW bids. Management states that the final structure of the project and contracts is subject to change. The final bids for all 300 MW are due in July 2014 and bids will be adjudicated two weeks later. The RFP process involves an initial pre-release of bids, general rounds of Q&A until the final bids are due. The CFE is considering bids for the second phase from both California and Mexico depending on pricing needs. They could get up to \$600M for the 300 MW with the CFE (~\$2,000/kW). In addition, we expect the project to participate in further RFPs for renewables in California, but is unlikely to be awarded generation given the on-peak value of solar resources in California. We also expect this (ESJ) asset to be sold down to a 50/50 ownership level in the near term, funding further growth opportunities at IENova in lieu of seeking external equity capital. We do not expect IENova to expand meaningfully into renewables in Mexico outside of this opportunity.

The CFE and management is strongly interested in wind development in the Baja region, which is a region south of California and can support up to 1,100 MW of wind development.

### What about Mexican Wind Investments? More to come here too

We continue to look for expansions of its ESJ investment [initial phase tied to SDG&E RFO], with future iterations focusing on CFE's Mexican needs. Site should accommodate a robust quantity of new wind, but ~300 MW incremental expected initially as part of forthcoming RFP. While the bulk of the focus at IENOVA will remain on midstream, we see renewables as another core focus for the company.

## JV with PEMEX

**Los Ramones I:** Management will be investing \$250 Million for this project. It expects to receive an 11.33% unlevered ROE for its 20 year contract.

**Figure 41: Los Ramones I Asset projections**

	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Capex spent per year	125						
Equity	56	113	113	113	113	113	113
<b>Net Income</b>		<b>\$13</b>	<b>\$13</b>	<b>\$13</b>	<b>\$14</b>	<b>\$14</b>	<b>\$14</b>
Interest	\$7	\$7	\$7	\$7	\$7	\$7	\$7
<b>EBIT</b>	<b>\$-</b>	<b>\$20</b>	<b>\$20</b>	<b>\$20</b>	<b>\$20</b>	<b>\$21</b>	<b>\$21</b>
D&A	\$6	\$6	\$6	\$6	\$6	\$6	\$6
<b>EBITDA</b>	<b>\$6</b>	<b>\$26</b>	<b>\$26</b>	<b>\$26</b>	<b>\$27</b>	<b>\$27</b>	<b>\$27</b>

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

**Los Ramones II:** Sempra just announced in October that it will also construct a second 275 mile segment of the Ramones pipeline to provide natural gas to growing industrial centers. Management will invest \$500 million in this segment. It is expected to be in service at the end of 2015. Management appear to guide towards higher returns than other projects (better than 6x EV/EBITDA). It is currently negotiating the terms of the project with PEMEX. It is approved to receive a 10.6% real regulated rate of return. With just a 25% ownership stake, and project finance leverage of 70%, the project will be financed with \$75 Million equity on its ~\$250 Mn total capital contribution.

**Figure 42: Los Ramones II Pipeline Asset Projections**

	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Capex spent per year	125	125					
Debt	125	50					
Equity	0	75					
<b>Net Income</b>		<b>\$1</b>	<b>\$8</b>	<b>\$9</b>	<b>\$9</b>	<b>\$9</b>	<b>\$9</b>
Interest	\$6	\$8	\$8	\$8	\$8	\$8	\$8
<b>EBIT</b>	<b>\$-</b>	<b>\$9</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$18</b>
D&A		\$4	\$4	\$4	\$4	\$4	\$4
<b>EBITDA</b>	<b>\$-</b>	<b>\$13</b>	<b>\$21</b>	<b>\$21</b>	<b>\$21</b>	<b>\$21</b>	<b>\$22</b>

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

**Ethane Pipeline:** As part of its joint venture with PEMEX gas, Sempra is constructing a 226 km pipeline with capacity of up to 151.9 MMcfd to supply ethane from PEMEX processing plants to the Etileno XXI ethylene cracker and polyethylene plant in Veracruz. Construction began in 2Q13 as the pipeline is expected to come online in 3Q14. The pipeline has a 21-year take or pay contract with PEMEX indexed for inflation. It received a 12.5% rate of return, at a slight discount to the regulated rate and is anticipated to cost ~ \$330 Mn. Management estimates this project will be a higher profitability project, with construction costs closer to the ~6x (13% return on investment) EV/EBITDA, vs. the bulk of its projects are constructed in the 6-8x range. The project was funded with \$200 million in cash on balance sheet.

**Figure 43: Ethane Pipeline Asset Projections**

	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Capex spent per year	100						
Debt Issued							
Equity	45						
<b>Net Income</b>		<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$7</b>	<b>\$7</b>	<b>\$7</b>
Interest		\$5	\$5	\$5	\$5	\$5	\$5
<b>EBIT</b>		<b>\$11</b>	<b>\$11</b>	<b>\$11</b>	<b>\$11</b>	<b>\$11</b>	<b>\$11</b>
D&A		\$4	\$4	\$4	\$4	\$4	\$4
<b>EBITDA</b>		<b>\$15</b>	<b>\$15</b>	<b>\$15</b>	<b>\$15</b>	<b>\$15</b>	<b>\$15</b>

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

## Additional Project Opportunities in the Pipeline

Sempra announced the following additional potential projects at their Analyst Day, which were publically announced by the government recently. Sempra plans to bid for these projects in the near-term and plans to employ the same structure as the Sonora Pipelines.

**Figure 44: Additional Potential Projects in the Pipeline**

Potential Route	Km.	Off-taker
Waha, Texas- El Encino, Chihuahua	800	CFE
El Encino, Chihuahua- Torreon Coahuila	477	CFE
South Texas- Tuxpan, Veracruz	1037	CFE
Colombia, Coahuila – Escobedo, Nuevo Leon	233	CFE
Mazatlán, Sinaloa – Guadalajara, Jalisco	475	CFE
Frontera – Los Ramones (bis)	120	CFE
Villa de Reyes, San Luis Potosi – Tula, Hidalgo	330	CFE
<b>Total</b>	<b>3472</b>	

Source: Company Reports

## Taxes: Exposure to F/X?

While there is minimal FX risk to the IENova business, with the bulk of the contracts US-dollarized, we flag the taxes paid to the government are in Pesos. The payment is calculated on a gain or loss of those assets/liabilities from quarter to quarter.

## Strong Credit Ratings

S&P gave IENova its highest long-term rating—AAA+. Management plans to increase and maintain its leverage to a total Debt/EBITDA ratio of 3, which was deemed acceptable by S&P.

**A focus on contract quality in Mexico to derive ratings**

Moody's gave a Baa1 credit rating to IENova on Jan 28, 2014. A Baa1 rating is equivalent to a Prime-2 global short term rating, meaning the entity has a strong ability to repay debt obligations. It is deemed medium-grade with moderate credit risk. The next table illustrates the determining factors of this rating. The key potential risk is that the energy sector is heavily controlled by the Mexican government, which was assigned a Baa1 rating as well.



## Sempra South American Utilities (SSAU)

SSAU operates electric transmission and distribution utilities in Chile and Peru and owns interest in utilities in Argentina. In 2011, SSAU acquired AEI's interests in Chilquinta Energia S.A. (100%) and Luz del Sur S.A.A. (76%) in Peru. These companies are both electric distribution utilities, which are now consolidated. SSAU also acquired two small energy-services companies, Tecnoed S.A. and Tecsur S.A from AEI. These distribution companies have exhibited 14-16% ROE over the past five years.

Interested in gas pipelines,  
electric generation & transmission  
growth opportunities

We see a substantial growth opportunity for SRE in its two South America businesses – Peru and Chile. Though as a percentage of the asset portfolio, the two businesses remain a small slice. We believe ROEs have tracked in the mid-teens, strongly above levels in the CA utilities.

Figure 45: South American Assets



Source: Company Reports

## Valuation

We value the segment using the market cap of SRE's publically listed sub in Peru, use peer valuations in Chile to value its T&D assets there, and lastly apply EV/EBITDA multiples (using Street consensus) for both the JV and core business. We continue to see upside to shares predicated on executing on future growth opportunities around LNG export, renewables, and midstream incremental opportunities.

We model earnings growth for the South America utilities of \$169mn in 2013, up 3% y/y excluding \$11mn of after-tax charges recorded in 1H13 related to the write-down and sale of Sempra's 43% share in two Argentina natural gas utility holding companies. The drivers of our growth forecast are primarily mid-single digit top line growth, driven by customer and usage growth.

Longer term, we model mid-single digit earnings growth for the segment, driven primarily by top line growth (customers and usage). The Santa Teresa hydro project in Peru is scheduled to be completed in 2014 and we expect it to bolster earnings growth in 2015, its first full year of operation. We assume a project cost of \$75mn and an EBITDA multiple of 7x, implying an incremental earnings contribution on a full year basis of about \$8mn. We assume margins remain relatively constant through the forecast period.

## Peru

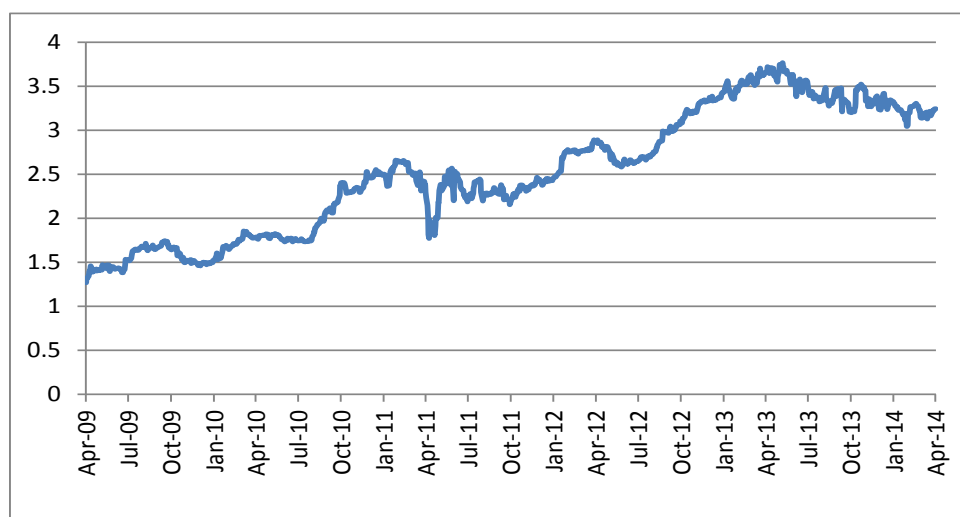
Sempra owns an 80% interest in a Peruvian publically traded utility, Luz Del Sur. The utility is expected to grow at a mid-to-high single digit rate, driving primarily by organic growth in sales and customers, rather than any specific infrastructure projects. The segment is easy to model from a valuation perspective since it is publically listed in Peru, in Nuevo Soles.

The operation, which accounts for about a third of all electricity used in the country, serves about 900,000 customers, including in the city of Lima. We await details regarding its plans to develop several generation assets and a build a multi-billion dollar pipeline.

The Peru operation also includes a controlling interest in two energy services companies Tecsur S.A and Tecnored S.A, which together represent a small share of earnings. It acquired AEI's interests. The next rate case is not until 2017.

Since Peru is a limited market, Sempra feels confident it can capitalize on M&A opportunities. It sees the greatest value creation in its green field projects.

Figure 46: Luz del Sur S.A. Stock Price (US Dollars)



Source: Factset

Figure 47: Luz Del Sur Income Statement (in Peruvian Nuevos Soles (MM))

Income Statement			2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Electric Distribution	1,843	2,073								
Rentals	5	5								
<b>Total Revenues</b>	<b>1,847</b>	<b>2,078</b>	2,221	2,531	2,724	2,929	3,150	3,397	3,643	3,898
Electric Distribution	1,275	1,464								
Rentals	0	0								
<b>Cost of sales</b>	<b>1,275</b>	<b>1,464</b>	1,596	1,874	2,021	2,211	2,415	2,643	2,871	3,106
<b>Gross Profit</b>	<b>572</b>	<b>613</b>	625	657	703	719	735	754	773	792
S&G expenses	38	40	40	46	47	51	54	56	59	61
Admin expenses	80	88	89	89	89	89	89	89	89	89
<b>Operating Income</b>	<b>454</b>	<b>485</b>	496	522	568	579	593	608	625	642
Other (Income)	(15)	(16)								
Other Expenses	13	23								
Net Other Income	(1)	7	7	7	7	7	7	7	7	7
<b>EBITDA</b>	<b>493</b>	<b>518</b>	529	561	607	622	639	657	676	696
<b>EBIT</b>	<b>455</b>	<b>478</b>	488	515	561	571	585	601	617	635
Interest (Income)	(13)	(15)	(15)	(20)	(20)	(20)	(20)	(20)	(20)	(20)
Interest Expenses	38	40	41	37	44	48	53	57	62	66
Net Interest Exp	25	25	26	17	24	29	33	38	42	47
<b>EBT</b>	<b>430</b>	<b>453</b>	462	498	536	543	552	563	575	588
Income Tax	131	144	151	148	159	161	164	167	171	175
Tax rate	30%	32%	33%	30%	30%	30%	30%	30%	30%	30%
<b>Net Income in Peruvian Currency</b>	<b>299</b>	<b>309</b>	311	350	377	381	388	396	404	413
<b>Noncontrolling Interest in \$</b>	<b>\$22</b>	<b>\$24</b>	\$23	\$25	\$27	\$27	\$28	\$28	\$28	\$29

Source: Company Reports & UBS estimates

Figure 48: Operating Statistics- Peru

Operating Statistics Peru	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Electric Sales (MMKwh)	6,984	7,492	7,859	8,244	8,648	9,071	9,515	9,981
% Growth	4.7%	7.3%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
\$/Kwh	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.14
Electricity Customers in 000's	996	1,034	1,074	1,116	1,159	1,204	1,250	1,298
% Growth	3.9%	4%	4%	4%	4%	4%	4%	4%
Mwh /Customer	7.0	7.2	7.3	7.4	7.5	7.5	7.6	7.7
Cents/Customer	8	9	9	9	9	9	10	10
Demand Growth Rate Calculation								
Expected Real GDP Growth	5%	5%	6%	6%	6%	6%	6%	6%
Expected Inflation Growth	3%	3%	2%	2%	2%	2%	2%	2%
Electricity Sales Growth Multiplier	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: Company Reports, UBS estimates

## Upcoming Projects

### Southern Peru Pipeline

Sempra hopes to build a new, multi-billion (~1,000 km) gas & liquids pipeline from the central rainforest region down to the Southern coast. While competition for the project is down to one other large competitor, execution is likely to prove challenging.

It just formed a consortium with the Techint and GDF Suez to collectively bid for the project. Techint has operated this pipeline for the past ten years. The bid is expected at the end of June.

Importantly it appears this growth project could be pursued through the Chilean subsidiary, using proceeds raised from an IPO rather than through the existing Peruvian subsidiary.

Figure 49: Southern Peru Pipeline



Source: Company Reports

### Santa Teresa Hydro project

This 100 MW hydro project is expected to come online later this July (~\$1,500/kW). It is located in the Cusco region, 715 miles from Lima. Management has sold all the firm power to large customers, who can buy 10-15 MW on a term basis directly from Luz del Sur. We see the project as a marginal contributor, but include our projections below.

Sempra also hopes to build Santa Teresa Hydro II, a 200 MW plant (at ~\$1,500/kW) just a few miles downstream from Santa Teresa Hydro I. We anticipate this project will cost ~\$300 million but the in-service date remains uncertain. It filed for water rights with the Peruvian regional government. Upon receiving this, management is confident to receive to get a long-term power agreement and large customers.

**Figure 50: Peruvian Hydro Asset- Santa Teresa I Hydro Plant**

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Capex		155	155	155	155	155	155	155
Capex Spent per year								
Equity		47	47	47	47	47	47	47
<b>Net Income</b>		<b>3</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
Interest		5	5	5	5	5	5	5
<b>EBIT</b>		<b>10</b>	<b>15</b>	<b>16</b>	<b>16</b>	<b>17</b>	<b>17</b>	<b>17</b>
D&A		5	5	5	5	5	5	5
<b>EBITDA</b>	<b>4</b>	<b>15</b>	<b>20</b>	<b>21</b>	<b>21</b>	<b>22</b>	<b>22</b>	<b>22</b>

Source: Company Reports, UBS estimates. (\$Mn unless otherwise indicated)

### Other areas of interest in Peru

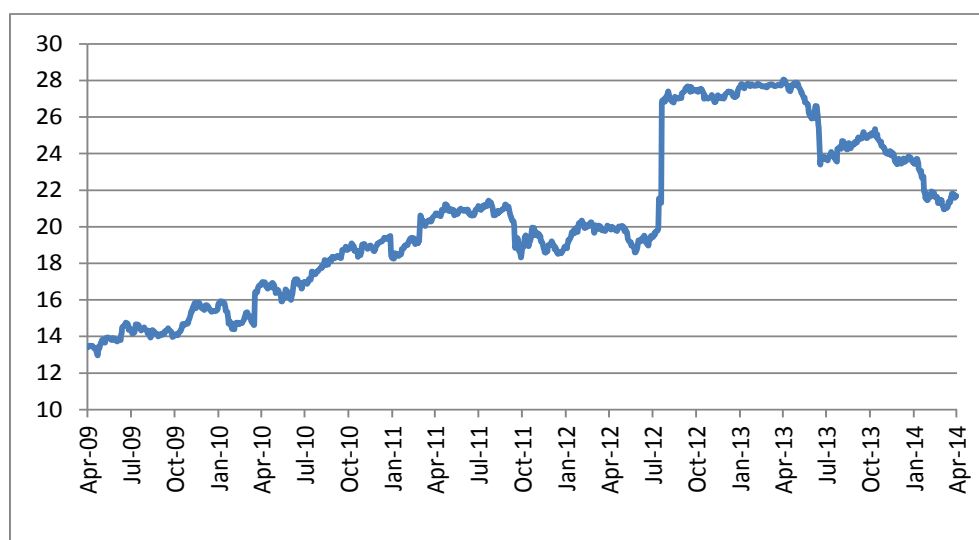
Management is also considering a ~500 MW combined cycle plant with a construction cost of \$300-\$40 million in our view. It doesn't have enough visibility to anticipate the online date. It also sees viable electric transmission opportunities.

## Chile

Chilquinta Energia is one of the largest electricity distributors in Chile, serving about 600,000 customers in the cities of Valparaiso and Viña del Mar. The business also includes an energy services company, Tecnored, which provides services that include substation construction, transmission line maintenance, and energy efficiency programs. Tecnored also owns small electric generation power plants. The next rate case is not until 2016.

Chile and Peru have very similar regulatory regimes. The allowed return is a bit higher in Peru due perhaps to more risk. In both countries, the tariffs are set based on new replacement costs of the distribution network.

**Figure 51: Compania Electric del Litoral S.A. Stock Price (US Dollars)**



Source: Factset

We include our estimates for the segment in the next table, largely derived by plugging the difference between publically available financials for Luz Del Sur and the South America segment.

