

EQUITY RESEARCH

RBC Capital Markets

RBC Capital Markets, LLC Shelby Tucker, CFA(Analyst) (212) 428-6462 (212) 905-2995 shelby.tucker@rbccm.com Ellen Ngai, CFA (Associate) (212) 558-0412 ellen.ngai@rbccm.com

October 10, 2013

California Regulation Update

Highlights from Meetings with CPUC

We believe that the regulatory outlook for California will be somewhat challenging in the near term but could stabilize after San Bruno and San Onofre Nuclear Generation Stations (SONGS). Recent meetings with the California Public Utilities Commission (CPUC) and Monday's signing of Assembly Bill 327 by Governor Brown suggest that the CPUC remains committed to attracting capital to support utility investment and will have the tools to balance rate recovery with desired public policy. In the meantime, both the San Bruno proceedings and, to a lesser extent, the SONGS retirement remain distractions that are likely to garner political heat and might create additional jitters among investors. We remain upbeat about Sempra Energy (SRE, Outperform), but are currently more cautious on PG&E (PCG, Sector Perform) and Edison International (EIX, Sector Perform).

San Bruno: President Peevey and to a lesser extent Commissioner Florio suggested that a final commission decision will be no later than the spring of 2014. Both commissioners have indicated that they want to put San Bruno behind them before they rule on Pacific Gas & Electric's (PacGas) general rate case (GRC). All parties, including the Division of Ratepayers Advocates (DRA), strongly believe that a strong credit rating for PacGas is important, although how a strong credit is defined is a little murky. The two presiding commissioners (Peevey and Florio) would like to reach a unanimous decision among all five commissioners; a 5-0 vote was not a critical consideration for Commissioner Ferron.

SONGS: Most commissioners suggested that SONGS is likely to be relatively straightforward, although they would not opine on the regulatory treatment. The Energy Division (ED), led by Ed Randall, suggested that if SONGS remains in rate base then the utility (SoCalEd) should not recover purchased power costs. President Peevey is confident that SONGS will be mostly resolved by the end of his term, at the end of 2014.

AB327: The Bill returns much authority to the CPUC to make rate design changes and address the imbalance on low-income customers due to net metering. Views were mixed on whether the CPUC would peruse the full \$10/month residential customer fixed charge, and the DRA expects to advocate for a minimum bill instead. We note that the Bill also provides a path forward to remove the net metering cap; however, we believe that the CPUC now has the tools to counteract the negative impacts of customers leaving the grid to use distributed generation.

PacGas GRC: Commissioner Florio, who is the presiding commissioner for the PacGas GRC, wants San Bruno to be decided before providing a recommendation. He and others want to reach a GRC decision that would be untainted by San Bruno. He is comfortable allowing the assigned administrative law judge (AL) more time to file a recommendation. However, he also has concerns about the rate at which recent GRCs have been decided and would like to see more timely decision coming from the CPUC.

We continue to favor Sempra over the other two California utilities although our preference has little to do with California. We believe Sempra has an attractive asset diversification program that focuses mainly on natural gas infrastructure investments and Latin America growth prospects. The next catalyst for the stock will likely be receiving the non-free trade agreement approval for its Cameron liquefied natural gas (LNG) facility later this year. We are hesitant to invest in PG&E at this time while we await a decision from the ALJs on the San Bruno matter. Political pressure is high and could have an effect on that decision. While we believe that SONGS will be a manageable event for SoCalEd, it will still take a while to be resolved. As a result, we are concerned that the stock could be stuck in limbo over the next 9–12 months.

Priced as of prior trading day's market close, EST (unless otherwise noted). All values in USD unless otherwise noted. For Required Conflicts Disclosures, see Page 5.



