

PRE-SALE REPORT

Gas Natural de Lima y Callao S.A. (Cálidda)

Peru

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This Pre-Sale Report provides an in-depth discussion of credit rating(s) for Gas Natural de Lima y Callao S.A. (Cálidda) and should be read in conjunction with Moody's most recent Credit Opinion and rating information available on [Moody's website](#).

- » Headquartered in Lima, Gas Natural de Lima y Callao S.A. (Cálidda; Baa3 senior unsecured, stable) is the largest local distribution company (LDC) of natural gas in Peru (Baa2; positive outlook) as measured by number of customers (103,000) and volume of natural gas supplied (4.8 Bcf/yr). Cálidda serves both the Department of Lima and the Constitutional Province of Callao, which account for about 30% of the country's total population and 50% of total GDP.
- » Cálidda operates under a 33-year build operate own and transfer (BOOT) concession agreement that will not expire before 2033. This agreement set annual targets in terms of new customer additions between 2010 and 2015 which the issuer already met in 2012.
- » Cálidda's natural gas distribution activities are regulated by the Organismo Supervisor de la Inversión en Energía y Minería (OSINERGMIN), while it pre-agrees with the Ministry of Energy and Mines (MEM) its capital expenditure (capex) program for the following five years.
- » Ranked by revenues, Cálidda is small when compared to other LDC utilities operating in the Americas but it has aggressive residential customer growth plans and expansion projects. These include the increase of its network capacity to 420 MMCFD (currently 255 MMCFD) before the middle of this year. The rating also considers that the company's exposure to large unregulated companies will remain significant.
- » The growth plans are underpinned by the low penetration rate for natural gas since its use in Peru is a relatively new phenomena despite the country's vast reserves, as well as the Government of Peru's supporting initiatives to extend the use of natural gas throughout the country.
- » Cálidda also renders unregulated ancillary services that are largely associated with installation and connection services but also includes the financing provided to new residential end-users to help fund their connection devices. These unregulated activities increase the issuer's overall business risk profile.
- » Proceeds from the proposed Notes offering will be used to fund the prepayment of Cálidda's outstanding senior and subordinated indebtedness aggregating US\$196.7 million, including the \$47 million subordinated shareholders' loan due in 2014 (which at year-end 2012 had accrued interests of around \$9.1 million), as well as for general corporate purposes including funding the issuer's capex program.

Summary Rating Rationale

The Baa3 senior unsecured rating reflects the fact that the bulk of Cálidda's revenues are derived from its regulated natural gas distribution operations, the cash flow visibility that is underpinned by the terms of the long-term BOOT concession agreement. The rating also reflects the credit supportive regulatory environment.

Cálidda's rating is tempered by

- i. its significant exposure to unregulated customers; concerns are offset by the growing portion of its distribution revenues generated under firm contracts, and the significant role that natural gas fired generation facilities play in the Peruvian energy mix;
- ii. the expected increase in the contribution to its cash flows of unregulated ancillary services, largely associated with the connection services;
- iii. the anticipated deterioration in Cálidda's credit metrics over the short term amid the increased leverage associated with the new notes; however, it also assumes that over the next 2 years Cálidda's cash flow generation will improve such that it will again report credit metrics that are well positioned within Moody's Baa-rating category;
- iv. the anticipated deterioration over the medium-term of Cálidda's liquidity profile in the absence of committed bank credit facilities; however, the rating assumes that the issuer will maintain robust cash balances that will allow it to meet unexpected cash flow shortfalls, particularly considering its significant capital expenditure program, and that its shareholders will allow Cálidda to implement a prudent dividend policy;
- v. some currency risk exposure associated with the payments from Cálidda's regulated customers. These bills are invoiced in nuevos soles after monthly adjustments of the charges that are initially calculated in US dollars. The dollarization of the Peruvian economy and the frequency of the adjustments (monthly) partially offset our credit concerns;

Rating Outlook

The stable outlook reflects our expectation that Cálidda will successfully implement its expansion plans within the residential segment along with a fairly credit-supportive outcome of the next tariff review, due in May 2014. The review should enhance Cálidda's ability to generate cash flows so that its reported credit metrics will improve over the next two years, such that its Cash flows from operations pre-W/C (CFO pre-W/C) to debt and interest coverage exceed 3x and 13%, respectively. The stable outlook further considers management's target for Cálidda to report over the medium term a 3.0x Debt/EBITDA. It also reflects our expectation that, in the absence of committed credit facilities, the company will maintain robust cash balances amid a responsible dividend policy so as to remain able to cope with any external shocks, particularly given its substantial capex program.

What Can Change The Rating – Up

The rating could be upgraded if the Peruvian government's sovereign rating is upgraded, if Moody's observes a more established track record in the application of all the regulatory mechanisms embedded in the framework, and if, upon completion of its current ongoing investment projects, Cálidda's liquidity profile over the medium term is very strong along with a significant improvement in its credit metrics such that its CFO pre-W/C to debt and interest coverage exceed 16% and 4x, respectively, on a sustainable basis.