Figure 52: Chilquinta Income Statement (US \$)

US \$	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Revenues	\$653	\$750	\$794	\$840	\$889	\$941	\$996	\$1,055	\$1,117
Cost of sales	\$556	\$649	\$675	\$711	\$749	\$793	\$840	\$889	\$941
<b>Gross Margin</b>	<b>97</b>	<b>\$101</b>	<b>\$118</b>	<b>\$129</b>	<b>\$140</b>	<b>\$148</b>	<b>\$157</b>	<b>\$166</b>	<b>\$176</b>
Depreciation	41	\$44	\$44	\$47	\$46	\$47	\$47	\$47	\$48
<b>Operating Income</b>	<b>57</b>	57	74	82	94	102	110	119	128
Other (Exp) /Income	49	39	39	45	50	50	54	54	54
<b>EBITDA</b>	<b>146</b>	<b>\$139</b>	<b>\$157</b>	<b>\$173</b>	<b>\$190</b>	<b>\$198</b>	<b>\$211</b>	<b>\$220</b>	<b>\$230</b>
EBIT	106	\$95	\$113	\$127	\$143	\$151	\$164	\$173	\$182
Int Expense	8	3	2	3	7	9	9	10	9
EBT	98	\$92	\$111	\$123	\$136	\$142	\$154	\$163	\$173
Income Tax	23	\$13	\$21	\$23	\$26	\$28	\$31	\$33	\$35
<b>Net Income</b>	<b>\$75</b>	<b>\$79</b>	<b>\$90</b>	<b>\$100</b>	<b>\$109</b>	<b>\$114</b>	<b>\$123</b>	<b>\$130</b>	<b>\$137</b>
Tax Rate	23.9%	13.8%	18.7%	18.9%	19.5%	19.7%	20.1%	20.2%	20.4%
Earnings growth		6.0%	13.9%	10.9%	9.4%	4.6%	7.7%	5.4%	5.8%

Source: Company Reports, UBS estimates. (\$Mn unless otherwise indicated)

Figure 53: Operating Statistics for Chile

Operating Statistics Chile	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Electric Sales (GWh)</b>									
Chile	2,698	2,856	3,023	3,200	3,388	3,586	3,796	4,018	4,254
Growth - y/y	7.1%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%
<b>Electric Customers (000's)</b>									
Chile	623	640	657	675	694	713	732	752	773
Growth - y/y	2.3%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
<b>MM kWhs Sold per 000 Customers</b>									
Chile	4.3	4.5	4.6	4.7	4.9	5.0	5.2	5.3	5.5
Growth - y/y	4.7%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
\$/ 000 Customers		1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
\$/kWhs	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Source: Company Reports, UBS estimates. (\$Mn unless otherwise indicated)

### Chile Trunk Transmission Projects

Sempra recently won two rounds of transmission bids. It will be partnering with SAESA for two projects. Similar with projects in Mexico, it has a 20-year US dollar denominated contracts backed by the Ministry of Energy for them.

Chile Trunk Transmission I is a \$150 million, 235 kilometre line. It is expected to come online in 2017. Chile Trunk Transmission II is a \$80 million, 114 kilometre line, which is expected to come online in 2018. Management hopes to bid for similar projects later this year.

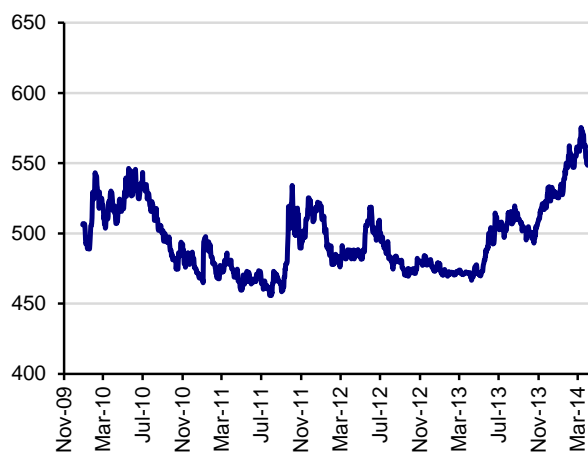
### Quantifying the F/X Exposure to Sempra

We include charts below of the three currencies the company is primarily exposed to. The Chilean Peso appreciated 17% YoY, while the Peruvian Sol appreciated 9%. A 10% appreciation of Peruvian Sol in 2014 causes a 1% decrease in EPS, while a 10% appreciation of the Chilean Peso has a marginal impact on EPS. While shares of IENova nominally trade in Pesos, much of its business is denominated in

USD (including its contract payments), with the underlying fundamentals of the business muted in exposure.

The tariffs for the distribution companies are set in local currencies. Sempra has periodic adjustment mechanisms for its tariffs involving inflation, exchange rates and commodity prices.

**Figure 54: US Dollar per Chilean Peso**



Source: Factset

**Figure 55: US Dollar per Peruvian New Sol**



Source: Factset

**Figure 56: US Dollar per Mexican Peso**



Source: Factset

## San Diego Gas & Electric (SDG&E)

SDG&E is an operating utility that has 3.4 million electric customers and 3.1 million natural gas customers in San Diego and Orange County. It also has a 20% stake in the San Onofre Nuclear Generation Station (SONGS), which went offline in 2012 due to infamous operating issues. SDG&E purchases energy to compensate for this lost power.

**Figure 57: SDG&E and SoCalGas Service Territory**



Source: Company Reports

**Figure 58: San Diego Gas & Electric Assets**

Power Plant	Fuel Type	State	Operating Status	MW	2012 CF (%)	Year in Service
Cuyamaca Peak Energy Plant (El Cajon CT)	Gas	CA	Operating	49	10.88	2002
Desert Star Energy Center	Gas	NV	Operating	490	56.73	2000
Miramar Energy Facility	Gas	CA	Operating	94	21.84	2005
Ocotillo Sol Project	Solar	CA	Planned	20	NA	NA
Palomar Energy	Gas	CA	Operating	570	55.8	2005

Source: Company Reports, SNL

### Pending 2013 Renewable RFO

SDG&E issued request for offers to expand its renewable portfolio in order to meet California RPS standards, which require it utilize 25% of renewable generation by the end of 2016 and 33% by the end of 2020 (formally known as the SB2(1X) RPS Compliance effort). Renewable expenditure represents \$400 million of SDG&E's total capital expenditure until 2017. Due on Jan 29, the proposed generation must be at least 20 MW and may be comprised of peaking, baseload, dispatchable, as-available or unbundled RECs. Management hopes to procure three categories of renewable resources: bundled products, firmed and shaped products and unbundled renewable energy credits. The first two categories will require fixed pricing with terms that are 15 years or less. PPA negotiations with selected parties should begin by May. SDG&E will seek CPUC approval for Tier 3 Advice Letters with PPAs sometime after March 2015.

**SDG&E plans to spend \$400 million of its total capital expenditure until 2017 on renewables.**



## Other small scale Renewable procurement initiatives...

SDG&E anticipates the fifth Renewable Auction Mechanism (RAM) RFO by the summer of 2014. CPUC issues this market-based procurement mechanism to approve renewable projects between 3-20 MW. The last one closed in September 2013.

Management is also accepting Program Participation requests for the Renewable Market Adjusting Tariff (Re-MAT) for small renewable generation (under 3 MW) in order to procure an additional 28.4 MW (per CPUC Decision D. 12-05-035). Eligible product types include: base-load, as-available and peaking as-available, each with a total 9.5 MW target capacity. The contract prices will be determined by the CPUC's market pricing mechanism with a minimum price of \$89.23/MWh for all product types. SDG&E will hold several bi-monthly rounds, which began in November 2013.

## Threat of Solar Expansion and Net Metering

The significant expansion of solar installations, especially in California, has raised the prospect of a "utility death spiral" as more customers leave the grid, saddling a shrinking pool of remaining customers with the cost of maintaining the network, incentivizing further defections. Many factors have hastened the pace of solar adoption/ grid defection:

- (1) New business models that allow homeowners to "go solar" with little or no upfront cost. Traditional residential models had customers spending upwards of \$30,000 to install a generation system. Now homeowners pay no upfront cost, which is borne by the provider (e.g. SolarCity) and instead enter into a long term (e.g. 20 year) contract to buy energy at a rate below what they're paying the local utility. Clearly, markets with high electricity costs and lots of sun make the most sense.
- (2) Net energy metering (NEM): Under a NEM regime customer meters track the flow of electricity produced by a distributed PV system and delivered to the grid vs the electricity used from the grid to establish a net credit or payment by the customer based on net usage. Owners of distributed PV systems often produce excess energy, which is sold to the utility at the applicable retail rate. In California, NEM utilities are required to provide for net metering until generating capacity used by NEM customers exceeds 5% of each investor-owned utility's aggregate peak load (5.2 GW total net metered capacity). The current level as of March 31, 2014 is 2.03%.
- (3) Rate tiering: In California a rate tiering system exists under which users who consume more electricity pay higher rates as their consumption reaches certain thresholds. Customers in the lower rate tiers (1 and 2) are sheltered from certain charges and rate hikes above a threshold, meaning that higher costs fall disproportionately on customers in higher tiers.

We see rate design reform as stemming 'grid parity' concerns for now

Decoupled revenues mute any near term impact

Long term question remains how quickly to move towards greater fixed charges for consumers

## Is this problematic yet? No, but balancing of rate tiers is a gradual shift

With California's utilities already decoupled, we see little immediate negative impact. Rather, we see greater deployment of residential solar as reducing the *need* for further structural T&D investments, with customers 'self-serving' offsetting in part organic load growth. Additionally, we see issues around permitting substantial Net Energy Metering (NEM), which allows customers to sell back to the utility at their respective avoided all-in cost (incl. wires charges, etc.), reflecting a meaningful subsidy above wholesale levels, encouraging customers to

over-produce to sell back to the grid. Overall, we are cautious as to the second order effects on the states' utilities, particularly with respect to longer-term ramifications on reduced grid reliance. Given the significant necessary transition in rates towards fixed compensation, and compression in rate tiers, we see a need to being transitioning rates immediately in order to avoid shock and *also* moderate net metered rates for customers.

## Quantifying the Lost Revenue

We include several tables below, illustrating the lost revenues to California utilities and SDG&E specifically with greater penetration of behind-the-meter solar generation. Using high level assumptions around residential lost revenues under full penetration under new caps, we estimate lost revenues to utilities as being ~9% for the California utilities. Given the focus on building out behind-the-meter solar and net energy metering, there will be an increased focus on precisely *what* tariffs customers are charged (residential, commercial, industrial, or wholesale), with customers now incentivized to see higher rates.

We include our estimate of what the impact to each of the utilities revenues would be on the hypothetical deployment of 5kW systems entirely across the residential tariff would do to utility revenues. While still decoupled, and a likely *maximum* exposure (seeing industrial and commercial users too are likely to make use of the Net Energy Metering tariff), the calculations suggest a material impact nonetheless.

**Figure 59: Total Lost Revenue for Utilities in California**

	SDG&E	SCE	PG&E
Allowable amount of solar generation (MWs)	607	2,240	2,409
# of 5 kW systems allowed in the cap	121,400	448,000	481,800
Total Lost Revenue from switching from Tier 4 to Tier 1 (\$Mn)	285	1,217	1,477
Total Lost Revenue as % of total 2012 revenue	7.72%	8.09%	12.46%

Source: Company Reports & UBS estimates

We include the break out of our utility projections, applying assumptions out what a typical 'Tier 4' customer would pay on a variable basis, offset by the net output of a 5kW system. While clearly not entirely coincident with their usage, a 5 kW system would effectively offset the usage of a standard Tier 4 customer. We also separately call out the lower revenue effect of dropping from a Tier 4 to a Tier 1 rate as well on remaining KWh sales sold.

**Figure 60: Lost Revenue to SDG&E**

SDG&E	Tier 4	Tier 3	Tier 2	Tier 1
Price (per kWh)	\$ 0.268	\$ 0.248	\$ 0.166	\$ 0.143
Usage range (kWh/month) <sup>1</sup>	>600	500-600	300-500	<300
Average usage range (kWh/month)	810	447	312	270
Usage Range (per kWh) <sup>2</sup>	>200%	131-200%	101-130%	Up to Baseline
	Annual (KWh)	Monthly (KWh)		
Total Usage	9,600	800		
Solar Usage	8,760	730		
New Usage from Grid	840	70		
For typical 5 kW solar system:	Annual Est.	Avg Bill		
Annual Revenue	\$ 2,573	214		
Loss in Revenue from switching from Tier 4 to Tier 1 on remaining sales	\$ 105			
Lost Revenues from lower usage (netting out solar dispatch)	\$ 2,348			
Proforma New Revenues w/ 5 kW system	\$ 120	10		

(1) Usage ranges are calculated in comparison to the baseline quantity, which is set by state law and implemented with approval of CPUC. (Typically, in the summer, this is 50-60% of the electricity the average residential customer uses in each territory. In the winter, this is 60-70% of the average use.)

(2) UBS assumption

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

## Mitigant to Solar Expansion Threat—Bill AB 327

The recently adopted California Utility Reform Bill (AB 327) will reduce the risk posed to utilities by wide-spread solar growth. SDG&E leads a strong consumer campaign "Fix My Energy Bill" to promote this bill. The bill 1) includes raising the net metering cap to 5% of each investor-owned utility's peak load (5.2GW total net metered capacity) or through 2017, whichever is earlier ; 2) gives California Public Utilities Commission (CPUC) until Mar-14 to come up with a scheme for grandfathering; and 3) gives the CPUC the authority to remove the net metering cap or come up with schemes for customers beyond the cap, and implement a fix charge of up to \$10/month to compensate the utilities (quite modest in our view relative to lost revenues).

CPUC has until March 2014 to come up with a scheme for grandfathering.

### What's the legacy issue here? All about rate equity

The genesis of the rate tiering as it exists today was designed to encourage energy efficiency, by disincentivizing greater usage, but also offering affordable rates to lower-income consumers, with inflation caps for the lower tiers put in place at the time of the energy crisis. The latest bill removes these price inflation limitations, as well as allows utilities to compress their rate offerings to just two tiers, limiting the price discrepancy between different levels of usage. The latest legislation is a first step forward, in a series of moves necessary to maintain rate equity between different energy users in the state; given the substantial need to flatten rate structures, and transition towards greater fixed compensation for utilities.

### What about Storage?

In October 2013, the California Public Utilities Commission (CPUC) created a new energy storage target for its investor-owned utilities of 1.375 GW by 2020. SDG&E's proposed energy storage target is 165 MW by 2020. The complete breakdown of the proposed targets for the California utilities is below. The CPUC hopes to incentivize novel approaches to storage, mandating targets related to transmission (conventional grid-scale solutions) and distribution (likely storage coupled with distributed generation solutions). The first of four biennial solicitations will be issued by March 1<sup>st</sup>, of which utilities can rate base 50%.

We have not included storage upside in our estimates

Figure 61: Storage Grid Domain Proposed Targets

Storage Grid Domain	Proposed Energy Storage Procurement Targets (MWs)				
Point of Interconnection	2014	2016	2018	2020	Total
<b>Southern California Edison</b>					
Transmission	50	65	85	110	310
Distribution	30	40	50	65	185
Customer	10	15	25	35	85
Subtotal SCE	90	120	160	210	580
<b>Pacific Gas and Electric</b>					
Transmission	50	65	85	110	310
Distribution	30	40	50	65	185
Customer	10	15	25	35	85
Subtotal PG&E	90	120	160	210	580
<b>San Diego Gas &amp; Electric</b>					
Transmission	10	15	22	33	80
Distribution	7	10	15	23	55
Customer	3	5	8	14	30
Subtotal SDG&E	20	30	45	70	165
Total - all 3 utilities	200	270	365	490	1,325

Source: California Public Utilities Commission

## Future technologies: Friends or Foe?

Beyond solar, we flag the company continues to evaluate opportunities arising from the recent Storage RFP as well as opportunities to enable electric vehicle penetration in the state. With the highest level of EV ownership in any metro-area in the US, we suspect SDG&E is likely to be at the forefront of this thesis.

## How does SDG&E Stack Up versus Peers?

We include regulated electric utility peers of SDG&E. The outstanding question remains whether (and to what degree) California can and should garner a premium multiple, especially versus fellow California utility PG&E considering ongoing issues around San Bruno. Lastly, with investors increasingly skittish over 'net metering' and distributed solar, we expect this to weigh on utility valuations in California in the future as well. Lastly, with management seemingly over-earning its authorized ROE, we also see some further risk to SDG&E; that said, it has consistently proved capable of earning such a return.

**What's the upshot? Still have real growth.** Despite regulatory concerns in the jurisdiction, SDG&E continues to see a disproportionate share of investment opportunities arising from aggressive energy policy in the state, which appears likely to last.

**What are future investment 'expansion' opportunities:** We see the following as future structural growth opportunities for shares of SDG&E.

- **More renewables (please?):** It remains unclear the level of appetite among utilities for more utility-scale projects. We understand the utilities are advocating for only a modest increase in the RPS target to ~40% from 33% by 2020. Meanwhile some advocates appear to be pushing for a ~50% standard by 2030. While we see a broader engine to drive continued ratebase growth, we believe utilities are likely concerned about both rate inflation on consumers significantly above inflation, as well as the potential impact of continued rate tier subsidization of distributed solar resources.
- **Bringing renewables to market:** More than anything, we see continued development of electric transmission resources as a key aspect of further renewable build out (as we don't expect either the utility or its competitive affiliate to win a large-share of solar projects given the increasingly competitive landscape for such projects). Compounding the need for transmission is the states' planned shift away from coastal once-through cooling generation, requiring generation to be imported into the densely populated coastal areas.
- **Storage RFP:** While a nascent topic, we see back-stopping renewables and integration as a key theme for both the utilities and IPPs. We would expect Sempra to pursue at least in part (either through the utility or its competitive affiliate on a range of solutions).

## Anticipated Rate base growth & recent Rate cases

We expect SDG&E ratebase and earnings to grow at 5-year CAGRs of 6.0% and 5.5% respectively, between 2013 and 2018. We include our rate base projections below. 40% of the ratebase is subject to FERC jurisdiction, with this expected to grow at a 9% CAGR to 44% from 2014-2018 through the investment of \$2.1B. California jurisdiction ratebase is expected to grow at a 4% CAGR to 56% by 2018 (43% electric and 13% gas) through the investment of \$3.4B from 2014-2018. The utility is currently authorized a 52% equity layer at 10.05% ROE on FERC and 10.3% on California ratebase. Our ratebase projections are laid out in the table below.

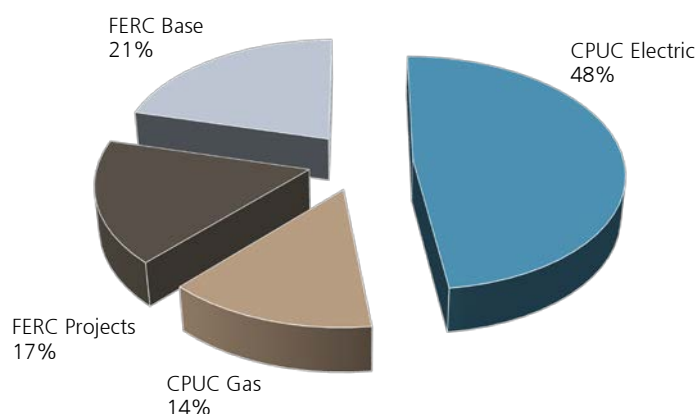
**Figure 62: SDG&E Net Income, Adjustments, and Rate base Projections**

	2013	2014	2015	2016	2017	2018E	2019E	2020E
Achieved ROR on Ratebase	6.53%	6.83%	6.75%	6.59%	6.52%	6.46%	6.39%	6.33%
Authorized ROR	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%	7.79%
<b>Rate Base</b>						\$4,340		
CPUC	\$4,419	\$4,612	\$4,816	\$5,024	\$5,250	\$5,478	\$5,798	\$6,105
FERC	\$2,825	\$3,075	\$3,347	\$3,638	\$3,960	\$4,304	\$4,556	\$4,797
<b>Total</b>	<b>\$7,244</b>	<b>\$7,687</b>	<b>\$8,163</b>	<b>\$8,663</b>	<b>\$9,210</b>	<b>\$9,782</b>	<b>\$10,353</b>	<b>\$10,902</b>
<b>Guidance</b>						\$9,500	plus another \$0.5-\$2.0B not in 2014-2018 plan	
CPUC ratebase CAGR	2%	4%	4%	4%	4%	4%	6%	5%
FERC ratebase CAGR	6%	9%	9%	9%	9%	9%	6%	5%
<b>Authorized Net Income Model</b>								
CPUC	\$237	\$247	\$258	\$269	\$281	\$293	\$311	\$327
FERC	\$148	\$161	\$175	\$190	\$207	\$225	\$238	\$251
<b>Total</b>	<b>\$384</b>	<b>\$408</b>	<b>\$433</b>	<b>\$459</b>	<b>\$488</b>	<b>\$518</b>	<b>\$549</b>	<b>\$578</b>
<b>PSEP Phase I and II</b>								
<b>CWIP</b>	<b>\$50</b>	<b>\$50</b>	<b>\$50</b>	<b>\$50</b>	<b>\$50</b>	<b>\$50</b>	<b>\$50</b>	<b>\$50</b>
Utility Incentive Mechanisms	\$0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0
Energy Efficiency Programs	\$4	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0
Repair Deductible Allowance (Before Capi	\$25.0	\$25.0	\$25.0					
Other Adjustments	\$30.0	\$20.0	\$20.0	\$38.0	\$38.0	\$38.0	\$38.0	\$38.0
<b>Total Other Adjustments</b>	<b>\$54</b>	<b>\$52</b>	<b>\$52</b>	<b>\$45</b>	<b>\$45</b>	<b>\$45</b>	<b>\$45</b>	<b>\$45</b>
<b>GRC</b>								
Retroactive Costs recovered till 3Q13 (\$MM)	(\$69.0)							
Expected Recovery of Retroactive revenues	\$0	(\$52)	(\$52)					
Expense Pfd Redemption	(\$3)							
6.2% Ratebase CAGR 2013-2018 5.4% Net Income CAGR 2013-2018								
<b>Total Adjusted Net Income</b>	<b>\$471</b>	<b>\$510</b>	<b>\$535</b>	<b>\$554</b>	<b>\$583</b>	<b>\$613</b>	<b>\$644</b>	<b>\$673</b>
<b>Guidance</b>	<b>\$470-\$500</b>	<b>\$470-\$510</b>	<b>\$500-\$540</b>	<b>\$525-\$575</b>				

Source: Company Reports, Government Filings, UBS estimates. (\$Mn unless otherwise indicated)

SDG&E has outlined a \$5.5bn capital program over that time period, allocated as defined below. About 62% of the spending is related to electric generation and natural gas distribution (CPUC-regulated), with 38% planned for new and replacement substations and MRO and integrity spending (FERC-regulated). We see limited risk to income growth driven by rate base expansion given 75% of this planned spending has already been approved.