At the California Public Utilities Commission (CPUC), We Met with the Following Groups and Commissioners:

- DRA (Division of Ratepayers Advocates) Joe Como, Interim Director, Linda Serizawa, Interim Deputy Director for Energy, and other members of the DRA Staff.
- Energy Division Ed Randolph, Energy Division Director, and Staff. The Energy Division advises the Commission, develops and administers energy policy, and ensures compliance with Commission decisions and statutory mandates.
- President Mike Peevey and Staff
- Commissioner Mark Ferron and Staff
- Commissioner Mike Florio and Staff
- Commissioner Carla Peterman and Staff

New AB327 gives CPUC More Authority over Setting Rate Design. This is the first broad rewriting of the California Public Utilities Code since the 2000–2001 energy crisis. The passage of AB327 returns much of the authority that was lost after the energy crisis. The bill was approved by Governor Jerry Brown on October 7. The key provisions are:

- Removes net metering suspension that would have occurred at year-end, codifies how to measure the net metering cap per utility (the limits will not be less than: SDG&E – 607 MW, SoCalEd – 2,240 MW, PG&E – 2,409 MW) and provides a path to remove the net metering cap.
- Allows the CPUC to adjust the current residential tiered rate structure.
- Allows for the CPUC to determine a fixed charge of up to \$10 per residential customer per month or \$5/month for qualified low-income customers beginning 1/1/2015, with annual increases capped by the Consumer Price Index.
- The CPUC may allow utilities to offer time-of-use pricing, and beginning 1/1/2018 the CPUC may require the utilities to utilize time-of-use pricing as a default.
- The electric utilities must provide a distributed resource plan to the CPUC by 7/1/2015.
- Puts the 33% RPS (Renewable Portfolio Standard) by 2020 as a floor rather than ceiling.

The Implications and Implementation of AB327 Dominated Conversations. Generally, parties viewed the return of authority to the CPUC positively. The Commissioners will be using the tools from AB327 to address net metering, distributed generation, and rate tier issues. There was concern from parties about being able to finish three large rate design cases along with the current work load. However, parties believe it would be feasible to complete the residential rate redesign if a universal framework is developed rather than three separate designs. Fine-tuning to accommodate the different customer class mix for each utility could occur in the second phase of upcoming GRCs. Modest changes to rate design can be made in 2014. Major changes cannot go into effect before 1/1/2015.

The DRA indicated that it had supported all rate design issues in the Bill but may oppose some aspects in litigation. The DRA warned that investors should not be surprised if the DRA opposes the fixed charge during litigation. The DRA believes that a minimum bill is a better solution. The DRA also wants to implement changes with AB327 gradually, especially the time-of-use rates.

San Bruno Will Continue to Drag into 2014. The ALJ recommendation is expected in late November. Commissioner Peevey indicated that he expects San Bruno to be resolved no later than the spring of 2014, likely around March. It is unlikely that a CPUC decision will come quickly after the ALJ recommendation because at least one commissioner will not start to review the San Bruno record until after the ALJ recommendation. We note that if an appeal is filed to the ALJ recommendation, this triggers an exemption that allows the commissioners to discuss the



case in closed session. All parties seemed to expect the exemption to be triggered and for the appeal to be filed close to the end of the 30-day period. Most parties mentioned that San Bruno continues to be "politically charged", which is the primary cause of the delays.

The commissioners and DRA were concerned about the financial health of PG&E moving forward and will not put the company in financial jeopardy, but they indicated that the penalty will be substantial. The DRA would also be against a large fine that negatively affects ratepayers. The commissioners were split on the importance of a unanimous vote on San Bruno.

PG&E Rate Case Decision after San Bruno. Most parties indicated that the GRC (general rate case) decision would come after San Bruno; otherwise, parties did not expect San Bruno to impact the GRC decision. Parties seemed to indicate a decision around mid-year. One commissioner indicated that San Bruno will not be as delayed as the SCE (Southern California Edison) and Sempra rate cases. The commissioner also mentioned that if delays of that length were to reoccur, the CPUC may give interim cash revenue increases in addition to the retroactive rate increases. However, it seems unlikely that such delays would reoccur given the unique situation last time with four new Commissioners.

DRA's two biggest issues with the rate case are: 1) management incentives of which 50% pass to ratepayers; and 2) \$400 million in accounting differences. DRA also indicated that it would prefer recovery after spending, not prior to spending. DRA is concerned that PG&E will spend money in places other than that approved or underspend.