**Figure 63: Planned Capex 2014-2018 (\$5.5B)**



Source: Company Reports

SDG&E plans to spend \$400 million on its Pipeline Safety Enhancement Plan (PSEP) through 2016 – much lower than the \$1.65bn planned at SoCalGas given the former's much smaller service territory – 4,100 square miles vs. 20,000 at SoCalGas, and fewer meters, 860,000 at SDG&E vs. 5.8 million at SoCalGas.

**Figure 64: Major Utility Capital Projects 2014-2020 (excludes base capital)**

Major Utility Capital Projects 2014-2020 (excludes base capital)		
Pipeline Safety & Enhancement Plan	2014-2020	\$600-\$1,000M
Substations (East Cty, S Bay, S Orange Cty)	2014-2019	\$1,000-\$1,200M
System Hardening (Cleveland Nat Forest, Poles)	2016-2020	\$600-\$800M
Grid Reliability (Sycamore-Penasquitos, Talega)	2015-2020	\$400-\$900M
Smart Grid, Elec Vehicle Infrastructure	2016-2020	\$100-\$300M
<b>Total Potential Investments (excluding base capital)</b>		<b>\$2,700-\$4,200M</b>
Key Project Expenditures in 2014-2018 plan		\$2,200M
<b>Opportunities not in 2014-2018 plan</b>		<b>\$500-\$2,000M</b>

Source: Company filings

As with SoCalGas, beyond capital spending/rate base growth and the impact from the recent rate case, we assume only modest benefits from customer base expansion, which has been tracking below 1%, and cost performance. Cost management incentive programs have contributed \$5-\$15mn in earnings in the last three years and roughly 10-30bp in allowed ROE above base margins. We believe the upside from incentives will remain modest in coming years.

We model ROE tracking in the 11-12% range in 2013-2014, above the allowed ROE of 10.30% as of the last rate case, driven by cost performance, benefits from tax incentives, and construction work in progress (CWIP) on which SDG&E earns a return but which is excluded from rate base. The key one-time reconciliation item is the 2012 GRC retro adjustment of \$25 million.

## Latest FERC ROE Settlement

Sempra recently filed an uncontested settlement with FERC staff and other parties regarding its ROE, with a 10.05% ROE (at the bottom end of initial range). It is based on actual equity recorded on December 31<sup>st</sup> and extends from Sept. 1, 2013-Dec. 31<sup>st</sup>, 2018. The 10.05% is down from 11.3% filed in its initial application, causing a \$20-\$30 Mn annual reduction in the ROE based upon FERC assets and the FERC rate base. This settlement has been factored into 2014 guidance. Management does not intend to ask for incentives for any projects put in place under formulaic rates. It is unclear what management had embedded in its 2013

(and future guidance ranges) in terms of new ROE, but we understand this is likely at the lower end. Notably the 10.05% is approximately equal to its recently revised CPUC jurisdictional authorized ROE of 10.1%.

## Moving forward from SONGS Retirement

### Recent settlement among parties

Sempra is a 20% owner of the three recently retired San Onofre Nuclear Generation Station facility (SONGS). On Thursday, March 27<sup>th</sup>, SCE, SDG&E, the Utility Reform Network and the CPUC Office of Ratepayer Advocates (ORA) announced entry into a settlement for a complete and final resolution of the California investigation into the failed steam generator replacement and decision to permanently shut down SONGS. While the settlement still needs commission approval, it will vastly accelerate the expected timeline of proceedings by about 9-12 months, with approvals possible by mid-2014. If approved, it should remove a key regulatory overhang and accelerate the proceeding timeline, a strong positive that will substantially lower regulatory risk for Sempra and other utilities. We recently raised our EIX rating from neutral to buy, citing (among other factors) the recent settlement as a significant indicator of regulatory stability. If approved, the settlement nullifies the need to complete the long FERC process to receiving OII approval involving multiple stages. The OII had been expected to drag on through late-2014/early-2015.

Given its smaller stake in SONGS, management believes the SONGS settlement will not have a material impact on earnings going forward. The table below showcases SDG&E Investment in SONGS.

**Figure 65: SDG&E's Investment in SONGS**

	\$Mn
Net Book Investment	\$516
Recorded Impairment	(\$200)
Other Costs/ Revenues	-13
<b>Net Regulatory Asset</b>	<b>\$303</b>

Source: Company Reports

### What will happen if the settlement is approved?

If the settlement is approved, Sempra will remove from rate base (as of February 2012) its investment in the SONGS Steam Generator Replacement Project (SGRP). As of February 2012, its net book value in the SGRP was ~\$160 million. After adjustment for the settlement, the total impairment booked by SDG&E is now \$187M pre-tax (\$128M after tax).

The settlement would allow SDG&E to recover in rates:

- The remaining investment in SONGS and associated PP&E from Feb. 2012-Feb 2022; at a SONGS Rate of Return (ROR) of 2.75 from Feb 2012 to Dec 2012 and a 2.35% for Jan 2013 to Dec 2014. For future periods, the SONGS ROR will fluctuate based on SDG&E's authorized weighted average returns on debt and preferred stock (These RORs were calculated by adding the SDG&E weighted average return on debt + 50% of SDG&E's weighted average return on preferred stock, as authorized in the CPUC Cost of Capital proceeding).

**The terms of the settlement are very similar for SDG&E and SCE – the cost of the failed steam generator replacement is to be disallowed (\$160M SDG&E's share), with the remaining ratebase and PP&E receiving a 2.35%-2.75% return on investment (including equity-funded portions) and recovered over 10 years. All purchased power and nuclear fuel contracts will be recovered as will all O&M subject to a prudence review.**

- O&M and refueling outage costs for 2012-2014 subject to a customary prudence review
- Nuclear fuel inventory and contracts over 10 years from Feb 2012-Feb 2022 at return equal to SDG&E's commercial paper borrowing rate
- All purchased replacement power related to SONGS (~\$165 million), and any SONGS-related Energy Resource Recovery Account (ERRA) under-collection to be recovered by Dec 31<sup>st</sup>, 2015

### **Possible Upside from Third-Party Recoveries, But Would Now Be Shared With Customers**

The settlement allows for upside (after sharing with customers) any possible third-party recoveries from the contractor, Mitsubishi Heavy Industries (MHI) and Nuclear Electric Insurance Limited (NEIL). The NRC "white" finding in Sept 2013 found that MHI "did not rigorously evaluate all concerns raised by the consultants" regarding its flawed FIT-III computer model, and that "Southern California Edison personnel questioned the results from and appropriateness of using FIT-III, but ultimately accepted the design as proposed by Mitsubishi." On behalf of all parties, SCE has requested arbitration through the International Chamber of Commerce seeking \$4B of damages and its position is that the \$138M warranty cap does not apply in this case because the steam generator tube leak and resulting damages represent a total and fundamental failure of performance by MHI ("failure of essential purpose" and "gross negligence"). In December 2013, MHI responded with \$41M of counterclaims against SCE, for which the utility has denied any liability. On behalf of SCE and SDG&E, SCE submitted \$149M of invoices to MHI for inspection and repair costs through April 2013. MHI paid the first \$45M invoice while reserving rights to challenge it. No other invoices have been paid. The remaining \$7M of SDG&E's apportioned inspection and repair costs are the only unrecoverable O&M in the settlement. Under the settlement, any MHI recoveries would first go to pay litigation costs through the end of this year. Then any remaining amounts would be split as follows:

Any proceeds from MHI will first reimburse litigation fees. Subsequent proceedings will be allocated as follows:

- 85% of the first \$25 million to SDG&E and 15% to ratepayers
- 66.67% of the next \$200 million to SDG&E and 33.33% to ratepayers
- 25% of additional amounts to SDG&E and 75% to ratepayers

Nuclear Electric Insurance Limited (NEIL) insurance has a \$2.75B accident liability limit plus \$3.5M per unit per week for outage costs after a 12 week deductible and subject to a limit of \$392M-\$490M depending on interpretation. However, EIX has noted that accidental outage policy benefits are reduced by 90% for the periods following announcement of the permanent retirement of SONGS and the company has not yet submitted a proof of loss under the accidental property damage insurance. Under the settlement, any NEIL recoveries would first go to pay litigation costs through the end of this year. Then any remaining money would be split 82.5% to ratepayers and 17.5% to shareholders. The ratepayer portion would be paid through credit to SDG&E's ERRA account. In prior statements, management has said they believe NEIL could be expected to make a coverage determination by their June Board meeting.

Claims involving NEIL and MHI both do not require CPUC approval.

On behalf of all parties, SCE has requested arbitration through the International Chamber of Commerce seeking \$4B of damages

Accidental outage policy benefits are reduced by 90% for the periods following announcement of the permanent retirement of SONGS and the company has not yet submitted a proof of loss under the accidental property damage insurance



## SONGS Replacement Investments

With both SDG&E and SoCalEdison having RFO's under way to replace generation lost by the early retirement of SONGS, we believe Sempra is likely to participate in the renewable aspect, known as preferred resources. Specifically, it continues to seek a contract for its Rosamond solar facility. Broadly, we believe the primary focus for 'incremental' investment around SONGS will involve both new gas and transmission infrastructure. That said, with the RFO results for new plant build not expected until late 2014, we see this update (on expanded investment opportunities) as more of a 2015 update.

SDG&E will also be investing \$150 million into the Sycamore line as part of its SONGS recovery plan. CAISO recently issued a plan for investing in electric transmission. Given the seeming structure of CAISO's FERC 1000 policies, we generally believe SDG&E will ultimately be awarded many of these projects.

SDG&E also plans on investing \$350 million into transmission, but has not disclosed its concrete plans yet. This is currently *not* in their growth plan. It will likely competitively bid for two projects in its service territory.

It also invested in several substations, as part of the PSEP plan. Please refer to the PSEP section for more information.

## Background on SONGS

SDG&E is a minority owner (20%) in the San Onofre Nuclear Generating Station (SONGS), a 2,150 MW nuclear generation facility that is controlled and operated by majority (80%) owner Southern California Edison (SCE). Unit 3 in the facility was shut down in early 2012 after a water leak occurred in the steam generator, attributed to unexpected wear and tear on thousands of its metal tubes, which on further inspection was also discovered in Unit 2 and led to its shut down as well. The steam generators, which had been replaced in 2009 (unit 2) and 2011 (unit 3) after a decade-long process were manufactured by Mitsubishi Heavy Industries.

After reviewing Edison's restart plan for unit 2, filed in October 2012, the Nuclear Regulatory Commission (NRC), through its adjudicating arm, the Atomic Safety and Licensing Board (ASLB), concluded in May 2013 that a license amendment proceeding, including public hearings would be necessary as part of any restart process. Given considerable uncertainty around when or if the NRC would allow a restart of Unit 2, and the likely protracted administrative processes and appeals, Edison announced in June 2013 that it had decided to retire SONGS altogether and begin activities to decommission the facility. SCE has also indicated that the current licenses expire in 2022, and with post-Fukushima requirements, including evaluating earthquake vulnerability, it was uncertain renewal would be economic. Unit 1 had been decommissioned after operating from 1868 – 1992.

Gas pipeline and electric transmission opportunities are primary focus post-SONGS

Details are likely a 2015 event

## Capex Forecast

Figure 66: SDG&E Capital Expenditure Forecast

		2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Capex</b>	<b>\$714</b>	<b>\$978<sup>*</sup></b>	<b>\$1,100</b>	<b>\$1,200</b>	<b>\$1,200</b>	<b>\$1,200</b>	<b>\$1,200</b>	<b>\$1,200</b>	<b>\$1,200</b>
<b>SRE Guidance for Capex</b>		<b>\$978</b>	<b>\$1,000-\$1 1-1.2</b>		<b>1-1.2</b>	<b>1-1.2</b>			
Growth - y/y		(20.9%)	12.5%	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Capex/ depreciation		2.0x	2.1x	2.2x	2.2x	2.1x	2.0x	1.9x	1.8x
Depreciation rate (% of average net PP&E)		4.6%	4.8%	4.7%	4.4%	4.4%	4.4%	4.4%	4.4%
Memo: D&A expense	\$301	\$494	\$532	\$549	\$551	\$578	\$603	\$628	\$652
Growth - y/y		0.8%	7.6%	3.2%	0.3%	4.9%	4.5%	4.1%	3.8%
Deferred Tax		\$171	\$150	\$150	\$150	\$150	\$150	\$150	\$150
Adjustments		\$0	(\$25)	\$25	\$0	(\$75)	(\$125)	(\$150)	(\$150)
<b>Net change in average rate base</b>		<b>\$244</b>	<b>\$443</b>	<b>\$476</b>	<b>\$499</b>	<b>\$547</b>	<b>\$572</b>	<b>\$572</b>	<b>\$548</b>

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

## Create quality for SDG&E intact with strong projected metrics still

The next table showcases our projected credit metrics vs. S&Ps.

Figure 67: SDG&E Projected Credit Metrics

<b>S&amp;P Projections</b>	<b>2013A</b>	<b>2014E</b>	<b>2015E</b>	<b>2016E</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>
FFO Debt	17%-18%	17%-18%						
Debt/EBITDA	3x-3.5x	3x-3.5x						
Debt /Capital	57%-58%	57%-58%						
Credit Rating-- A/Stable/A-1 ( as of 12/9/2013)								
<b>UBSe</b>								
FFO	\$929	\$1,094	\$1,136	\$1,105	\$1,161	\$1,217	\$1,272	\$1,325
Debt	\$4,613	\$4,930	\$5,418	\$5,944	\$6,421	\$6,852	\$7,237	\$7,578
FFO/ Debt	18%	18%	18%	18%	18%	18%	18%	17%
EBITDA	\$1,333	\$1,637	\$1,705	\$1,668	\$1,752	\$1,839	\$1,924	\$2,006
Capital	\$9,332	\$10,053	\$10,963	\$11,871	\$12,752	\$13,607	\$14,438	\$15,244
Credit Facility	\$439	\$439	\$439	\$439	\$439	\$439	\$439	\$439

Source: Company Reports & UBS estimates. (\$Mn unless otherwise indicated)

# Southern California Gas Company

Southern California Gas Company (SoCalGas) is the largest natural gas distribution utility in the country, serves 21.1 million gas customers in much of southern and central California. Sempra Energy indirectly owns all of its common stock. The main one-time item for 2013 was the after-tax charge on SONGS and earnings associated with previous years.

Figure 68: Key Statistics Table

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Capex</b>	<b>\$762</b>	<b>\$1,100</b>	<b>\$1,300</b>	<b>\$1,400</b>	<b>\$1,400</b>	<b>\$1,400</b>	<b>\$1,400</b>	<b>\$1,400</b>
<b>SRE Guidance for Capex</b>	<b>\$1,000</b>	<b>\$1,100</b>	<b>\$1,100-\$130</b>	<b>\$1,200-\$140</b>	<b>\$1,200-\$140</b>	<b>\$1,200-\$140</b>		
Growth - y/y	19.2%	44.4%	18.2%	7.7%	0.0%	0.0%	0.0%	0.0%
Capex/ depreciation	2.0x	2.7x	3.1x	3.3x	3.1x	3.0x	2.8x	2.6x
Depreciation rate (% of average net PP&E)	5.3%	5.1%	4.7%	4.4%	4.2%	4.0%	4.0%	4.0%
Memo: D&A expense	\$383	\$401	\$413	\$425	\$447	\$466	\$497	\$536
Growth - y/y	5.8%	4.7%	3.1%	2.9%	5.2%	4.2%	6.5%	8.0%
Deferred Tax	\$117	\$150	\$150	\$150	\$150	\$150	\$150	\$150
Adjustments	\$260	(\$25)	\$50	\$50	\$50	\$0	\$0	\$0
<b>Net change in average rate base</b>	<b>\$522</b>	<b>\$524</b>	<b>\$787</b>	<b>\$875</b>	<b>\$853</b>	<b>\$784</b>	<b>\$753</b>	<b>\$714</b>
Implied earnings growth at allowed ROE	\$29.6	\$29.7	\$44.6	\$49.6	\$48.3	\$44.4	\$42.7	\$40.4
Reported/ modeled change	\$50.0	\$15.3	\$31.0	\$11.4	\$20.1	\$36.1	\$44.3	\$41.9
Total PP&E, net	\$7,467	\$8,166	\$9,053	\$10,027	\$10,980	\$11,914	\$12,817	\$13,681
Growth - y/y	6.4%	9.4%	10.9%	10.8%	9.5%	8.5%	7.6%	6.7%
<b>Regulatory Equity Base</b>								
Adjusted NI	\$339	\$354	\$385	\$397	\$417	\$453	\$497	\$539
Dividend	(\$50)	(\$71)	(\$77)	(\$79)	(\$83)	(\$91)	(\$99)	(\$108)
Equity Base	\$3,356	\$3,640	\$3,948	\$4,265	\$4,599	\$4,961	\$5,359	\$5,790
Target Equity Capital	52.0%	52.0%	52.0%	52.0%	52.0%	52.0%	52.0%	52.0%
<b>Regulatory Equity Base</b>	<b>\$1,745</b>	<b>\$1,893</b>	<b>\$2,053</b>	<b>\$2,218</b>	<b>\$2,391</b>	<b>\$2,580</b>	<b>\$2,787</b>	<b>\$3,011</b>
Shareholder Equity from Authorized ROEs	\$3,356	\$3,640	\$3,948	\$4,265	\$4,599	\$4,961	\$5,359	\$5,790
Achieved ROEs		10%	10%	9%	9%	9%	9%	9%
<b>Authorized ROEs</b>	<b>10.1%</b>	<b>10.1%</b>	<b>10.1%</b>	<b>10.1%</b>	<b>10.1%</b>	<b>10.1%</b>	<b>10.1%</b>	<b>10.1%</b>
<b>Authorized Equity</b>	<b>52.0%</b>	<b>52.0%</b>	<b>52.0%</b>	<b>52.0%</b>	<b>52.0%</b>	<b>52.0%</b>	<b>52.0%</b>	<b>52.0%</b>
<b>Earned ROEs</b>								
<b>GAAP ROE (YE)</b>	<b>14.3%</b>	<b>13.9%</b>	<b>12.3%</b>	<b>11.5%</b>	<b>11.0%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.8%</b>
<b>GAAP ROE (Average)</b>	<b>15.2%</b>	<b>14.6%</b>	<b>12.9%</b>	<b>12.0%</b>	<b>11.5%</b>	<b>11.4%</b>	<b>11.4%</b>	<b>11.3%</b>
<b>Regulatory ROE (YE)</b>	<b>17.62%</b>	<b>16.13%</b>	<b>14.79%</b>	<b>12.96%</b>	<b>11.90%</b>	<b>11.58%</b>	<b>11.55%</b>	<b>11.53%</b>
<b>Regulatory ROE (Average)</b>	<b>18.96%</b>	<b>17.20%</b>	<b>16.05%</b>	<b>14.00%</b>	<b>12.70%</b>	<b>12.21%</b>	<b>12.10%</b>	<b>12.01%</b>
Debt (Includes Preferred Equity)	\$1,433	\$1,648	\$2,120	\$2,672	\$3,201	\$3,689	\$4,124	\$4,500
Equity	\$2,549	\$2,832	\$3,141	\$3,458	\$3,791	\$4,154	\$4,551	\$4,983
<b>Total Capital</b>	<b>\$3,982</b>	<b>\$4,480</b>	<b>\$5,261</b>	<b>\$6,130</b>	<b>\$6,993</b>	<b>\$7,843</b>	<b>\$8,676</b>	<b>\$9,482</b>
Achieved ROR	8.82%	8.37%	7.91%	6.97%	6.35%	6.10%	6.02%	5.94%
<b>Authorized ROR</b>	<b>8.02%</b>	<b>8.02%</b>	<b>8.02%</b>	<b>8.02%</b>	<b>8.02%</b>	<b>8.02%</b>	<b>8.02%</b>	<b>8.02%</b>

Source: Company Reports and UBS estimates. (\$Mn unless otherwise indicated)

**Figure 69: SoCal Gas Net Income Reconciliation**

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>EBT</b>	<b>\$481</b>	<b>\$517</b>	<b>\$594</b>	<b>\$612</b>	<b>\$696</b>	<b>\$756</b>	<b>\$830</b>	<b>\$900</b>
Income tax expense	\$116	\$162	\$208	\$214	\$279	\$303	\$332	\$360
Rate	24.1%	31.3%	35.0%	35.0%	40.0%	40.0%	40.0%	40.0%
<b>SRE Guidance</b>		38-43%			(34.8)			
1X charges (gains) - after tax	\$0	(\$39)						
Earnings associated with 1Q13	(\$12)							
Earnings associated with previous years	(\$25)							
<b>Net income - adjusted</b>	<b>\$340</b>	<b>\$355</b>	<b>\$386</b>	<b>\$398</b>	<b>\$418</b>	<b>\$454</b>	<b>\$498</b>	<b>\$540</b>

Source: Company Reports. (\$Mn unless otherwise indicated)

## Rate Case Proceedings

The California utilities file a general rate case on a triennial basis, the latest of which was the 2012 general rate case (GRC) filed in December 2010 but settled only in May 2013. SoCalGas requested a revenue requirement of \$2.11bn, an increase of \$268mn or 14.5% over 2011. The Division of Ratepayer Advocates (DRA) had recommended that the utility commission *reduce* the revenue requirement by 5% vs. 2011. The case settled at a revenue requirement of \$1.96bn, which is a \$115mn or 6% increase vs. 2011. The settlement also provides for annual escalation rates of 2.65-2.75% in 2013-2015. Because the settlement occurred in 2013, but the impact of the GRC is retroactive to the beginning of 2012, Sempra recorded a true-up in 2Q13, reflecting the 2012 and 1Q13 impact of the GRC settlement.