San Onofre Nuclear Generating Station (SONGS) Less Contentious and Less Politically Charged; Expect Outcome to Be Based on Historical Precedent. Southern California Edison (SCE), subsidiary of Edison International (EIX), announced the early retirement of SONGS in November 2012. As compared with San Bruno, the Commissioners believe that the SONGS retirement will be resolved quickly and with less media scrutiny. Commissioner Peevey believes that SONGS will be mostly resolved by the end of 2014.

The Energy Division stated that either SONGS will stay in rate base (to receive a return **on** investment) **or** SCE will receive recovery of replacement power costs; to receive both would be double dipping. The Energy Division confirmed EIX's view that past precedent shows that no longer used and useful assets would still receive a return **of** investment, with a potential to receive a debt return on the investment in some cases. We are uncertain as to how the CPUC would approach recovery **of** investment outside of rate base, but accelerated depreciation is one option.

We note that EIX guidance removes SONGS from rate base and assumes no debt return, in line with a conservative view on precedent. We also note that EIX has taken a \$575 million asset impairment of net investment in SONGS of \$2,096 million. Additionally, as of May 31, 2013, SONGS replacement power costs since 1/1/2012 total \$650 million and authorized revenues collected for SONGS total \$804 million.

Potential Ratings Agency Downgrade of California. All parties agreed that California needs strong utilities and would not take any action that would damage the credit profile of the companies. The DRA did not see a situation where the ratings agencies would take a more negative view on California and downgrade all California utilities due to regulation.

Resource Adequacy Unlikely to Lead to Capacity Markets. The Energy Division does not foresee capacity markets in California. We believe that California would be against a federal rule mandating capacity markets due to the fear that the rule would reduce California's ability to meet their own state goals regarding energy efficiency, demand response, and distributed generation. The Energy Division does not believe that the current commissioners would support

3





Changes at the Commission. Commissioner Peevey indicated that he expects to leave the CPUC at the end of 2014 at the conclusion of his term. We also note that Commissioner Ferron's term ends at the end of 2014; we expect Commissioner Ferron to be reappointed. We believe that Commissioner Peterman or Ferron could be appointed as the next president. One commissioner noted that there have not been radical changes at the Commission since Governor Brown's appointments. The slow down in GRC decisions was to be expected with so many new commissioners and San Bruno, but the commissioner did not believe that the direction of the commission has changed.



Companies Mentioned

Edison International (NYSE: EIX; \$47.15; Sector Perform) PG&E Corporation (NYSE: PCG; \$40.92; Sector Perform) Sempra Energy (NYSE: SRE; \$85.23; Outperform)

Required Disclosures

Conflicts Disclosures

The analyst(s) responsible for preparing this research report received compensation that is based upon various factors, including total revenues of the member companies of RBC Capital Markets and its affiliates, a portion of which are or have been generated by investment banking activities of the member companies of RBC Capital Markets and its affiliates.

RBC Capital Markets, LLC makes a market in the securities of Edison International.

A member company of RBC Capital Markets or one of its affiliates received compensation for products or services other than investment banking services from Edison International during the past 12 months. During this time, a member company of RBC Capital Markets or one of its affiliates provided non-securities services to Edison International.

RBC Capital Markets is currently providing Edison International with non-securities services.

RBC Capital Markets has provided Edison International with non-securities services in the past 12 months.

RBC Capital Markets, LLC makes a market in the securities of PG&E Corporation.

A member company of RBC Capital Markets or one of its affiliates received compensation for products or services other than investment banking services from PG&E Corporation during the past 12 months. During this time, a member company of RBC Capital Markets or one of its affiliates provided non-securities services to PG&E Corporation.

RBC Capital Markets is currently providing PG&E Corporation with non-securities services.

RBC Capital Markets has provided PG&E Corporation with non-securities services in the past 12 months.

A member company of RBC Capital Markets or one of its affiliates received compensation for investment banking services from Sempra Energy in the past 12 months.

RBC Capital Markets, LLC makes a market in the securities of Sempra Energy.

A member company of RBC Capital Markets or one of its affiliates received compensation for products or services other than investment banking services from Sempra Energy during the past 12 months. During this time, a member company of RBC Capital Markets or one of its affiliates provided non-securities services to Sempra Energy.