A separate cost of capital proceeding defines California utilities' authorized capital structure and the allowed return on rate base (ROR). SoCalGas filed an application with the CPUC in April 2012 proposing an 8.44% ROR (down from 8.68%), a capital structure of 52.0% common equity (up from 48.0%), and an authorized ROE of 10.9% (up from 10.8%). The CPUC authorized a ROR of 8.02% for SoCalGas, including a common equity weighting of 52.0% and an ROE of 10.10%, effective January 1, 2013. The effect of the ruling vs. the rates that had been in effect prior will be to reduce SoCalGas's annual authorized revenue by about \$22mn.

We model ROE continuing to track in the low-teens for the next couple of years, then trending down towards the allowed ROE of 10.10% as of the last rate case. SoCal has been earning above its allowed ROE in recent years, benefiting from cost performance and tax incentives, in addition to substantial levels of construction work in progress (CWIP) on which it can earn a return but that is excluded from rate base.

Beyond capital spending/rate base growth and impact from the recent GRC, we assume modest benefits from customer growth, which has been tracking below 1%, and cost performance. SoCalGas benefits from a cost management incentive program, which has contributed \$14-\$37mn in earnings in the last three years and roughly 60-120bp in allowed ROE above base margins. Incentive levels have been declining due to lower and less volatile gas prices, which has limited the opportunity to earn incentives tied to gas procurement and operating storage and hub services – factors we do not see changing materially for at least the next few years.

**The authorized ROE for SoCalGas is the lowest of the California utilities, which as of the latest CCOC cases had authorized ROEs of 10.4% (PG&E), 10.45% (SCE), and 10.3% (SDG&E).**

## What about SoCal Gas versus Peers?

Examining peers, we see SoCal as warranting a premium given its disproportionate growth profile. While pending PSEP proceedings and concerns over San Bruno linger in California, we generally perceive a willingness (and public pressure) to reinvest significantly in its gas infrastructure. Despite the higher risk of operating in California (getting it right is no more important anywhere else versus California)

Our valuation embeds a 16.5x multiple, a 1x premium versus peers.

Figure 70: Regulated Gas Comps

Company	Tkr	UBS Rating	Mkt Cap (\$ mill)	Price 4/9/2014	Price Target	Dividend Yield	Dividend	Dividend Growth			EPS		P/E		EV/EBITDA			P/B
								2014E	2015E	2016E	2014E	2015E	2014E	2015E	2014E	2015E	2016E	
AGL Resources	GAS	NR	6,011	50.42	NR	3.89%	1.96	-3.00%	3.09%	6.50%	3.63	3.09	13.9x	16.3x	7.2x	7.9x	7.7x	1.7
Ameren Corp.	AEE	Neutral	9,681	39.90	39.00	4.01%	\$ 1.60	0.00%	0.00%	0.00%	2.36	2.52	16.9x	15.8x	7.2x	6.8x	6.5x	1.5
Black Hills Corp.	BKH	NR	2,579	57.80	NR	2.70%	1.56	-22.00%	3.40%	3.22%	2.61	2.79	22.1x	20.7x	7.7x	7.3x	6.9x	2.0
Chesapeake Utilities	CPK	NR	596	61.66	NR	2.50%	1.54	-18.50%	11.66%	8.79%	3.49	3.70	17.7x	16.7x	7.3x	6.8x	6.4x	2.1
Consolidated Edison	ED	Neutral	16,146	55.13	53.00	4.57%	2.52	2.48%	0.81%	0.80%	3.67	3.79	15.0x	14.6x	9.3x	8.6x	8.3x	1.3
Integrus Energy Group	TEG	NR	4,819	60.26	NR	4.51%	\$ 2.72	36.00%	0.00%	1.10%	3.64	3.87	16.6x	15.6x	9.8x	9.7x	9.1x	1.5
The Laclede Group	LG	NR	1,515	46.24	NR	3.81%	1.76	-11.90%	3.75%	4.21%	2.92	3.17	15.8x	14.6x	8.9x	7.6x	8.1x	1.4
MDU Resources Group	MDU	NR	6,588	34.71	NR	2.05%	0.71	-64.10%	2.79%	2.57%	1.59	1.77	21.8x	19.6x	8.9x	8.6x	8.2x	2.3
New Jersey Resources	NJR	NR	2,083	49.44	NR	3.40%	1.68	-14.25%	5.42%	6.75%	3.78	3.03	13.1x	16.3x	10.4x	11.6x	10.2x	2.3
Northeast Utilities	NU	Buy	14,340	45.46	47.00	3.45%	\$ 1.57	19.51%	7.64%	7.10%	2.69	2.92	16.9x	15.6x	10.4x	10.4x	10.4x	1.5
Northwestern Energy	NWE	NR	1,840	47.47	NR	3.37%	1.60	-19.25%	15.17%	9.68%	2.70	3.23	17.6x	14.7x	8.5x	6.5x	6.2x	1.8
PEPCO	POM	NR	5,205	20.78	NR	5.20%	1.08	-46.00%	0.00%	0.00%	1.21	1.31	17.2x	15.9x	8.8x	8.2x	7.8x	1.2
Piedmont Natural Gas	PNY	NR	2,792	35.81	NR	3.57%	1.28	-36.75%	3.64%	4.04%	1.86	1.91	19.3x	18.7x	9.8x	9.1x	8.4x	2.3
Public Service Enterprise Group	PEG	Neutral	19,563	38.65	39.00	3.83%	\$ 1.48	4.23%	3.00%	2.00%	2.73	2.60	14.2x	14.9x	6.7x	6.8x	6.6x	1.8
TECO Energy	TE	Sell	#N/A	17.22	15.00	5.11%	0.88	0.00%	0.00%	0.00%	1.02	1.13	16.9x	15.3x	7.5x	7.5x	7.5x	1.6
UGI Corporation	UGI	NR	5,177	45.12	NR	2.50%	1.13	-42.50%	4.35%	1.67%	2.69	2.87	16.8x	15.7x	7.1x	7.3x	7.2x	2.1
UIL Holdings	UIL	NR	2,040	36.13	NR	4.78%	1.73	-13.50%	0.23%	1.21%	2.28	2.44	15.8x	14.8x	8.0x	7.4x	6.8x	1.5
Xcel Energy	XEL	NR	15,282	30.67	NR	3.91%	1.20	-41.60%	4.97%	5.30%	1.99	2.09	15.4x	14.7x	8.7x	8.1x	7.8x	1.6
<b>Average</b>						<b>3.73%</b>		<b>-15.1%</b>	<b>3.9%</b>	<b>3.6%</b>			<b>16.8x</b>	<b>16.1x</b>	<b>8.5x</b>	<b>8.1x</b>	<b>7.8x</b>	
<b>Median</b>						<b>3.82%</b>		<b>-13.9%</b>	<b>3.2%</b>	<b>2.9%</b>			<b>16.8x</b>	<b>15.6x</b>	<b>8.6x</b>	<b>7.7x</b>	<b>7.7x</b>	

Source: Factset for non-covered companies, UBS estimates

## Projections for Credit Metrics

Figure 71: SoCal Gas Credit Metrics, S&P projections vs. UBSe

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
S&P SoCal Credit Stats								
FFO Debt	17%-18%	17%-18%						
Debt/EBITDA	3x-3.5x	3x-3.5x						
Debt /Capital	57%-58%	57%-58%						
Credit Rating	A/Stable/A-1							
Moody-SoCal Credit Summary								
(CFO Pre-W/C + Interest) / Interest Expense	7.3x							
(CFO Pre-W/C) / Debt	31.0%							
(CFO Pre-W/C - Dividends) / Debt	30.9%							
Debt / Book Capitalization	43.4%							
Credit Rating	A1/Stable/P-1							
UBSe Credit Stats								
FFO	\$748	\$794	\$799	\$822	\$864	\$919	\$994	\$1,076
Debt	\$1,475	\$1,691	\$2,164	\$2,717	\$3,246	\$3,734	\$4,170	\$4,546
EBITDA	\$933	\$1,078	\$1,126	\$1,177	\$1,303	\$1,401	\$1,523	\$1,650
Capital	\$4,002	\$4,501	\$5,283	\$6,153	\$7,016	\$7,866	\$8,700	\$9,507
Credit Facility	\$439	\$439	\$439	\$439	\$439	\$100	\$100	\$100
Credit Metrics - UBSe								
FFO/ Debt	39%	37%	31%	26%	23%	24%	23%	23%
Debt/EBITDA	2.1x	2.0x	2.3x	2.7x	2.8x	2.7x	2.8x	2.8x
Debt /Capital	48%	47%	49%	51%	53%	49%	49%	49%
(CFO Pre-W/C + Interest) / Interest Expense	11.8x	8.9x	7.7x	6.9x	6.4x	6.2x	6.1x	6.0x
(CFO Pre-W/C - Dividends) / Debt	36%	34%	28%	24%	21%	22%	21%	21%

Source: Company Reports, S&P reports, UBSe. (\$Mn unless otherwise indicated)

## PSEP plan— key driver of rate base (& EPS) growth

The Pipeline Safety Enhancement Plan (PSEP) was developed in response to the recent San Bruno California pipeline explosion. In 2011, the CPUC mandated all California utilities to test and/or replace all gas transmission pipelines that had not been pressure tested for enhanced safety. The Commission also required safety enhancements such as adding more remote and automatic shut-off valves to enhance the integrity of the network. This plan involves *both* SDG&E and SoCalGas. SDG&E has allocated 57% of its base capital plan until 2018 to improving system reliability, out of which PSEP has the largest share.

**Final decision for initial \$ 2 Billion request is expected any day**

Sempra anticipates total PSEP expenses and capital of just under \$2B through 2018, with roughly half of that filed for approval in the last general rate case. The decision regarding this filing is expected any day. (Docket #:A1111002). The company intends to file for approval of the remaining \$1B phases later in 2014. Of the \$2B total, \$1.6B of this is for capital outlays and the remaining \$375M are operating and maintenance expenses. Depending on resolution of these PSEP petitions, we see a strong potential for management to accelerate its \$2B-\$3B of post-2018 investments into the current horizon (split half capital and half O&M).

**Provides opportunity to accelerate earnings post-2018**

We believe the risk of rejection is low because CPUC's safety mandate is strong. The first key question is whether Sempra will be allowed to replace some pipelines in populated areas or will it simply test these pipelines for safety concerns. The Commission would prefer the utility to do more testing and less replacing. Meanwhile, Sempra believes that testing old pipes is a waste as many will need to be replaced eventually anyways. Management highlights the Commission has already authorized spending and is asking the utility to track this expenditure for reimbursement later. The CPUC recently approved interim funding of \$78 million for SoCalGas and \$10 million for SDG&E until the decision is issued. However, Sempra has already used up this funding, having spent ~\$100 million so far.

**Key question is whether the Commission will allow SoCalGas to replace certain pipelines in populated areas**

**Figure 72: Pipeline Safety Enhancement Plan - SDG&E and SoCalGas (\$M)**

Pipeline Safety Enhancement Plan - SDG&E and SoCalGas (\$M)	Initial Phase 2014-2018	Remaining Phases 2014-2018	Additional Expenditures 2019+ (to be updated)	Total PSEP
O&M	\$175	\$200	\$1,000-\$1,500	\$1,375-\$1,875
Capital	\$800	\$800	\$1,000-\$1,500	\$2,600-\$3,100
Total	\$975	\$1,000	\$2,000-\$3,000	\$3,975-\$4,975

*Filing status*      *Already filed*      *To be filed in 2014*      *Co wants to accelerate*

Source: Company filings. (\$Mn unless otherwise indicated)

### Plans for specific projects

As a part of PSEP, a \$450 million East County substation will be completed by the end of this year. A similar substation in South Orange County is pending PUC approval, also worth ~\$450 million. The South Bay substation was just approved by the Commission for ~\$100-\$150 million. The upcoming filing will also serve to address replacing a pre-1946 pipe, continuing valve automation, testing or replacing. Much more will be disclosed once the CPUC decision is released and the CPUC evolves its vision for the PSEP plan.

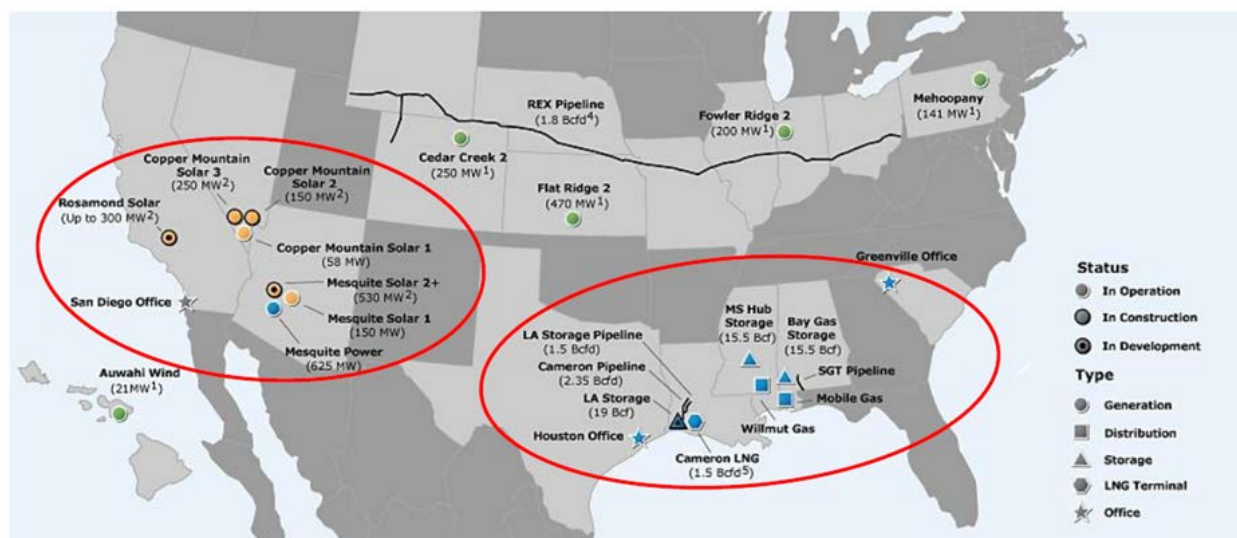
**There is no expected completion date for PSEP, with management anticipating program needs as far out as 2023.**

There is no expected completion date for PSEP, with management anticipating program needs as far out as 2023.

# Sempra US Gas & Power

Sempra US Gas & Power is comprised of two subsidiaries: Sempra Renewables and Sempra Natural Gas. The map below showcases the location of its assets. Major capital investments include the REX Pipeline and the Cameron LNG facility.

Figure 73: Sempra US Gas & Power Assets



Source: Company Reports

## Renewables

Management's strategy is to primarily focus on leveraging its existing renewable assets. 90% of its renewables development plan until 2018 is already in operation or under construction. Roughly 322 MW worth of renewables are coming online until 2018. Meanwhile, the remaining 10% is expected to come from the Rosamond facility, which is under development but doesn't have a contract yet. It remains unclear how committed it is to growth beyond 2018 for wind and solar.

Sempra Renewables invested \$707 million to develop and operate its initiatives as of Dec 31, 2013. All current and planned renewable projects have a 50-50 joint venture structure, in order to deconsolidate all this debt off its balance sheet. The only exception is Copper Mountain Solar 1 project, which is wholly owned by Sempra. It also plans to utilize project finance and maintain geographic and off-taker diversity. It expects unlevered IRRs of 8-13%, implying returns in the mid to high teens on an equity basis. The typical capital structure is ~60% debt, 40% equity; for wind projects, management states that it may employ more leverage under certain circumstances.

Renewable segment should see continued growth in near term

Structurally, the question is "how committed is management to growing (beyond California)?"

Mgmt. intends to pursue a 50/50 JV structure on all assets

Figure 74: Sempra US Gas & Power Total Renewables (MW)- needs to be updated

Fuel	Operating	Under Construction	Development
Solar	300	308	600
Wind	1082		75

Operating Solar: 242 MW are jointly-owned with Consolidated Edison Development

Under Construction Solar: 58 MW are jointly-owned with Consolidated Edison Development

Operating Wind: 50 percent owner with BP Wind

Source: Company Reports



The table below showcases Sempra's renewable energy equity investments.

**Figure 75: List of Equity Investments from 10k**

	2012	2013
Auwahi Wind	72	53
Cedar Creek 2 Wind	93	92
Copper Mountain Solar 2		67
Flat Ridge 2 Wind	291	292
Fowler Ridge 2	47	51
Mehoopany Wind	89	85
Mesquite Solar 1		67

Source: Company Reports

## Solar

Sempra hopes to build its presence primarily in Arizona and Nevada. Sempra management stated that unless there is an increase in the RPS target in California of 33%, it is unlikely to focus much in the state. California Investor Owned Utilities have already invested heavily in renewables in order to meet strong RPS requirements. The municipalities are not as interested in renewable build as there are not under as much pressure from the CPUC. The next tables showcase Sempra's assets in operating and under construction. The total capacity *only* represents Sempra's ownership share. Sempra stated the average capacity factor for solar projects is ~20-25%.

### Shifting solar focus to Arizona and Nevada

**Figure 76: Operating Solar Assets**

Power Plant	State	MW	JV Partner	PPA Term	Tax Credits	SNL Net Generation (MWh)	SNL 2012 CF (%)	COD	PPA Counterparty	Expiration
Copper Mountain Solar 1	NV	58	None	20	ITC	106,378	25	2010	Pacific Gas and Electric Company	2030
Copper Mountain Solar 2	NV	46	Consolidated Edison	25	Grant	72,066		2012	Pacific Gas and Electric Company	2037
Mesquite Solar 1	AZ	75	Consolidated Edison	20	Grant	233,105	15	2012	Pacific Gas and Electric Company	2032
Alpaugh	CA	50	Consolidated Edison	20	Grant		22	2012	Pacific Gas and Electric Company	2032
Alpaugh North	CA	20	Consolidated Edison	20	Grant			2012	Pacific Gas and Electric Company	2032
White River	CA	20	Consolidated Edison	20	Grant			2012	Pacific Gas and Electric Company	2032
Corcoran	CA	20	Consolidated Edison	20	Grant			2012	Pacific Gas and Electric Company	2032
El Dorado Solar Project	NV	10								

Source: Company Reports, SNL

It just partnered with Consolidated Edison on 5 solar projects in California on March 20<sup>th</sup>— Alpaugh, Alpaugh North, White River, Corcoran and Copper Mountain Solar III.

**Figure 77: Solar Assets Under Construction**

Power Plant	State	MW	JV Partner	PPA Term	Tax Credits	COD	PPA Counterparty	Expiration
Copper Mountain Solar 2	NV	29	Consolidated Edison	25	ITC	2012	Electric Company Los Angeles	2037
Copper Mountain Solar 3	NV	125	Consolidated Edison	20	ITC	2015	Department of	2035

Source: Company Reports, SNL

## Assets qualified for California RPS

In California, in order for renewable assets to qualify to fulfil renewable portfolio standards (RPS), they must be deemed eligible as an Eligible Renewable Energy Resource (ERR). The purchase must also meet the provision of California Senate Bill 2(1X). The following Sempra assets already are EER certified, increasing their



power demand: Copper Mountain Solar I & II and Mesquite Solar I. It has also received pre-certification for Copper Mountain Solar 3 and will submit an application for ERR certification for each phase after it comes online in 2015. California currently has a 33% RPS standard by 2020, which some speculate could increase to 50%.

## Digging Down into Specific Projects

### Rare Few Assets without a Joint Venture Partner

**Copper Mountain Solar 1:** This 58 MW facility is located in Nevada and has an Investment Tax Credit. It had a 25% capacity factor in 2012. To finance this venture, Sempra received a \$120 Million term loan and letters of credit from the Bank of Tokyo-Mitsubishi UFJ/Union Bank, Sumitomo Mitsui Banking Corporation & Credit Agricole in 2012. El Dorado Solar is a 10 MW facility adjacent to Copper Mountain Solar 1 in Nevada. The power from both facilities is fully contracted for 20 years with Pacific Gas & Electric, which expires in 2030.

**Figure 78: Copper Mountain Solar 1**

General		Operational		Financing (Initial)		Final Cap Structure	
Total Capacity (MW)	58	PPA Price (¢/KWh)	\$0.13	Debt	70%	Debt	\$154
Generation (GWh)	106	PPA Date	2009	Equity	30%	Grant	\$62
Investor IRR	14.18%	O&M (\$/kW-yr)	40	Debt \$ Mn	\$154	Net Debt	\$93
Construction Cost	\$220	Capacity Factor	25%	Equity \$ Mn	\$66		
Implied Cost \$/kW	3,800	Degradation factor	1%				
Qualifying Capital		<b>Returns</b>		Cost of Debt	5%	Equity	\$66
		Pre-tax IRR	5%	Debt Tenor	18	Grant	\$0
Effective Tax (Federal + St)	35.000%	After-tax levered IRR	14%	FCF Cash Sweep to C	25%	Net Equity	\$66
EV/EBITDA	11.4x	On Peak Multiplier	1.27	Cash Grant to Debt	100%	Equity / Cap	42%
				Cash Grant (\$ Mn)	\$62	Debt / Cap	58%

Source: Company Reports, Sparksread, UBS estimates, Government Filings

### Joint Ventures with Consolidated Edison

#### **Copper Mountain Solar 3:**

This 250 MW facility under construction is one of Sempra's larger scale renewable developments. Management just announced its partnership with Consolidated Edison on March 20<sup>th</sup>. Los Angeles Department of Water and Power and the City of Burbank recently signed a 20 year PPA through with the Southern California Public Power Authority for all of its power until 2035. The Nevada Governor's Office recently approved \$66 million in tax incentives. \$46 million will be allocated to property taxes and \$20 million in sales and use taxes over three years.

**Figure 79: Copper Mountain Solar 3**

General		Operational		Financing (Initial)		Final Cap Structure	
Total Capacity (MW)	125	PPA Price (¢/KWh)	\$0.13	Debt	70%	Debt	\$200
Generation (GWh)	274	PPA Date	4Q12	Equity	30%	Grant	\$105
Investor IRR	12.05%	O&M (\$/kW-yr)	40	Debt \$ Mn	\$200	Net Debt	\$95
Construction Cost	\$375	Capacity Factor	25%	Equity \$ Mn	\$175		
Implied Cost \$/kW	3,000	Degradation factor	1%				
Qualifying Capital		<b>Returns</b>		Cost of Debt	5%	Equity	\$175
		Pre-tax IRR	10%	Debt Tenor	18	Grant	\$0
Effective Tax (Federal )	35%	After-tax levered IRR	12%	FCF Cash Sweep to D	20%	Net Equity	\$175
EV/EBITDA	8.0x	On Peak Multiplier	1.15	Cash Grant to Debt	100%	Equity / Cap	65%
				Cash Grant (\$ Mn)	\$105	Debt / Cap	35%

Source: Company Reports, UBS estimates, Government Filings

**Copper Mountain Solar 2:** The first 92 MW came in service in November 2012 and an additional 58 MW, which will come online in 2015. Sempra closed on ~\$350 Million in debt financing May 2013. The 10-year debt was priced at LIBOR plus 237 basis points. ConEd acquired its equity stake in the project at \$71 Mn in July 2013.

**Figure 80: Copper Mountain Solar 2- first 92 MW**

General		Operational		Financing (Initial)		Final Cap Structure	
Total Current Capacity (MW)	92	PPA Price (¢/kWh)	\$0.12	Debt	58%		
Total 2015 Capacity (MW)	75						
Generation (GWh)	303	PPA Date	5-Dec-11	Equity	42%	Debt	\$350
2015 Generation (GWh)	125						
Investor IRR	12.51%	O&M (\$/kW-yr)	30	Debt \$ Mn	\$350	Grant	\$151
Current Construction Cost	\$600	Capacity Factor	23%	Equity \$ Mn	\$250	Net Debt	\$199
Implied Cost \$/kW	6,522	Degradation factor	1%				
Qualifying Capital		<b>Returns</b>		Cost of Debt	4%	Equity	\$250
		Pre-tax IRR	8%	Debt Tenor	10	Grant	\$17
Effective Tax (Federal + State)	40.85%	After-tax levered IRR	13%	FCF Cash Sweep to Debt	20%	Net Equity	\$233
EV/EBITDA	12.9x			Cash Grant to Debt	90%	Equity / Cap	0.539814815
				Cash Grant (\$ Mn)	\$168	Debt / Cap	46%

Source: Company Reports, Power Intelligence, UBS estimates, Government Filings

**Figure 81: Copper Mountain 2 – additional 58 MW**

General		Operational		Financing (Initial)		Final Cap Structure	
Total Current Capacity (MW)	46	PPA Price (¢/kWh)	\$0.12	Debt	70%		
Generation (GWh)	109	PPA Date	5-Dec-11	Equity	30%	Debt	\$122
Investor IRR	14.03%	O&M (\$/kW-yr)	40	Debt \$ Mn	\$122	Grant	\$44
Current Construction Cost	\$175	Capacity Factor	27%	Equity \$ Mn	\$52	Net Debt	\$78
Implied Cost \$/kW	3,800	Degradation factor	1%				
Qualifying Capital		<b>Returns</b>		Cost of Debt	5%	Equity	\$52
		Pre-tax IRR	11%	Debt Tenor	18	Grant	\$5
Effective Tax (Federal)	35.000%	After-tax levered IRR	13%	FCF Cash Sweep to D	30%	Net Equity	\$48
EV/EBITDA	8.9x	On Peak Multiplier	1.27	Cash Grant to Debt	90%	Equity / Cap	38%
				Cash Grant (\$ Mn)	\$49	Debt / Cap	62%

Source: Company Reports, Power Intelligence, UBS estimates, Government Filings

**Mesquite Solar 1:** This 75 MW facility has a 20 year PPA with PG&E until 2032. The Department of Energy's Loan Program Office gave a \$337 million loan guarantee to build this plant in September 2011. Consolidated Edison bought its share for \$103 Million.

**Figure 82: Mesquite Solar 1**

General		Operational		Financing (Initial)		Final Cap Structure	
Total Capacity (MW)	75.0	PPA Price (¢/kWh)	\$0.13	Debt	70%		
Generation (GWh)	180	PPA Date	2010	Equity	30%	Debt	\$337
Investor IRR	19.84%	O&M (\$/kW-yr)	20	Loan Guarantee	\$337	Grant	\$95
Construction Cost	\$375	Capacity Factor	27%	Equity \$ Mn	\$38	Net Debt	\$243
Implied Cost \$/kW	5,000	Degradation factor	1%				
Qualifying Capital		<b>Returns</b>		Cost of Debt	5%	Equity	\$38
		Pre-tax IRR	8%	Debt Tenor	18	Grant	\$11
Effective Tax (Federal)	35.0%	After-tax levered IRR	20%	FCF Cash Sweep to D	30%	Net Equity	\$28
EV/EBITDA	10.1x	On Peak Multiplier	1.27	Cash Grant to Debt	90%	Equity / Cap	10%
				Cash Grant (\$ Mn)	\$105	Debt / Cap	90%

Source: Company Reports, UBS estimates, Government Filings

## Assets under Development

Future development opportunities include the projects below. None have PPA contracts or joint venture partners presently, making them relatively low value projects. Management has actively bid for several RFOs and is hopeful to get listed for some of these later this year. Little else has been publically released about them.

**Figure 83: Solar Assets In Development**

Power Plant	State	MW	JV Partner	COD	Construction Start date	PPA Counterparty
Rosamond Solar Plant - Phase 1	CA	75	None	2015	2014	no PPA yet
Rosamond Solar Plant - Phase 2	CA	150	None	2015	2014	no PPA yet
Mesquite Solar II+	AZ	530	None	2015/2016		no PPA yet

Source: Company Reports

**Rosamond Solar (Phase 1 &2):** Both phases are 150 MW. Sempra has been searching for a PPA since the project was approved in late 2010. It is located in California. Management is confident the facility will find a contract given the volume of PPAs already signed in the state.

**Figure 84: Rosamond Solar Project – Included in Projections despite no Contract**

General		Operational		Financing (Initial)		Final Cap Structure	
Total Capacity (MW)	300	PPA Price (¢/kWh)	\$0.13	Debt	70%	Debt	\$630
Generation (GWh)	591	PPA Date	2016	Equity	30%	Grant	\$252
Investor IRR	15.11%	O&M (\$/kW-yr)	40	Debt \$ Mn	\$630	Net Debt	\$378
Construction Cost	\$900	Capacity Factor	23%	Equity \$ Mn	\$270		
Implied Cost \$/kW		Degradation factor	1%				
Qualifying Capital		<b>Returns</b>		Cost of Debt	5.00%	Equity	\$270
		Pre-tax IRR	6%	Debt Tenor	18	Grant	\$0
Effective Tax (Federal + State)	35.0000%	After-tax levered IRR	15%	FCF Cash Sweep to E	25%	Net Equity	\$270
EV/EBITDA	10.7x			Cash Grant to Debt	100%	Equity / Cap	42%
				Cash Grant (\$ Mn)	\$252	Debt / Cap	58%

Source: Company Reports, UBS estimates, Government Filings

**Mesquite Solar II+:** Sempra could develop the Mesquite Solar site to be over 500 MW.

**Figure 85: Mesquite Solar Expansion (Future)**

General		Operational		Financing (Initial)		Final Cap Structure	
Total Capacity (MW)	275	PPA Price (¢/kWh)	\$0.13	Debt	70%	Debt	\$400
Generation (GWh)	482	PPA Date	4Q12	Equity	30%	Grant	\$139
Investor IRR	22.01%	O&M (\$/kW-yr)	40	Debt \$ Mn	\$400	Net Debt	\$261
Construction Cost	\$550	Capacity Factor	20%	Equity \$ Mn	\$150		
Implied Cost \$/kW	2,000	Degradation factor	1%				
Qualifying Capital		<b>Returns</b>		Cost of Debt	5%	Equity	\$150
		Pre-tax IRR	19%	Debt Tenor	18	Grant	\$15
Effective Tax (Federal + St)	40.2%	After-tax levered IRR	22%	FCF Cash Sweep to D	30%	Net Equity	\$135
EV/EBITDA	6.1x	On Peak Multiplier	1.27	Cash Grant to Debt	90%	Equity / Cap	34%
				Cash Grant (\$ Mn)	\$154	Debt / Cap	66%

Source: Company Reports, UBS estimates, Government Filings

## Wind

Sempra does not appear poised to continue significant wind development. While it recently partnered with BP Wind to finance and develop its wind projects (all of its projects are 50/50 JV's), we see its seeming decision to pass up acquisition of BP's portfolio (media reported have stated it is on the market), suggests to us it is less serious in pursuing development.

That said, management appears to expect a further extension in the Production Tax Credit (PTC) through 2016, enabling a continued wind book. It is particularly focused on acquiring projects without equity, but that have reached the final documentation stage with all the necessary permits and PPAs in place. We perceive a fair share of these less-experienced developers have been awarded contracts into the latest run up to the PTC expiration at the end of 2013 (and into early 2014). As such, we believe Sempra could yet announce acquisitions in the months ahead.

The table below illustrates Sempra's wind assets. All of its operating wind projects are joint ventures with BP Wind.

**Figure 86: Operating Wind Assets**

Asset	State	MW	JV Partner	PPA Term	Tax Credits	Generation (MWh)	SNL 2012 CF (%)	COD	PPA Counterparty	Expiration
Cedar Creek Wind 2	CO	125	BP Wind	25	PTC	801,121	36	2011	Public Service Company of Colorado	2036
Fowler Ridge 2	IN	100	BP Wind	20	PTC				4 50-MW contracts to AEP and Vectren Energy Delivery	
Flat Ridge 2 Wind Farm	KS	235	BP Wind	20-25	PTC	222,586		2012	Associated Electric Cooperative Inc. (310 MW)/ Southwestern Electric Power Company (109 MW), Arkansas Electric Cooperative Corporation (51 MW)	2032-2037
Mehoopany Wind	PA	71	BP Wind	20	PTC	4,686		2012	Old Dominion Electric Cooperative (111 MW)/ Southern Maryland Electric Cooperative (30 MW)	2032
Auwahi Wind	HI	11	BP Wind	20	Grant	3,206		2012	Maui Electric Company	2032

Source: Company Reports, SNL

Management is particularly focused on projects that have reached the final development stage, but lack adequate capital.

We expect potential developments on this front in months ahead.

## Digging down into the details

### Broken Bow Wind Farm

Broken Bow is currently the only wind farm under development and is expected to be in service in 2014. It was originally owned by Edison Mission Energy. Sempra does not currently have a partner for this project. It has a total capital cost of \$2000/kw, half of which will be Sempra's share. Management anticipates its after-tax cost of capital will be 8-10%, expensive for its taste.

The only current wind development

**Figure 87: Wind Assets under Development**

Asset	State	ing MW	Planned MW	JV Partner	PPA Term	Tax Credits	COD	PPA Counterparty	Expiration
Broken Bow 2 Wind Farm	NE	75	75	none yet	25	PTC	2012/ 2014	Nebraska Public Power District (73 MW), Omaha Public Power District (18 MW), BOOD (for planned 75 MW)	2037

Source: Company Reports, SNL

## **Assets under a Joint Venture with BP Wind Energy**

**Cedar Creek Wind 2:** Located in Colorado, it was financed by Bank of Tokyo-Mitsubishi & Mizuho Corporate Bank participated in a \$400 Mn. club deal backing this plant in 2010 with a debt tenor of 10-12 years. It has a production tax credit and a 2012 capacity factor of 36%. Placed in service in 2011, it has a contract with the Public Service Company of Colorado until 2036. Sempra's initial investment was \$209 million in 2010.

**Fowler Ridge Wind 2:** In 2011, Sempra acquired 50% of this project from Dominion. Located in Indiana, it has four 20 year PPA contracts, each 50 MW each, with AEP and Vectren Energy Delivery. It also has a Production Tax Credit. Fowler Ridge was financed by bankers from Bankia (formerly Caja Madrid).

**Flat Ridge Wind 2:** Located in Kansas, this \$800 million, 470 MW asset was originally constructed with 419 MW and then expanded for another 51 MW. The power from the first phase is sold through three PPAs for 20 and 25 years with Associated Electric Cooperative (310 MW) and Southwestern Electric Power Company (109 MW). The power from the second phase is sold through a PPA with the Arkansas Electric Cooperative (51 MW). Banco Santander and Bank of Tokyo-Mitsubishi-UFJ arranged a \$355 million bank & bond deal in January 2010 (\$245 million was the bank portion and \$110 million was the bond portion). Prudential provided a \$110 Million institutional loan as well. It has a Production Tax Credit as well.

**Mehoopany Wind:** Sempra's share is 71 MW. It is located in Pennsylvania and has a production tax credit. It received \$150 million of debt financing from Bank of Tokyo-Mitsubishi UFJ, CoBank & Mizuho. It has 20 year contracts with Old Dominion Electric Cooperative and Southern Maryland Electric Cooperative.

**Auwahi Wind:** Sempra acquired its share from Shell WindEnergy in 2009. It came in service in 2012 and is 21 MW. Management received a grant for this venture. It has a PPA with Maui Electric Company until 2032. The facility was expanded in response to an RFP from the Department of Hawaiian Home Lands.

## **Energy Storage**

Management also hopes to invest in energy storage to capitalize on California's mandate for 1.3 GW of storage by 2020. This is not currently in their financial plan, but it plans on bidding into the energy storage RFO later this year. It currently has a small scale battery storage facility at its Hawaiian wind facility—Auwahi.

# Natural Gas

We value this segment applying EV/EBITDA multiples to each of the segments. We flag that most of the legacy businesses here continue to produce limited cash flow, including the Cameron LNG import facility, Southeast Storage, and Cameron Pipeline. While much of the Street's attention has been focused on the forthcoming LNG export facility (which we value in its own segment), we see inherent upside to all of these assets. Specifically, with gas market volatility returning, we perceive upside to historically contracted storage rev's (~\$0.05/mcf in recent times). Additionally, upside on greater throughput for the Cameron pipeline interconnecting the site back to the grid should provide further relief (our EBITDA estimate below attempts to capture this angle). We apply discounted multiples to both to reflect their future nature, as well as limited cash flows from import facility without the export facility in-service.

Sempra Natural Gas has two regulated natural gas distribution utilities in the southeast, which represent a very minor part of its overall earnings. Management is interested in expanding its gas storage assets in the southeast, though we flag that this is likely immaterial. It sells electricity under short and long-term contracts. The rest of its output is available to be sold into energy markets daily. Management is interested in contracting long-term for storage assets to avoid exposure to volatile natural gas dynamics.

Gas Utilities represents a small part of total earnings

**Mobile Gas Services Corporation:** Bought by Sempra Energy in 2008 as part acquisition of Energy South, Mobile Gas Services Corporation located in southwest Alabama. It serves ~90,000 residential, commercial & industrial customers. Founded in 1836, it is one of the oldest utilities in the country.

Strongly interested in expanding gas storage assets in the southeast

**Wilmot Gas Company** is located in Mississippi with 20,000 customers, which was acquired in May 2012.

## Other Sempra Natural Gas Assets

**Bay Gas Storage:** Located in southwest Alabama, it has a total working capacity of 15.5 Bcf. It began operation in 1994. Management is currently constructing a fifth cavern on the site of 5 Bcf capacity, anticipated for service this year.