RBC Capital Markets is currently providing Sempra Energy with non-securities services.

RBC Capital Markets has provided Sempra Energy with investment banking services in the past 12 months.

RBC Capital Markets has provided Sempra Energy with non-securities services in the past 12 months.

The author is employed by RBC Capital Markets, LLC, a securities broker-dealer with principal offices located in New York, USA. **Explanation of RBC Capital Markets Equity Rating System**

An analyst's 'sector' is the universe of companies for which the analyst provides research coverage. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12 months relative to the analyst's sector average. Although RBC Capital Markets' ratings of Top Pick (TP)/Outperform (O), Sector Perform (SP), and Underperform (U) most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis.

Ratings

Top Pick (TP): Represents analyst's best idea in the sector; expected to provide significant absolute total return over 12 months with a favorable risk-reward ratio.

Outperform (O): Expected to materially outperform sector average over 12 months.

Sector Perform (SP): Returns expected to be in line with sector average over 12 months.

Underperform (U): Returns expected to be materially below sector average over 12 months.

Risk Rating



As of March 31, 2013, RBC Capital Markets suspends its Average and Above Average risk ratings. **T§peculative** risk rating reflects a security's lower level of financial or operating predictability, illiquid share trading volumes, high balance sheet leverage, or limited operating history that result in a higher expectation of financial and/or stock price volatility.

Distribution of Ratings

For the purpose of ratings distributions, regulatory rules require member firms to assign ratings to one of three rating categories - Buy, Hold/Neutral, or Sell - regardless of a firm's own rating categories. Although RBC Capital Markets' ratings of Top Pick(TP)/ Outperform (O), Sector Perform (SP), and Underperform (U) most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis (as described above).

	Distributior	n of Ratings		
RBC Capital Markets, Equity Research				
	As of 30-5	Sep-2013		
			Investment Banking Serv./Past 12 Mos.	
Rating	Count	Percent	Count	Percent
BUY [Top Pick & Outperform]	769	51.00	271	35.24
HOLD [Sector Perform]	656	43.50	179	27.29
SELL [Underperform]	83	5.50	13	15.66



TP: Top Pick; O: Outperform; SP: Sector Perform; U: Underperform; I: Initiation of Research Coverage; D: Discontinuation of Research Coverage; Annual State and State







References to a Recommended List in the recommendation history chart may include one or more recommended lists or model portfolios maintained by RBC Wealth Management or one of its affiliates. RBC Wealth Management recommended lists include a former list called the Prime Opportunity List (RL 3), the Guided Portfolio: Prime Income (RL 6), the Guided Portfolio: Large Cap (RL 7), the Guided Portfolio: Dividend Growth (RL 8), the Guided Portfolio: Midcap 111 (RL 9), the Guided Portfolio: ADR (RL 10), and the Guided Portfolio: Global Equity (U.S.) (RL 11). RBC Capital Markets recommended lists include the Strategy Focus List and the Fundamental Equity Weightings (FEW) portfolios. The abbreviation 'RL On' means the date a security was placed on a Recommended List.

Equity Valuation and Risks

For valuation methods used to determine, and risks that may impede achievement of, price targets for covered companies, please see the most recent company-specific research report at https://www.rbcinsight.com or send a request to RBC Capital Markets Research Publishing, P.O. Box 50, 200 Bay Street, Royal Bank Plaza, 29th Floor, South Tower, Toronto, Ontario M5J 2W7.



Conflicts Policy

RBC Capital Markets Policy for Managing Conflicts of Interest in Relation to Investment Research is available from us on request. To access our current policy, clients should refer to

https://www.rbccm.com/global/file-414164.pdf

or send a request to RBC Capital Markets Research Publishing, P.O. Box 50, 200 Bay Street, Royal Bank Plaza, 29th Floor, South Tower, Toronto, Ontario M5J 2W7. We reserve the right to amend or supplement this policy at any time.