**Mississippi Hub:** Located in Simpson County, Mississippi, it currently has two caverns with a total working capacity of 15 Bcf. It is permitted for four caverns with a total 30 Bcf working capacity. Management expects to complete construction of a third cavern this year with a 7.5 Bcf capacity. It began commercial operation in 2010.

**Cameron Interstate Pipeline:** It links the Cameron LNG facility to five interstate pipelines that extend to important markets in the Northeast, Southeast and Midwest. The 42 inch pipeline has a 2.35 Bcf/d capacity. It began operation in November 2008.

**Louisiana Storage Hub:** Located in Louisiana, the LA Storage Pipeline is a 23.3 mile pipeline providing firm and interruptible transportation and other services to LNG shippers and producers as well as local distribution companies and industrial end-users. It is 75% owned by SEI Storage Production, a wholly owned subsidiary of Sempra Energy International and 25% by ProLiance Transportation and Storage-Liberty, LLC.

**Southern Gas Transmission Company:** It only provided \$1 million in earnings in 2012. Sempra owns 49% of this asset.

## Rockies Express Pipeline (REX)

Sempra US Gas & Power has a 25% stake in the Rockies Express Pipeline LLC, one of the largest pipelines ever constructed in the country, transporting gas 1,676 miles from northwest Colorado to eastern Ohio. It is fairly negligible from a valuation perspective, with estimated earnings of ~\$23 million in 2014. It began operation in November 2009. Other stakeholders include: Kinder Morgan (50%) and Phillips 66 (25%). Tallgrass Development LP bought its ownership stake from Kinder Morgan Energy Partners in November 2012. It is fully contracted through 2019, with \$80-\$90 million of cash flows and \$40 million of pre-tax earnings through 2018. Management is working hard to resolve the earnings cliff and get contracts after 2019.

Fully contracted through 2019,  
\$80-\$90 Mn of cash flows

We estimate the project is likely  
to decline

The recent discovery of shale gas in the east has diluted the value of this pipeline. It recently received FERC approval in Nov 2013 to develop this pipeline to transport gas in bi-directionally—from east to west.

We use cash flow distributions from 2015-2019 as the basis for our valuation, incorporating a further upside from the forthcoming backhaul contract upside in a separate line item; it's important to recall that SRE's portion of debt at the project ~\$750 Mn is non-recourse and is likely to prove tricky in any contract extension beyond 2018 (particularly as SRE attempts to retain its equity ownership going into this cliff). We see no ability to drive further distributions to the parent under the cash of our \$0.50/Mcf assumption in 2019, making this a key focus of any restructuring of the debt/equity relationship.

### What about backhaul opportunity back to the Midcontinent?

With management expecting revenues to hit by 2015 following its ongoing open season, we assume a ~\$0.30/MMBtu uplift to the project economics, driving an incremental ~\$0.13 in EPS annually through 2018. We see this as among the most important incremental catalysts for the story in the medium-term. Additionally, the question remains to what extent NGPL's interconnection with the REX project could enable the backhaul of gas down south to Texas region at a premium price. We increasingly suspect Chicago gas basis will prove under pressure given the twin effects of REX Backhaul along with the ongoing Vector/Nexus pipeline. We suspect opportunities remain across a variety of markets.

Figure 88: Backhaul Uplift

	2015E	2016E	2017E	2018E
<b>Backhaul Uplift</b>	<b>\$199.5</b>	<b>\$197.0</b>	<b>\$197.0</b>	<b>\$197.0</b>
Backhaul Rev / Mcf	\$0.25	\$0.25	\$0.25	\$0.25
Added Distributions	<b>\$130</b>	<b>\$128</b>	<b>\$128</b>	<b>\$128</b>
Assume Incremental Debt Amort	<u>(\$30)</u>	<u>(\$30)</u>	<u>(\$30)</u>	<u>(\$30)</u>
Assumed	\$100	\$98	\$98	\$98
SRE Share	\$32	\$32	\$32	\$32
EPS Uplift	\$0.13	\$0.13	\$0.12	\$0.12

Source: Company Reports & UBS estimates

## Stable cash flows through 2019, but then what?

We assume a decline to \$0.20/mcf in 2020 once the contract roll-offs as a placeholder. Current rates on the project are \$1.08/Mcf, off which we assume a ~1% annual inflation factor through 2019.

Figure 89: REX Projections

Rockies Express Pipeline	2012A	2013A	2014E	2015E	2016E	2017E	2018E	2019E	2020E
	<b>\$41.77</b>	<b>\$36.40</b>	<b>\$38.25</b>	<b>\$38.71</b>	<b>\$40.43</b>	<b>\$40.10</b>	<b>\$39.86</b>	<b>(\$49.51)</b>	<b>(\$46.45)</b>
Operating Revenues	\$786.2	\$802.6	\$818.8	\$831.1	\$845.7	\$845.7	\$845.7	\$394.0	\$394.0
(O&M)	(\$141.8)	(\$136.3)	(\$139.0)	(\$141.1)	(\$142.1)	(\$143.2)	(\$143.9)	(\$144.5)	(\$145.2)
(D&A)	(\$193.3)	(\$193.81)	(\$194.4)	(\$194.9)	(\$195.4)	(\$196.0)	(\$196.5)	(\$197.1)	(\$197.6)
(Loss on long-lived assets)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
(Taxes other than income taxes)	(\$83.6)	(\$85.4)	(\$87.0)	(\$88.3)	(\$89.9)	(\$89.9)	(\$89.9)	(\$41.9)	(\$41.9)
<b>Operating Income</b>	<b>\$367.6</b>	<b>\$387.1</b>	<b>\$398.4</b>	<b>\$406.8</b>	<b>\$418.2</b>	<b>\$416.6</b>	<b>\$415.4</b>	<b>\$10.5</b>	<b>\$9.3</b>
Earnings from unconsolidated affiliates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Other income, net	(\$15.4)	(\$36.7)	(\$42.0)	(\$42.9)	(\$43.9)	(\$43.8)	(\$43.6)	(\$0.4)	(\$0.3)
(Interest & debt expense)	(\$185.2)	(\$204.8)	(\$203.5)	(\$209.1)	(\$212.6)	(\$212.5)	(\$212.3)	(\$208.2)	(\$194.8)
Affiliated interest income, net	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
(Income taxes)	(\$63.6)	(\$55.2)	(\$61.2)	(\$61.9)	(\$64.7)	(\$64.2)	(\$63.8)	\$79.2	\$74.3
<b>Net Income</b>	<b>\$103.4</b>	<b>\$90.5</b>	<b>\$91.8</b>	<b>\$92.9</b>	<b>\$97.0</b>	<b>\$96.2</b>	<b>\$95.7</b>	<b>(\$118.8)</b>	<b>(\$111.5)</b>
<b>EBITDA</b>	<b>\$545</b>	<b>\$544</b>	<b>\$551</b>	<b>\$559</b>	<b>\$570</b>	<b>\$569</b>	<b>\$568</b>	<b>\$207</b>	<b>\$207</b>
<b>EBIT</b>	<b>\$42</b>	<b>\$36</b>	<b>\$38</b>	<b>\$39</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>(\$50)</b>	<b>(\$46)</b>
<b>Ownership</b>	25%	25%	25%	25%	25%	25%	25%	25%	25%
<b>SRE's EBITDA</b>	<b>\$136.4</b>	<b>\$136.1</b>	<b>\$137.7</b>	<b>\$139.7</b>	<b>\$142.4</b>	<b>\$142.2</b>	<b>\$142.1</b>	<b>\$51.8</b>	<b>\$51.7</b>
Interest Expense			(\$50.9)	(\$52.3)	(\$53.1)	(\$53.1)	(\$53.1)	(\$52.0)	(\$48.7)
Cash Taxes			(\$15.3)	(\$15.5)	(\$16.2)	(\$16.0)	(\$15.9)	\$19.8	\$18.6
Debt Amortization?			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0
<b>Distribution to SRE Parent</b>			<b>\$71.5</b>	<b>\$72.0</b>	<b>\$73.1</b>	<b>\$73.1</b>	<b>\$73.1</b>	<b>\$0.0</b>	<b>\$21.5</b>
<b>Guidance</b>			80-90	80-90	80-90	80-90	80-90	80-90	80-90
<b>SRE's EBIT</b>	<b>\$10.4</b>	<b>\$9.1</b>	<b>\$9.6</b>	<b>\$9.7</b>	<b>\$10.1</b>	<b>\$10.0</b>	<b>\$10.0</b>	<b>(\$12.4)</b>	<b>(\$11.6)</b>
<b>SRE's Pre-tax Equity Income</b>	<b>\$41.8</b>	<b>\$36.4</b>	<b>\$38.2</b>	<b>\$38.7</b>	<b>\$40.4</b>	<b>\$40.1</b>	<b>\$39.9</b>	<b>(\$49.5)</b>	<b>(\$46.4)</b>
<b>SRE's Pre-tax Cash Distribution</b>	<b>\$90.1</b>	<b>\$84.9</b>	<b>\$86.8</b>	<b>\$87.4</b>	<b>\$89.3</b>	<b>\$89.1</b>	<b>\$89.0</b>	<b>(\$0.2)</b>	<b>\$3.0</b>

Source: Company reports, FERC, and UBS estimates. (\$Mn unless otherwise indicated)

## Reverse flow lateral will be in-service by early this year

This segment is planned to be in-service early this year, though Sempra may employ a phased-in approach instead. Management states meeting this in-service date rests on the results of its open seasons, in which it allows contractors to bid for capacity. Management is currently determining the design capacity of this pipeline based on the results of its first open season, which was held from Jan 29<sup>th</sup>-Feb 12<sup>th</sup>. After this, it will determine the transportation rates and fees for service, which are subject to FERC approval. FERC also approved firm transportation contracts without triggering a rate reduction for its foundation and anchor shippers.



## Mesquite Power: Held For Sale

Earlier this year, Management decided to sell the remaining portion of this plant to get out of the merchant generation business. It reports it has had good interest so far. It sold 625 MW of its 1,250 MW Mesquite Power, natural gas plant in Arizona, to Salt River Project for \$371 million as of February 28<sup>th</sup> 2013 (\$600/kW). (FERC approval docket: EC13-33) Management retains 625 MW in the project, with 270 MW contracted with the Southwest Public Power Resources Group under a 25 year contract beginning in 2015. The plant is in-service as of 2003, among the first new projects in the Southwest following the California Energy Crisis. Sempra natural gas purchases fuel to power its Mesquite Power plant.

Recently announced plans to sell remaining half

Figure 90: Mesquite CCGT Economics

<i>Economics:</i>	2015E	2016E	2017E	2018E	2019E	2020E
Contracted (MW)	271	271	271	271	271	271
Merchant (MW)	354	354	354	354	354	354
Capacity Factor	65%	65%	65%	65%	65%	65%
Merchant Generation (MWH)	2,015,676	2,015,676	2,015,676	2,015,676	2,015,676	2,015,676
Contract Price (\$/kW-yr)	\$60	\$60	\$60	\$60	\$60	\$60
Onpeak (Palo Verde), \$/MWh	\$40.25	\$40.40	\$42.10	\$44.45	\$44.95	\$44.95
Revenues (\$MM)	\$97	\$98	\$101	\$106	\$107	\$107
Gas Price SoCal	\$4.38	\$4.28	\$4.32	\$4.43	\$4.45	\$4.47
Fuel Cost per Mwh	\$31.54	\$30.79	\$31.09	\$31.86	\$32.03	\$32.17
O&M (\$/kw-yr)	\$15.45	\$15.91	\$16.39	\$16.88	\$17.39	\$17.91
Non Fuel V'ble costs per MWh	\$0.79	\$0.79	\$0.79	\$0.79	\$0.79	\$0.79
Fuel Cost	\$36	\$35	\$35	\$36	\$37	\$37
Spark Spread (\$/MWh)	\$9	\$10	\$11	\$13	\$13	\$13
Gross Margin	\$33.82	\$35.64	\$38.45	\$41.63	\$42.31	\$42.02
O&M Cost	\$10	\$10	\$10	\$11	\$11	\$11
Other Cost	\$2	\$2	\$2	\$2	\$2	\$2
Total Costs	\$47	\$47	\$47	\$49	\$49	\$50
<b>Gross Margin</b>	<b>\$50</b>	<b>\$51</b>	<b>\$54</b>	<b>\$57</b>	<b>\$58</b>	<b>\$57</b>
Depreciation	\$16	\$16	\$16	\$16	\$16	\$16
<b>EBIT</b>	<b>\$35</b>	<b>\$35</b>	<b>\$38</b>	<b>\$42</b>	<b>\$42</b>	<b>\$42</b>
EBITDA	\$50	\$51	\$54	\$57	\$58	\$57
Interest	\$14	\$14	\$14	\$14	\$14	\$14
EBT	\$20	\$21	\$24	\$28	\$28	\$28
Tax	\$7	\$7	\$8	\$10	\$10	\$10
<b>NI</b>	<b>\$13</b>	<b>\$14</b>	<b>\$16</b>	<b>\$18</b>	<b>\$18</b>	<b>\$18</b>

Source: Company reports, Platts, and UBS estimates. (\$Mn unless otherwise indicated)

## Credit Rating- Sempra Energy Parent

The next table showcases the credit metrics for Sempra Energy.

Figure 91: Key Credit Metrics

Key Credit Metrics	2010	2012	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Key Credit Metrics - S&P											
FFO Debt			17.6%	16%-18%	15%-17%						
Debt/EBITDA			5.0x	4x-4.5x	4x-4.5x						
Debt /Capital			59.3%	57%-59%	57%-59%						
Credit Rating				BBB+/Stable/A-2							
Key Credit Metrics - Moody's											
(CFO Pre-W/C + Interest)/ Interest Expense	4.9x	4.7x	5.1x	5.2x							
(CFO Pre-W/C)/ Debt	19.90%	17.50%	17.70%	18.80%							
(CFO Pre-W/C - Dividends)/Debt	16.50%	13.80%	13.60%	14.50%							
Debt/ Book Capitalization	50.30%	51.80%	53.80%	52.30%							
UBSe											
FFO			\$2,648	\$2,404	\$2,876	\$2,972	\$2,985	\$3,124	\$3,535	\$3,646	\$3,904
Debt			\$12,892	\$12,945	\$13,746	\$14,439	\$15,076	\$15,582	\$15,618	\$15,700	\$15,657
EBITDA			2888	3168	\$3,451	\$3,754	\$3,900	\$4,130	\$4,959	\$5,495	\$5,878
Capital			\$23,595	\$24,815	\$26,211	\$27,671	\$29,053	\$30,404	\$31,582	\$32,942	\$34,289
Credit Facility				\$1,067	\$1,067	\$1,067	\$1,067	\$1,067	\$539	\$539	\$539
(1) As of 9/30/13, Sempra's credit facility is \$1067MM and would be expire in 2017											
Key Credit Metrics - UBSe											
FFO Debt			20.5%	17.2%	19.4%	19.2%	18.5%	18.8%	21.9%	22.5%	24.1%
Debt/EBITDA			4.5x	4.1x	4.0x	3.8x	3.9x	3.8x	3.1x	2.9x	2.7x
Debt /Capital			55%	56%	57%	56%	56%	55%	51%	49%	47%

Source: Company Reports. (\$Mn unless otherwise indicated)

Figure 92: Sempra Credit Ratings

As of March 23, 2014	S&P	Moody's	Fitch
<b>Sempra Energy</b>			
Unsecured Debt	BBB+	Baa1	BBB+
Commercial Paper	A-2	P-2	F2
<b>SoCalGas</b>			
Secured Debt	A+	Aa2	AA-
Unsecured Debt	A	A1	A+
Preferred Stock	BBB+	A3	A-
Commercial Paper	A-1	P-1	F1
<b>SDG&amp;E</b>			
Secured Debt	A+	Aa2	AA-
Unsecured Debt	A	A1	A+
Commercial Paper	A-1	P-1	F1

Source: Company Reports

Figure 93: Consolidated Income Statement

Consolidated Income Statement	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Revenues</b>	<b>\$10,036</b>	<b>\$9,647</b>	<b>\$10,557</b>	<b>\$11,528</b>	<b>\$12,315</b>	<b>\$13,104</b>	<b>\$14,118</b>	<b>\$17,210</b>	<b>\$20,271</b>	<b>\$21,707</b>
Growth - y/y	11.5%	(3.9%)	9.4%	9.2%	6.8%	6.4%	7.7%	21.9%	17.8%	7.1%
Utilities	\$8,322	\$8,441	\$9,309							
Energy-related businesses	\$1,714	\$1,206	\$1,248							
Consensus revenue										
<b>Cost of Sales</b>										
Utilities:										
Cost of natural gas	\$1,866	\$1,290	\$1,646							
Cost of electric fuel and purchased power	\$1,397	\$1,760	\$1,932							
<b>Energy Related Businesses:</b>										
Cost of natural gas, electric fuel and purchased power	\$746	\$481	\$435							
Other cost of sales	\$137	\$159	\$178							
Growth - y/y	55.7%	16.1%	11.9%							
<b>Total Cost of Sales</b>	<b>\$4,146</b>	<b>\$3,690</b>	<b>\$4,191</b>	<b>\$4,790</b>	<b>\$5,225</b>	<b>\$5,751</b>	<b>\$6,398</b>	<b>\$8,173</b>	<b>\$10,102</b>	<b>\$11,012</b>
<b>Gross margin</b>	<b>\$5,890</b>	<b>\$5,957</b>	<b>\$6,366</b>	<b>\$6,738</b>	<b>\$7,090</b>	<b>\$7,353</b>	<b>\$7,720</b>	<b>\$9,037</b>	<b>\$10,169</b>	<b>\$10,695</b>
	58.7%	61.7%	60.3%	58.5%	57.6%	56.1%	54.7%	52.5%	50.2%	49.3%
<b>Operating Costs (\$MM)</b>										
Operating & maintenance	\$2,800	\$2,956	\$2,995	\$3,106	\$3,141	\$3,238	\$3,342	\$3,801	\$4,274	\$4,386
Depreciation and amortization	\$977	\$1,090	\$1,113	\$1,212	\$1,255	\$1,283	\$1,356	\$1,463	\$1,531	\$1,596
Franchise fees & other taxes	\$343	\$359	\$374	\$361	\$385	\$411	\$438	\$468	\$499	\$533
<b>Total operating costs</b>	<b>4120</b>	<b>4405</b>	<b>4482</b>	<b>4679</b>	<b>4781</b>	<b>4931</b>	<b>5136</b>	<b>5732</b>	<b>6305</b>	<b>6515</b>
Growth - y/y	11.6%	6.9%	1.7%	4.4%	2.2%	3.1%	4.2%	11.6%	10.0%	3.3%
Equity earnings (losses), pre-tax	\$9	\$74	\$31	\$54	\$58	\$57	\$52	\$49	(\$42)	(\$40)
Other gains (losses)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other (income) loss, net	(\$130)	(\$172)	(\$140)	(\$126)	(\$132)	(\$138)	(\$138)	(\$142)	(\$142)	(\$142)
<b>EBIT</b>	<b>\$1,909</b>	<b>\$1,798</b>	<b>\$2,055</b>	<b>\$2,239</b>	<b>\$2,500</b>	<b>\$2,617</b>	<b>\$2,774</b>	<b>\$3,496</b>	<b>\$3,964</b>	<b>\$4,282</b>
<b>Interest expense, net</b>	<b>\$439</b>	<b>\$469</b>	<b>\$539</b>	<b>\$591</b>	<b>\$668</b>	<b>\$739</b>	<b>\$804</b>	<b>\$960</b>	<b>\$978</b>	<b>\$996</b>
Interest income	\$26	\$24	\$20							
Interest expense, net of amounts capitalized	\$465	\$493	\$559	\$591	\$668	\$739	\$804	\$960	\$978	\$996
<b>EBT</b>	<b>\$1,470</b>	<b>\$1,329</b>	<b>\$1,516</b>	<b>\$1,648</b>	<b>\$1,832</b>	<b>\$1,877</b>	<b>\$1,970</b>	<b>\$2,536</b>	<b>\$2,986</b>	<b>\$3,285</b>
<b>Income tax (expense)/ benefit</b>	<b>(\$401)</b>	<b>(\$238)</b>	<b>(\$403)</b>	<b>(\$479)</b>	<b>(\$564)</b>	<b>(\$525)</b>	<b>(\$502)</b>	<b>(\$764)</b>	<b>(\$1,021)</b>	<b>(\$1,127)</b>
Rate	(27.2%)	(17.9%)	(26.6%)	(29.1%)	(30.8%)	(28.0%)	(25.5%)	(30.1%)	(34.2%)	(34.3%)
<b>Equity Earnings net of Income Tax</b>	<b>\$52</b>	<b>\$36</b>	<b>\$24</b>	<b>\$45</b>	<b>\$64</b>	<b>\$75</b>	<b>\$77</b>	<b>\$79</b>	<b>\$82</b>	<b>\$84</b>
Adjustments (gains) - after tax	(\$262)	\$207	(\$70)	(\$91)	(\$52)	\$0	\$0	\$0	\$0	\$0
Other Adj			\$0							
			\$119							
			(\$77)							
<b>Net income - adjusted</b>	<b>\$1,122</b>	<b>\$1,127</b>	<b>\$1,060</b>	<b>\$1,213</b>	<b>\$1,331</b>	<b>\$1,427</b>	<b>\$1,544</b>	<b>\$1,851</b>	<b>\$2,046</b>	<b>\$2,242</b>
Noncontrolling interests	\$42	\$55	\$79	\$95	\$107	\$116	\$126	\$135	\$147	\$163
Preferred dividend of subsidiaries	\$8	\$6	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$8
Discontinued Operations										
<b>Earnings applicable to common - adjusted</b>	<b>\$1,072</b>	<b>\$1,066</b>	<b>\$973</b>	<b>\$1,110</b>	<b>\$1,216</b>	<b>\$1,303</b>	<b>\$1,410</b>	<b>\$1,708</b>	<b>\$1,891</b>	<b>\$2,071</b>
<b>SRE Guidance</b>	<b>\$975 - \$1110 \$1030 - \$1180 \$1130-\$1280</b>									
<b>Cumulative 5-Year Earnings ("14-'18)</b>	<b>\$6,747</b>									
<b>5-Year Earnings Guidance</b>	<b>\$6,400</b>									
<b>Shares Outstanding</b>										
Basic Shares Outstanding (MM)	239.7	241.3	243.9	245.7	247.5	249.9	254.8	257.2	259.6	262.1
Diluted Shares Outstanding (MM)	241.5	246.7	249.3	251.2	253.1	255.5	260.5	262.9	265.4	268.0
Growth - y/y	(2.6%)	2.1%	1.1%	0.8%	0.8%	1.0%	2.0%	1.0%	1.0%	1.0%
<b>Adjusted Diluted EPS</b>	<b>4.44</b>	<b>4.32</b>	<b>3.90</b>	<b>4.42</b>	<b>4.81</b>	<b>5.10</b>	<b>5.41</b>	<b>6.50</b>	<b>7.12</b>	<b>7.73</b>
<b>Disclosed Adjusted EPS</b>	<b>4.18</b>									
Growth - y/y	12.9%	(2.6%)	(9.7%)	13.2%	8.8%	6.1%	6.2%	20.0%	9.7%	8.5%
Growth CAGR								10.1%	10.0%	
CAGR Guidance			\$4.18					8-10%	9-11%	
<b>SRE Guidance</b>	<b>\$4.00-\$4.30 \$4.25-\$4.55 \$4.60-\$4.90 \$6.00-\$6.50</b>									
<b>Consensus</b>				4.46	4.86	5.16	5.42			

Source: Company Reports, UBS estimates, Thompson Reuters. (\$Mn unless otherwise indicated)

Figure 94: Consolidated Balance Sheet

Balance Sheet	2010	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>Current assets</b>											
Cash & equivalents	\$912	\$252	\$475	\$904	\$943	\$972	\$1,002	\$1,042	\$1,187	\$1,330	\$1,392
Accounts receivable	\$891	\$1,198	\$1,299	\$1,522	\$1,662	\$1,775	\$1,889	\$2,035	\$2,481	\$2,922	\$3,129
Inventory	\$258	\$346	\$408	\$287	\$313	\$335	\$356	\$384	\$468	\$551	\$590
Other current assets	\$1,302	\$536	\$1,513	\$1,284	\$1,284	\$1,284	\$1,284	\$1,284	\$1,284	\$1,284	\$1,284
<b>Total current assets</b>	<b>\$3,363</b>	<b>\$2,332</b>	<b>\$3,695</b>	<b>\$3,997</b>	<b>\$4,202</b>	<b>\$4,366</b>	<b>\$4,531</b>	<b>\$4,746</b>	<b>\$5,420</b>	<b>\$6,088</b>	<b>\$6,396</b>
<b>Tangible Fixed Assets - Net</b>											
	\$19,814	\$23,465	\$25,191	\$25,460	\$27,448	\$29,493	\$31,360	\$33,154	\$34,840	\$36,459	\$38,013
<b>Other noncurrent assets</b>											
Goodwill	\$540	\$1,036	\$1,111	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024
Regulatory assets arising from Pension & OPEB	\$869	\$1,126	\$1,151	\$435	\$435	\$435	\$435	\$435	\$435	\$435	\$435
Investments (in affiliates)	\$2,951	\$1,671	\$1,516	\$1,575	\$1,575	\$1,575	\$1,575	\$1,575	\$1,575	\$1,575	\$1,575
Other investments	\$2,694	\$3,619	\$3,835	\$4,753	\$4,653	\$4,553	\$4,453	\$4,353	\$4,253	\$4,253	\$4,253
<b>Non-Current Assets</b>	<b>\$7,054</b>	<b>\$7,452</b>	<b>\$7,613</b>	<b>\$7,787</b>	<b>\$7,687</b>	<b>\$7,587</b>	<b>\$7,487</b>	<b>\$7,387</b>	<b>\$7,287</b>	<b>\$7,287</b>	<b>\$7,287</b>
<b>Total assets</b>	<b>\$30,231</b>	<b>\$33,249</b>	<b>\$36,499</b>	<b>\$37,244</b>	<b>\$39,337</b>	<b>\$41,446</b>	<b>\$43,378</b>	<b>\$45,286</b>	<b>\$47,548</b>	<b>\$49,834</b>	<b>\$51,696</b>
<b>Current liabilities</b>											
Trade payables and other ST liabilities	\$3,628	\$3,703	\$2,987	\$2,677	\$2,923	\$3,123	\$3,323	\$3,580	\$4,364	\$5,140	\$5,504
Short term debt	\$158	\$449	\$546	\$545	\$545	\$545	\$545	\$545	\$545	\$545	\$545
Current portion of LT debt			\$725	\$1,147	\$1,186	\$1,273	\$1,353	\$1,417	\$1,421	\$1,432	\$1,426
<b>Total current liabilities</b>	<b>\$3,786</b>	<b>\$4,152</b>	<b>\$4,258</b>	<b>\$4,369</b>	<b>\$4,654</b>	<b>\$4,941</b>	<b>\$5,221</b>	<b>\$5,542</b>	<b>\$6,330</b>	<b>\$7,117</b>	<b>\$7,475</b>
<b>Noncurrent liabilities</b>											
Long term debt	\$8,980	\$10,078	\$11,621	\$11,253	\$12,016	\$12,621	\$13,178	\$13,620	\$13,652	\$13,724	\$13,686
Asset Retirement Obligations	\$1,449	\$1,905	\$2,033	\$2,084	\$2,084	\$2,084	\$2,084	\$2,084	\$2,084	\$2,084	\$2,084
Deferred taxes	\$1,545	\$1,520	\$2,100	\$2,804	\$3,254	\$3,704	\$4,054	\$4,354	\$4,654	\$4,804	\$4,954
Other long term liabilities	\$5,270	\$5,416	\$5,804	\$4,884	\$4,884	\$4,884	\$4,884	\$4,884	\$4,884	\$4,884	\$4,884
<b>Total liabilities</b>	<b>\$21,030</b>	<b>\$23,071</b>	<b>\$25,816</b>	<b>\$25,394</b>	<b>\$26,892</b>	<b>\$28,234</b>	<b>\$29,421</b>	<b>\$30,484</b>	<b>\$31,604</b>	<b>\$32,612</b>	<b>\$33,083</b>
<b>Equity</b>											
Common equity	\$8,990	\$9,775	\$10,282	\$11,008	\$11,603	\$12,270	\$13,015	\$13,860	\$15,001	\$16,280	\$17,671
Preferred equity	\$100	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20
Minority interests	\$111	\$383	\$381	\$822	\$822	\$922	\$922	\$922	\$922	\$922	\$922
<b>Shareholders' Equity</b>	<b>\$9,201</b>	<b>\$10,178</b>	<b>\$10,683</b>	<b>\$11,850</b>	<b>\$12,445</b>	<b>\$13,212</b>	<b>\$13,957</b>	<b>\$14,802</b>	<b>\$15,943</b>	<b>\$17,222</b>	<b>\$18,613</b>
<b>Total liabilities and equity</b>	<b>\$30,231</b>	<b>\$33,249</b>	<b>\$36,499</b>	<b>\$37,244</b>	<b>\$39,337</b>	<b>\$41,446</b>	<b>\$43,378</b>	<b>\$45,286</b>	<b>\$47,548</b>	<b>\$49,834</b>	<b>\$51,696</b>

Source: Company Reports, UBS estimates & Thompson Reuters. (\$Mn unless otherwise indicated)

Figure 95: CFO/ Guidance table

	Mgmt	UBSe
Div UBSe vs. Guidance	\$3,600	\$3,628
Equity UBSe vs. Guidance	\$600	\$600
Asset Sales and Return of Capital Guidance	\$800	\$500
Depreciation Guidance	\$6,500	\$6,570
Working Cap/ Other CFO	\$2,400	\$2,397
<b>Total CFO Guidance</b>	<b>\$15,300</b>	<b>\$16,038</b>
Net Operating Loss (NOL), Nominal	\$1,250	
Net Operating Loss (NOL), NPV @ 8%	\$1,032	

Source: Company Reports, UBS estimates. (\$Mn unless otherwise indicated)

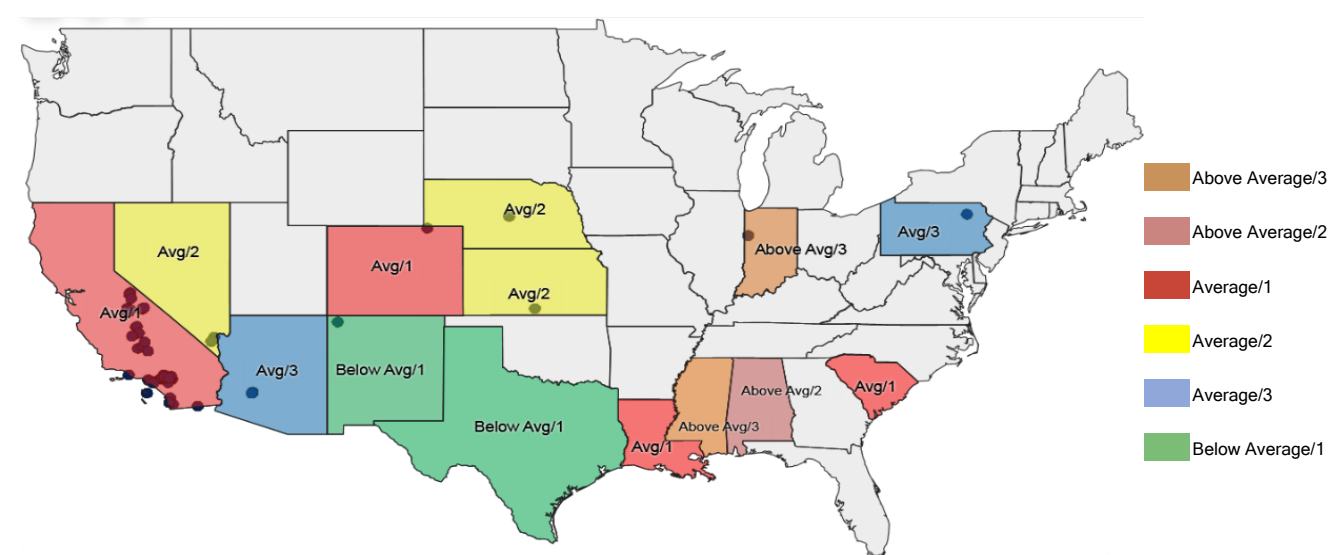
**Figure 96: Consolidated Cash Flow Statement**

Cash Flow Statement	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Operating activities								
Net income	\$1,088	\$1,213	\$1,267	\$1,352	\$1,467	\$1,772	\$1,965	\$2,158
Depreciation, Amortization	\$1,113	\$1,212	\$1,255	\$1,283	\$1,356	\$1,463	\$1,531	\$1,596
Deferred Income Taxes	\$334	\$450	\$450	\$350	\$300	\$300	\$150	\$150
Net change in working capital	(\$620)	\$80	\$65	\$65	\$83	\$254	\$252	\$118
Other operating	(\$131)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net cash provided by operating activities	\$1,784	\$2,956	\$3,037	\$3,050	\$3,207	\$3,789	\$3,898	\$4,022
Guidance		15,300	\$16,038					
Investing activities								
Capital expenditure - tangible fixed assets	(\$2,572)	(\$3,200)	(\$3,300)	(\$3,150)	(\$3,150)	(\$3,150)	(\$3,150)	(\$3,150)
Net disposals/acquisitions	(\$24)	\$100	\$100	\$100	\$100	\$100	\$0	\$0
Other investment	\$907	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net cash provided by investing activities	(\$1,689)	(\$3,100)	(\$3,200)	(\$3,050)	(\$3,050)	(\$3,050)	(\$3,150)	(\$3,150)
Excluding Mesquite Sale until actually announced								
Cash flow before financing (after dividends)	(\$511)	(\$803)	(\$853)	(\$722)	(\$605)	(\$57)	(\$104)	(\$59)
Financing activities								
Increase/ (decrease) in debt	\$549	\$801	\$693	\$637	\$506	\$37	\$82	(\$44)
Repayment threshold		\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Equity issuance/ (repurchase)	\$17	\$50	\$100	\$125	\$150	\$175	\$175	\$175
Common stock dividends paid	(\$606)	(\$658)	(\$690)	(\$722)	(\$762)	(\$796)	(\$851)	(\$932)
Other cash from financing	\$465	\$0	\$100	\$0	\$0	\$0	\$0	\$0
Increase/ (decrease) in preferred	(\$87)	(\$10)	(\$10)	(\$10)	(\$10)	(\$10)	(\$10)	(\$10)
Net cash provided by financing activities	\$338	\$183	\$193	\$30	(\$116)	(\$594)	(\$604)	(\$810)
Increase (decrease) in cash								
Forex Adjustments	(\$4)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net change in cash	\$429	\$39	\$29	\$30	\$41	\$145	\$143	\$62
Cash at the beginning of the year	\$475	\$904	\$943	\$972	\$1,002	\$1,042	\$1,187	\$1,330
Cash at the end of the year	\$904	\$943	\$972	\$1,002	\$1,042	\$1,187	\$1,330	\$1,392

Source: Company Reports and UBS estimates. (\$Mn unless otherwise indicated)

## Overview of US Regulatory Jurisdictions

**Figure 97: Regulatory Jurisdictions Rankings for Sempra Energy's assets**



Dots represent Sempra's US assets. Does *not include* gas and pipeline assets.

Source: SNL

## California:

California remains a fairly constructive state. However, we caution that an additional potentially massive \$2.25 Billion fine for Pacific Corporation & Electric could dampen investor sentiment on the state (it's all about how it's defined in forthcoming weeks by the CPUC). All Commissioners are Democrats. Their term expirations are in the next table. Commissioner Mark Ferron recently resigned and was replaced by Mr. Michael Picker to serve until 2015. Picker's appointment is subject to Senate approval.

### Unique characteristics:

The PUC has had in place for several years an Energy Resource Recovery Account, designed to track and allow timely recovery of the difference between a utility's projected and actual generation costs. Also, full electric and gas revenue decoupling mechanisms have been in place for many years. In addition, certain segments of utility operations are subject to performance-based ratemaking mechanisms, including an incentive framework that enables the major companies to earn back a percentage of their energy efficiency program expenditures.

Figure 98: CPUC Commissioner Terms

Commissioner	Last Appointed	Term Expires
Mike Florio	2011	2017
Mike Peevey	2008	2014
Michael Picker	2014	2015
Carla Peterman	2012	2018
Catherine Sandoval	2011	2016

Source: Public Filings

**Alabama** is a Republican jurisdiction that is deemed above average by SNL Energy due to its formula rate adjustment mechanisms, which allow utilities to recover costs in a timely manner. SRE owns **Mobile Gas**, a natural gas distribution utility, in Southwestern Alabama, regulated by the Alabama Public Service Commission.

**Mississippi** is stable with one Democrat and one Republican Commissioner and one independent. It has formula-based regulation plans with annual adjustments and no rate case activity in the last decade. SRE owns **Wilmot Gas**, another natural gas distribution utility, in Mississippi.

Earnings from Alabama and Mississippi are immaterial relative to those from California

## Management Bios

**Debra L. Reed, Chairman of the Board and CEO.** Previously, Reed served as executive vice president of Sempra Energy. From 2006 to 2010, she was president and chief executive officer of SDG&E and SoCalGas. From 2004 to 2006, Reed was president and chief operating officer of SDG&E and SoCalGas and, before that, president of SDG&E and chief financial officer of both companies.

Reed is one of 20 female CEOs of Fortune 500 companies, and was recognized by Fortune and Forbes as one of the most influential female executives for several years. She serves on the board of several organizations including: Halliburton Co., the University of Southern California Viterbi School of Engineering and the Chairman's Competitiveness Council. Reed graduated summa cum laude from the University of Southern California with a bachelor's degree in civil engineering.

**Mark A. Snell, President.** From 2005 to 2011, Snell was executive vice president and chief financial officer of Sempra Energy. Previously, he was group president overseeing Sempra Energy's businesses outside of the company's two California utilities. In that position, Snell oversaw all aspects of Sempra Energy's activities in competitive energy markets, including energy trading, electric generation, liquefied natural gas, pipelines and storage facilities, international utilities and retail energy marketing. Before that, he served as chief financial officer of this group. Snell joined Sempra Energy in 2001 as vice president of planning and development.

Previously, Snell was executive vice president and chief financial officer for Earth Tech, a Long Beach, Calif.-based water management, engineering and environmental services firm. Snell is a member of the board of directors of San Diego State University's College of Business Administration and the Hubbs-SeaWorld Research Institute. He holds a bachelor's degree in accounting from San Diego State University.

**Joseph A. Householder, EVP & CFO.** Formerly, Householder was senior vice president, controller and chief accounting officer where he was responsible for financial reporting, accounting and controls, and tax functions for all of Sempra Energy's companies. Before that, he served as vice president of Corporate Tax and chief tax counsel for Sempra Energy where he oversaw Sempra Energy's worldwide tax affairs. Prior to joining Sempra Energy in 2001, Householder was a partner at PricewaterhouseCoopers in the firm's national tax office.

Previously, he was vice president of Corporate Development and assistant chief financial officer of Unocal until 1999. There, Householder was responsible for worldwide tax planning, financial reporting and forecasting, and risk-management compliance. Householder serves on the board of the San Diego Regional Economic Development Corporation. Householder holds a bachelor's degree in business administration from the University of Southern California and a law degree from Loyola Law School. Additionally, he has completed the executive program at UCLA Anderson School.

**Richard A. Vaccari, VP – Investor Relations.** Previously, Vaccari was treasurer of Sempra Energy, and before that, served as vice president of mergers and acquisitions. He also was managing director of Sempra Partners, an equity fund with financial and energy counterparts to acquire attractive gas and power assets.

Prior to joining Sempra Energy in 2003, Vaccari spent more than 20 years in investment banking, focusing primarily on the power sector. He began his career at Goldman Sachs as vice president of the public utility group, and served as a managing director in the global power group at Merrill Lynch. He also worked for Credit Suisse First Boston, where he was a senior managing director in the energy group. Vaccari holds a master's degree in business administration from the University of Chicago's Booth School of Business and a bachelor's degree in economics from the University of Pennsylvania.