Dissemination of Research and Short-Term Trade Ideas

RBC Capital Markets endeavors to make all reasonable efforts to provide research simultaneously to all eligible clients, having regard to local time zones in overseas jurisdictions. RBC Capital Markets' research is posted to our proprietary websites to ensure eligible clients receive coverage initiations and changes in ratings, targets and opinions in a timely manner. Additional distribution may be done by the sales personnel via email, fax or regular mail. Clients may also receive our research via third-party vendors. Please contact your investment advisor or institutional salesperson for more information regarding RBC Capital Markets' research. RBC Capital Markets also provides eligible clients with access to SPARC on its proprietary INSIGHT website. SPARC contains market color and commentary, and may also contain Short-Term Trade Ideas regarding the securities of subject companies discussed in this or other research reports. SPARC may be accessed via the following hyperlink: <u>https://www.rbcinsight.com</u>. A Short-Term Trade Idea reflects the research analyst's directional view regarding the price of the security of a subject company in the coming days or weeks, based on market and trading events. A Short-Term Trade Idea may differ from the price targets and/or recommendations in our published research reports reflecting the research analyst's views of the longer-term (one year) prospects of the subject company, as a result of the differing time horizons, methodologies and/or other factors. Thus, it is possible that the security of a subject company that is considered a long-term 'Sector Perform' or even an 'Underperform' might be a short-term buying opportunity as a result of temporary selling pressure in the market; conversely, the security of a subject company that is rated a long-term 'Outperform' could be considered susceptible to a short-term downward price correction. Short-Term Trade Ideas are not ratings, nor are they part of any ratings system, and RBC Capital Markets generally does not intend, nor undertakes any obligation, to maintain or update Short-Term Trade Ideas. Short-Term Trade Ideas discussed in SPARC may not be suitable for all investors and have not been tailored to individual investor circumstances and objectives, and investors should make their own independent decisions regarding any Short-Term Trade Ideas discussed therein.

Analyst Certification

All of the views expressed in this report accurately reflect the personal views of the responsible analyst(s) about any and all of the subject securities or issuers. No part of the compensation of the responsible analyst(s) named herein is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the responsible analyst(s) in this report.

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of MSCI Inc. ("MSCI") and Standard & Poor's Financial Services LLC ("S&P") and is licensed for use by RBC. Neither MSCI, S&P, nor any other party involved in making or compiling the GICS or any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability and fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affliates or any third party involved in making or compiling the GICS or any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

Disclaimer

RBC Capital Markets is the business name used by certain branches and subsidiaries of the Royal Bank of Canada, including RBC Dominion Securities Inc., RBC Capital Markets, LLC, RBC Europe Limited, RBC Capital Markets (Hong Kong) Limited, Royal Bank of Canada, Hong Kong Branch and Royal Bank of Canada, Sydney Branch. The information contained in this report has been compiled by RBC Capital Markets from sources believed to be reliable, but no representation or warranty, express or implied, is made by Royal Bank of Canada, RBC Capital Markets, its affiliates or any other person as to its accuracy, completeness or correctness. All opinions and estimates contained in this report constitute RBC Capital Markets' judgement as of the date of this report, are subject to change without notice and are provided in good faith but without legal responsibility. Nothing in this report constitutes legal, accounting or tax advice or individually tailored investment advice. This material is prepared for general circulation to clients and has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. The investments or services contained in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about the suitability of such investments or services. This report is not an offer to sell or a solicitation of an offer to buy any securities. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. RBC Capital Markets research analyst compensation is based in part on the overall profitability of RBC Capital Markets, which includes profits attributable to investment banking revenues. Every province in Canada, state in the U.S., and most countries throughout the world have their own laws regulating the types of securities and other investment products which may be offered to their residents, as well as the process for doing so. As a result, the securities discussed in this report may not be eligible for sale in some jurisdictions. RBC Capital Markets may be restricted from publishing research reports, from time to time, due to regulatory restrictions and/ or internal compliance policies. If this is the case, the latest published research reports available to clients may not reflect recent material changes in the applicable industry and/or applicable subject companies. RBC Capital Markets research reports are current only as of the date set forth on the research reports. This report is

October 10, 2013

8



not, and under no circumstances should be construed as, a solicitation to act as securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction. To the full extent permitted by law neither RBC Capital Markets nor any of its affiliates, nor any other person, accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or the information contained herein. No matter contained in this document may be reproduced or copied by any means without the prior consent of RBC Capital Markets.