## Sempra Energy (SRE.N)

Income statement (US\$m)	12/11	12/12	12/13	12/14E	% ch	12/15E	% ch	12/16E	12/17E	12/18E
<b>Revenues</b>	<b>10,036</b>	<b>9,647</b>	<b>10,557</b>	<b>11,555</b>	<b>9.4</b>	<b>12,326</b>	<b>6.7</b>	<b>13,087</b>	<b>14,077</b>	<b>17,160</b>
Gross profit	5,890	5,957	6,366	6,765	6.3	7,108	5.1	7,358	7,717	9,039
<b>EBITDA (UBS)</b>	<b>2,938</b>	<b>2,924</b>	<b>3,192</b>	<b>3,523</b>	<b>10.4</b>	<b>3,838</b>	<b>8.9</b>	<b>3,983</b>	<b>4,211</b>	<b>5,048</b>
Depreciation & amortization	(977)	(1,090)	(1,113)	(1,212)	8.9	(1,255)	3.5	(1,283)	(1,356)	(1,463)
<b>EBIT (UBS)</b>	<b>1,961</b>	<b>1,834</b>	<b>2,079</b>	<b>2,310</b>	<b>11.1</b>	<b>2,583</b>	<b>11.8</b>	<b>2,700</b>	<b>2,854</b>	<b>3,585</b>
Associates & investment income	0	0	0	0	-	0	-	0	0	0
Other non-operating income	0	0	(77)	0	-	0	-	0	0	0
Net interest	(439)	(469)	(539)	(591)	-9.6	(660)	-11.7	(722)	(785)	(937)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
<b>Profit before tax</b>	<b>1,522</b>	<b>1,365</b>	<b>1,463</b>	<b>1,720</b>	<b>17.6</b>	<b>1,924</b>	<b>11.8</b>	<b>1,978</b>	<b>2,069</b>	<b>2,648</b>
Tax	(400)	(238)	(403)	(489)	-21.3	(574)	-17.5	(534)	(511)	(768)
<b>Profit after tax</b>	<b>1,122</b>	<b>1,127</b>	<b>1,060</b>	<b>1,231</b>	<b>16.1</b>	<b>1,349</b>	<b>9.6</b>	<b>1,443</b>	<b>1,558</b>	<b>1,880</b>
Preference dividends	(8)	(6)	(8)	(8)	-	(8)	-	(8)	(8)	(8)
Minorities	(42)	(55)	(79)	(95)	-20.7	(107)	-11.9	(116)	(126)	(135)
Extraordinary items	262	(207)	28	91	225.7	52	-42.8	0	0	0
<b>Net earnings (local GAAP)</b>	<b>1,333</b>	<b>859</b>	<b>1,001</b>	<b>1,219</b>	<b>21.8</b>	<b>1,287</b>	<b>5.6</b>	<b>1,319</b>	<b>1,424</b>	<b>1,737</b>
<b>Net earnings (UBS)</b>	<b>1,072</b>	<b>1,066</b>	<b>973</b>	<b>1,128</b>	<b>15.9</b>	<b>1,235</b>	<b>9.5</b>	<b>1,319</b>	<b>1,424</b>	<b>1,737</b>
Tax rate (%)	26.3	17.4	27.5	28.4	3.2	29.8	5.0	27.0	24.7	29.0
<b>Per share (US\$)</b>	<b>12/11</b>	<b>12/12</b>	<b>12/13</b>	<b>12/14E</b>	<b>% ch</b>	<b>12/15E</b>	<b>% ch</b>	<b>12/16E</b>	<b>12/17E</b>	<b>12/18E</b>
EPS (UBS, diluted)	4.44	4.32	3.90	4.49	15.0	4.88	8.7	5.16	5.47	6.61
EPS (local GAAP, diluted)	5.52	3.48	4.01	4.85	20.9	5.08	4.8	5.16	5.47	6.61
EPS (UBS, basic)	4.47	4.42	3.99	4.59	15.0	4.99	8.7	5.28	5.59	6.75
Net DPS (US\$)	1.92	2.40	2.52	2.62	4.0	2.73	4.0	2.83	2.93	3.03
Cash EPS (UBS, diluted) <sup>1</sup>	8.48	8.74	8.37	9.32	11.4	9.84	5.6	10.18	10.67	12.17
Book value per share	40.72	42.54	45.25	47.30	4.5	49.72	5.1	52.30	54.67	58.70
Average shares (diluted)	241.52	246.69	249.33	251.20	0.8	253.09	0.8	255.49	260.47	262.95
<b>Balance sheet (US\$m)</b>	<b>12/11</b>	<b>12/12</b>	<b>12/13</b>	<b>12/14E</b>	<b>% ch</b>	<b>12/15E</b>	<b>% ch</b>	<b>12/16E</b>	<b>12/17E</b>	<b>12/18E</b>
Cash and equivalents	252	475	904	944	4.4	973	3.0	1,001	1,040	1,185
Other current assets	2,080	3,220	3,093	3,264	5.5	3,396	4.1	3,527	3,696	4,225
<b>Total current assets</b>	<b>2,332</b>	<b>3,695</b>	<b>3,997</b>	<b>4,208</b>	<b>5.3</b>	<b>4,369</b>	<b>3.8</b>	<b>4,527</b>	<b>4,736</b>	<b>5,409</b>
Net tangible fixed assets	23,465	25,191	25,460	27,448	7.8	29,493	7.5	31,360	33,154	34,840
Net intangible fixed assets	2,162	2,262	1,459	1,459	0.0	1,459	0.0	1,459	1,459	1,459
Investments / other assets	5,290	5,351	6,328	6,228	-1.6	5,828	-6.4	5,728	5,628	5,528
<b>Total assets</b>	<b>33,249</b>	<b>36,499</b>	<b>37,244</b>	<b>39,342</b>	<b>5.6</b>	<b>41,149</b>	<b>4.6</b>	<b>43,074</b>	<b>44,977</b>	<b>47,237</b>
Trade payables & other ST liabilities	3,703	3,712	3,824	4,114	7.6	4,356	5.9	4,627	4,940	5,723
Short term debt	449	546	545	545	0.00	545	0.00	545	545	545
<b>Total current liabilities</b>	<b>4,152</b>	<b>4,258</b>	<b>4,369</b>	<b>4,659</b>	<b>6.6</b>	<b>4,901</b>	<b>5.2</b>	<b>5,172</b>	<b>5,485</b>	<b>6,268</b>
Long term debt	10,078	11,621	11,253	11,999	6.6	12,327	2.7	12,870	13,301	13,308
Other long term liabilities	8,841	9,937	9,772	10,222	4.6	10,672	4.4	11,022	11,322	11,622
Preferred shares	20	20	20	20	0.00	20	0.00	20	20	20
<b>Total liabilities (incl pref shares)</b>	<b>23,091</b>	<b>25,836</b>	<b>25,414</b>	<b>26,900</b>	<b>5.8</b>	<b>27,920</b>	<b>3.8</b>	<b>29,085</b>	<b>30,128</b>	<b>31,218</b>
Common s/h equity	9,775	10,282	11,008	11,621	5.6	12,307	5.9	13,068	13,927	15,096
Minority interests	383	381	822	822	0.0	922	12.2	922	922	922
<b>Total liabilities &amp; equity</b>	<b>33,249</b>	<b>36,499</b>	<b>37,244</b>	<b>39,342</b>	<b>5.6</b>	<b>41,149</b>	<b>4.6</b>	<b>43,074</b>	<b>44,977</b>	<b>47,237</b>
<b>Cash flow (US\$m)</b>	<b>12/11</b>	<b>12/12</b>	<b>12/13</b>	<b>12/14E</b>	<b>% ch</b>	<b>12/15E</b>	<b>% ch</b>	<b>12/16E</b>	<b>12/17E</b>	<b>12/18E</b>
Net income (before pref divs)	1,341	865	1,009	1,227	21.6	1,295	5.5	1,327	1,432	1,745
Depreciation & amortization	977	1,090	1,113	1,212	8.9	1,255	3.5	1,283	1,356	1,463
Net change in working capital	(224)	(630)	(620)	82	-	63	-22.6	63	81	254
Other operating	(227)	693	282	454	61.1	441	-3.0	392	349	355
<b>Operating cash flow</b>	<b>1,867</b>	<b>2,018</b>	<b>1,784</b>	<b>2,976</b>	<b>66.8</b>	<b>3,054</b>	<b>2.6</b>	<b>3,064</b>	<b>3,219</b>	<b>3,817</b>
Tangible capital expenditure	(3,783)	(2,956)	(2,572)	(3,200)	-24.4	(3,300)	-3.1	(3,150)	(3,150)	(3,150)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	(2)	(450)	(24)	100	-	400	300.0	100	100	100
Other investing	715	248	907	0	-	0	-	0	0	0
<b>Investing cash flow</b>	<b>(3,070)</b>	<b>(3,158)</b>	<b>(1,689)</b>	<b>(3,100)</b>	<b>-83.5</b>	<b>(2,900)</b>	<b>6.5</b>	<b>(3,050)</b>	<b>(3,050)</b>	<b>(3,050)</b>
Equity dividends paid	(440)	(550)	(606)	(658)	-8.6	(690)	-4.8	(722)	(762)	(796)
Share issues / (buybacks)	10	62	17	50	194.1	100	100.0	125	150	175
Other financing	(154)	(95)	378	(10)	-	90	-	(10)	(10)	(10)
Change in debt & pref shares	1,118	1,938	549	783	42.56	375	-52.10	621	493	8
<b>Financing cash flow</b>	<b>534</b>	<b>1,355</b>	<b>338</b>	<b>164</b>	<b>-51.4</b>	<b>(125)</b>	<b>-</b>	<b>14</b>	<b>(129)</b>	<b>(623)</b>
<b>Cash flow inc/(dec) in cash</b>	<b>(669)</b>	<b>215</b>	<b>433</b>	<b>40</b>	<b>-90.8</b>	<b>29</b>	<b>-28.3</b>	<b>28</b>	<b>40</b>	<b>144</b>
FX / non cash items	9	8	(4)	0	-	0	-	0	0	0
<b>Balance sheet inc/(dec) in cash</b>	<b>(660)</b>	<b>223</b>	<b>429</b>	<b>40</b>	<b>-90.7</b>	<b>29</b>	<b>-28.3</b>	<b>28</b>	<b>40</b>	<b>144</b>

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts. <sup>1</sup>Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.



## Sempra Energy (SRE.N)

Valuation (x)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
P/E (local GAAP, diluted)	9.5	18.6	20.7	19.9	19.0	18.7	17.6	14.6
P/E (UBS, diluted)	11.8	15.0	21.3	21.5	19.8	18.7	17.6	14.6
P/CEPS	6.1	7.2	9.7	10.1	9.6	9.3	8.8	7.7
Equity FCF (UBS) yield %	(15.2)	(6.0)	(3.9)	(1.0)	(1.1)	(0.4)	0.3	2.8
Net dividend yield (%)	3.7	3.7	3.0	2.7	2.8	2.9	3.0	3.1
P/BV x	1.3	1.5	1.8	2.0	1.9	1.8	1.8	1.6
EV/revenues (core)	1.9	2.3	2.5	2.5	2.4	2.3	2.1	1.8
EV/EBITDA (core)	6.4	7.5	8.2	8.4	7.8	7.5	7.2	6.0
EV/EBIT (core)	9.6	12.0	12.5	12.7	11.6	11.1	10.6	8.4
EV/OpFCF (core)	6.4	7.5	8.2	8.4	7.8	7.5	7.2	6.0
EV/op. invested capital	1.2	1.2	1.4	1.5	1.4	1.4	1.3	1.2
<b>Enterprise value (US\$m)</b>	<b>12/11</b>	<b>12/12</b>	<b>12/13</b>	<b>12/14E</b>	<b>12/15E</b>	<b>12/16E</b>	<b>12/17E</b>	<b>12/18E</b>
Market cap.	12,615	15,585	20,161	23,458	23,458	23,458	23,458	23,458
Net debt (cash)	9,311	9,311	9,311	9,311	9,311	9,311	9,311	9,311
Buy out of minorities	383	381	822	822	922	922	922	922
Pension provisions/other	1,905	2,033	2,084	2,084	2,084	2,084	2,084	2,084
<b>Total enterprise value</b>	<b>24,213</b>	<b>27,309</b>	<b>32,378</b>	<b>35,675</b>	<b>35,775</b>	<b>35,775</b>	<b>35,775</b>	<b>35,775</b>
Non core assets	(5,290)	(5,351)	(6,328)	(6,228)	(5,828)	(5,728)	(5,628)	(5,528)
<b>Core enterprise value</b>	<b>18,923</b>	<b>21,958</b>	<b>26,050</b>	<b>29,447</b>	<b>29,947</b>	<b>30,047</b>	<b>30,147</b>	<b>30,247</b>
<b>Growth (%)</b>	<b>12/11</b>	<b>12/12</b>	<b>12/13</b>	<b>12/14E</b>	<b>12/15E</b>	<b>12/16E</b>	<b>12/17E</b>	<b>12/18E</b>
Revenue	11.5	-3.9	9.4	9.4	6.7	6.2	7.6	21.9
EBITDA (UBS)	13.2	-0.5	9.2	10.4	8.9	3.8	5.7	19.9
EBIT (UBS)	13.4	-6.5	13.4	11.1	11.8	4.5	5.7	25.6
EPS (UBS, diluted)	12.9	-2.6	-9.7	15.0	8.7	5.8	5.9	20.8
Net DPS	23.1	25.0	5.0	4.0	4.0	3.8	3.5	3.5
<b>Margins &amp; Profitability (%)</b>	<b>12/11</b>	<b>12/12</b>	<b>12/13</b>	<b>12/14E</b>	<b>12/15E</b>	<b>12/16E</b>	<b>12/17E</b>	<b>12/18E</b>
Gross profit margin	58.7	61.7	60.3	58.5	57.7	56.2	54.8	52.7
EBITDA margin	29.3	30.3	30.2	30.5	31.1	30.4	29.9	29.4
EBIT margin	19.5	19.0	19.7	20.0	21.0	20.6	20.3	20.9
Net earnings (UBS) margin	10.7	11.1	9.2	9.8	10.0	10.1	10.1	10.1
ROIC (EBIT)	12.9	10.2	11.1	12.0	12.5	12.2	12.2	14.5
ROIC post tax	9.5	8.4	8.0	8.6	8.8	8.9	9.2	10.3
ROE (UBS)	11.4	10.6	9.1	10.0	10.3	10.4	10.5	12.0
<b>Capital structure &amp; Coverage (x)</b>	<b>12/11</b>	<b>12/12</b>	<b>12/13</b>	<b>12/14E</b>	<b>12/15E</b>	<b>12/16E</b>	<b>12/17E</b>	<b>12/18E</b>
Net debt / EBITDA	3.5	4.0	3.4	3.3	3.1	3.1	3.0	2.5
Net debt / total equity %	101.3	109.8	92.3	93.4	90.1	88.9	86.4	79.2
Net debt / (net debt + total equity) %	50.3	52.3	48.0	48.3	47.4	47.1	46.3	44.2
Net debt/EV	54.4	53.3	41.9	39.5	39.8	41.4	42.5	42.0
Capex / depreciation %	NM	NM	NM	NM	NM	NM	NM	NM
Capex / revenue %	NM	NM	24.4	27.7	26.8	24.1	22.4	18.4
EBIT / net interest	4.5	3.9	3.9	3.9	3.9	3.7	3.6	3.8
Dividend cover (UBS)	2.3	1.8	1.6	1.8	1.8	1.9	1.9	2.2
Div. payout ratio (UBS) %	43.0	54.3	63.2	57.1	54.6	53.6	52.3	44.8
<b>Revenues by division (US\$m)</b>	<b>12/11</b>	<b>12/12</b>	<b>12/13</b>	<b>12/14E</b>	<b>12/15E</b>	<b>12/16E</b>	<b>12/17E</b>	<b>12/18E</b>
Others	10,036	9,647	10,557	11,555	12,326	13,087	14,077	17,160
<b>Total</b>	<b>10,036</b>	<b>9,647</b>	<b>10,557</b>	<b>11,555</b>	<b>12,326</b>	<b>13,087</b>	<b>14,077</b>	<b>17,160</b>
<b>EBIT (UBS) by division (US\$m)</b>	<b>12/11</b>	<b>12/12</b>	<b>12/13</b>	<b>12/14E</b>	<b>12/15E</b>	<b>12/16E</b>	<b>12/17E</b>	<b>12/18E</b>
Others	1,961	1,834	2,079	2,310	2,583	2,700	2,854	3,585
<b>Total</b>	<b>1,961</b>	<b>1,834</b>	<b>2,079</b>	<b>2,310</b>	<b>2,583</b>	<b>2,700</b>	<b>2,854</b>	<b>3,585</b>

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

**Forecast returns**

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Forecast price appreciation	+9.9%
Forecast dividend yield	2.7%
Forecast stock return	+12.6%
Market return assumption	5.4%
Forecast excess return	+7.2%

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**Statement of Risk**

Risks to our estimates and price target include: unfavourable movements in commodity prices; mild weather in utility service territories; unfavourable regulatory outcomes; lower than expected natural gas or oil production; and unplanned disruptions at power generation facilities. Further risks include volumetric, credit, and collateral risk associated with its retail power and gas marketing business. Operational risk is present through the day to day operation of its large power fleet (both regulated and merchant), T&D assets, large gas midstream business, and marginal upstream assets.

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### UBS Investment Research: Global Equity Rating Definitions

UBS 12-Month Rating	Definition	Coverage <sup>1</sup>	IB Services <sup>2</sup>
<b>Buy</b>	FSR is > 6% above the MRA.	47%	33%
<b>Neutral</b>	FSR is between -6% and 6% of the MRA.	42%	34%
<b>Sell</b>	FSR is > 6% below the MRA.	11%	23%
UBS Short-Term Rating	Definition	Coverage <sup>3</sup>	IB Services <sup>4</sup>
<b>Buy</b>	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%
<b>Sell</b>	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 31 March 2014.

1: Percentage of companies under coverage globally within the 12-month rating category. 2: Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

3: Percentage of companies under coverage globally within the Short-Term rating category. 4: Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

**KEY DEFINITIONS:** **Forecast Stock Return (FSR)** is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months. **Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium). **Under Review (UR)** Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation. **Short-Term Ratings** reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case. **Equity Price Targets** have an investment horizon of 12 months.

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**UBS Securities LLC:** Julien Dumoulin-Smith; Michael Weinstein; Paul Zimbardo.

## Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
<b>Sempra Energy</b> <sup>2, 4, 5, 6a, 6b, 7, 16</sup>	SRE.N	Not Rated	N/A	US\$96.42	11 Apr 2014

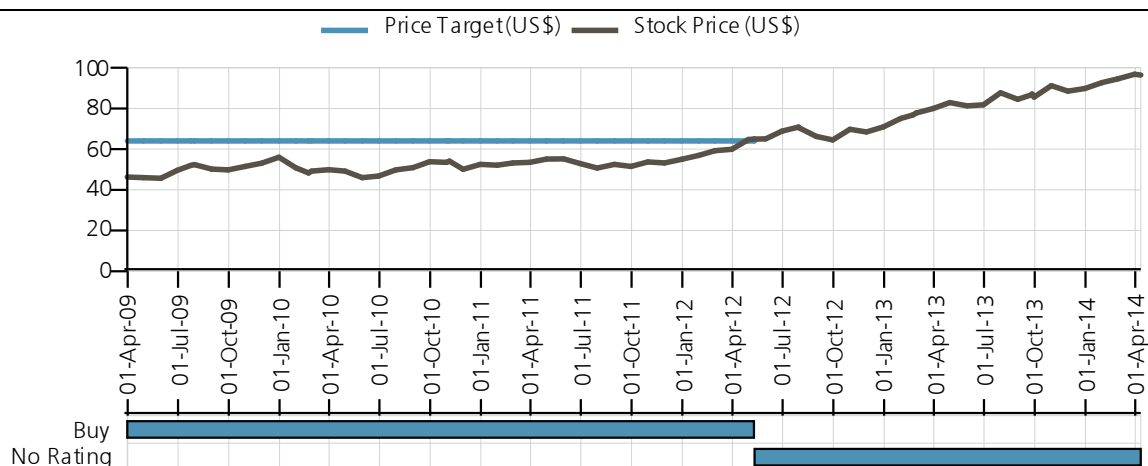
Source: UBS. All prices as of local market close.

Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

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Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

### Sempra Energy (US\$)



Source: UBS; as of 11 Apr 2014

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