Additional information is available on request.

To U.S. Residents:

This publication has been approved by RBC Capital Markets, LLC (member FINRA, NYSE, SIPC), which is a U.S. registered broker-dealer and which accepts responsibility for this report and its dissemination in the United States. Any U.S. recipient of this report that is not a registered broker-dealer or a bank acting in a broker or dealer capacity and that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report, should contact and place orders with RBC Capital Markets, LLC.

To Canadian Residents:

This publication has been approved by RBC Dominion Securities Inc.(member IIROC). Any Canadian recipient of this report that is not a Designated Institution in Ontario, an Accredited Investor in British Columbia or Alberta or a Sophisticated Purchaser in Quebec (or similar permitted purchaser in any other province) and that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report should contact and place orders with RBC Dominion Securities Inc., which, without in any way limiting the foregoing, accepts responsibility for this report and its dissemination in Canada.

To U.K. Residents:

This publication has been approved by RBC Europe Limited ('RBCEL') which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority ('FCA') and the Prudential Regulation Authority, in connection with its distribution in the United Kingdom. This material is not for general distribution in the United Kingdom to retail clients, as defined under the rules of the FCA. However, targeted distribution may be made to selected retail clients of RBC and its affiliates. RBCEL accepts responsibility for this report and its dissemination in the United Kingdom.

To Persons Receiving This Advice in Australia:

This material has been distributed in Australia by Royal Bank of Canada - Sydney Branch (ABN 86 076 940 880, AFSL No. 246521). This material has been prepared for general circulation and does not take into account the objectives, financial situation or needs of any recipient. Accordingly, any recipient should, before acting on this material, consider the appropriateness of this material having regard to their objectives, financial situation and needs. If this material relates to the acquisition or possible acquisition of a particular financial product, a recipient in Australia should obtain any relevant disclosure document prepared in respect of that product and consider that document before making any decision about whether to acquire the product. This research report is not for retail investors as defined in section 761G of the Corporations Act.

To Hong Kong Residents:

This publication is distributed in Hong Kong by RBC Investment Services (Asia) Limited, RBC Investment Management (Asia) Limited and RBC Capital Markets (Hong Kong) Limited, licensed corporations under the Securities and Futures Ordinance or, by the Royal Bank of Canada, Hong Kong Branch, a registered institution under the Securities and Futures Ordinance. This material has been prepared for general circulation and does not take into account the objectives, financial situation, or needs of any recipient. Hong Kong persons wishing to obtain further information on any of the securities mentioned in this publication should contact RBC Investment Services (Asia) Limited, RBC Investment Management (Asia) Limited, RBC Capital Markets (Hong Kong) Limited or Royal Bank of Canada, Hong Kong Branch at 17/Floor, Cheung Kong Center, 2 Queen's Road Central, Hong Kong (telephone number is 2848-1388).

To Singapore Residents:

This publication is distributed in Singapore by the Royal Bank of Canada, Singapore Branch and Royal Bank of Canada (Asia) Limited, registered entities granted offshore bank and merchant bank status by the Monetary Authority of Singapore, respectively. This material has been prepared for general circulation and does not take into account the objectives, financial situation, or needs of any recipient. You are advised to seek independent advice from a financial adviser before purchasing any product. If you do not obtain independent advice, you should consider whether the product is suitable for you. Past performance is not indicative of future performance. If you have any questions related to this publication, please contact the Royal Bank of Canada, Singapore Branch or Royal Bank of Canada (Asia) Limited.

To Japanese Residents:

Unless otherwise exempted by Japanese law, this publication is distributed in Japan by or through RBC Capital Markets (Japan) Ltd., a registered type one financial instruments firm and/or Royal Bank of Canada, Tokyo Branch, a licensed foreign bank.

[®] Registered trademark of Royal Bank of Canada. RBC Capital Markets is a trademark of Royal Bank of Canada. Used under license.

Copyright © RBC Capital Markets, LLC 2013 - Member SIPC Copyright © RBC Dominion Securities Inc. 2013 - Member CIPF Copyright © RBC Europe Limited 2013

Copyright © Royal Bank of Canada 2013

All rights reserved