What Can Change The Rating – Down

Cálidda's rating could be downgraded if Moody's perceives that the issuer's liquidity profile is insufficient to comfortably cope with potential external shocks. Negative rating actions could also result from unexpected changes in the regulatory framework and/or a less credit-supportive outcome of future tariff reviews. Other negative events would include a downgrade of the Peruvian sovereign ratings, and/or if Cálidda's majority shareholder, Empresas de Energía de Bogotá (EEB), were to experience a multi-notch downgrade. Failure over the medium term to report credit metrics that are more commensurate with the Baa-rating category, such that its CFO pre-W/C-to-debt and interest coverage ratios remain below 3x and 13%, respectively, for an extended period, would likely trigger a downgrade. Dividend distributions that start before the completion of the ongoing capex program and improvement of Cálidda's cash flows, and/or an aggressive future dividend distribution policy that results in the issuer reporting Retained Cash flows (RCF)-to-debt below 9% on a sustainable basis, could also trigger a downgrade.

Business Overview

The table below illustrates the historical development of Cálidda's net revenues, that exclude pass-through components. The company also offers services ancillary to its regulated natural gas distribution services which are mainly the fees associated with installation and connection services, but also consist of the interest received for providing financing to new residential end-users for funding connection devices, as well as the fees for integrated solutions and consulting services to industrial customers. Depending on their natural gas demand, customers are classified as regulated or unregulated (refer to the Appendix 4).

TABLE 1

Breakdown of net revenues - net of pass through cost components and promotional discounts

Total net revenues (in US\$)	2008	%	2009	%	2010	%	2011	%	2012	%
Regulated	21.5	75.4%	28.2	78.5%	31.4	60.7%	36.5	47.9%	44.9	50.6%
Residential & Commercial	0.9		1.5		1.6		2.5		4.0	
Regulated Industries	13.9		14.6		17.3		16.7		19.4	
NG Vehicles	6.7		12.0		12.2		15.9		18.9	
Regulated Generators	-		-		0.2		1.4		2.7	
Not Regulated	7.0	24.6%	7.7	21.5%	20.3	39.3%	39.7	52.1%	43.9	49.4%
Large Industrial customers	2.9		2.3		3.3		4.0		3.8	
Large generation companies	4.1		5.4		17.0		35.8		40.1	
Total - Distribution revenues	28.5	84.1%	35.9	82.7%	51.7	81.2%	76.2	73.8%	88.8	71.0%

TABLE 1

Breakdown of net revenues - net of pass through cost components and promotional discounts

Total net revenues (in US\$)	2008	%	2009	%	2010	%	2011	%	2012	%
Installation services	3.0	8.9%	5.0	11.5%	10.1	15.9%	24.6	23.8%	32.3	25.8%
Others	2.4	7.1%	2.5	5.8%	1.9	3.0%	2.5	2.4%	3.9	3.1%
TOTAL - Revenues	33.9		43.4		63.7		103.3		125.0	

Source: Cálidda; Revenues are presented net of promotional revenues as well as pass-through cost components (natural gas and transportation charges)

Brief Corporate Profile

Headquartered in Lima, Gas Natural de Lima y Callao S.A. (Cálidda) started commercial operations in 2004 after a two year construction period.

It currently ranks as the largest Local Distribution Company (LDC) of natural gas in Peru (Baa2; positive) in terms of number of customers and volume of natural gas supplied. Cálidda operates under a 33-year build operate own and transfer (BOOT) concession agreement.

As illustrated in the map below Cálidda's concession area comprises the Department of Lima and the Constitutional Province of Callao which accounts for around 50% of the Peruvian GDP and around 30% of the country's total population of approximately 30 million. The bulk of the country's natural gas fired power generation facilities are also located in this area. As part of Cálidda's ongoing expansion project, its network capacity is expected to increase to 420 MMCFD (currently 250 MMCFD) before the middle of this year, while its residential customer base is anticipated to also grow significantly over the next several years. At year-end 2012, its total customer base of over 101,000 already exceeded the goals set under the BOOT agreement that included 91,000 customers by 2015.

FIGURE 1



Source: Offering memorandum

Cálidda's natural gas tariffs are subject to regulatory purview of the Peruvian regulatory body, Organismo Supervisor de la Inversión en Energía y Minería (OSINERGMIN), while it pre-agrees its five year capex program with the Ministry of Energy and Mines (MEM).

Cálidda's majority shareholder is Empresa de Eneqía de Bogotá (EEB; Baa3, stable) with a indirect and direct ownership stake of 66.2% given that it also holds a 15.6% equity interest in the other shareholder, Promigas S.A. E.S. (not rated; 40% interest).

Detailed Rating Considerations

Credit-Supportive Regulatory Environment...

As illustrated in the Appendix 3 and 4, Cálidda operates under a BOOT concession agreement that will not expire before 2033, which is 10 years after the maturity of the proposed Notes. Cálidda also benefits from a Tax Stability Agreement. The intent of the agreements is to ensure that Cálidda achieves financial equilibrium, and also to guarantee a 12% annual return on investments. Risk of an early termination of the BOOT agreement is viewed as limited given the LDC's historical operational performance and our understanding that Cálidda and the MEM have a constructive working relationship. We also understand that the Single Distribution Tariff implemented in 2010 following that year's amendment of the BOOT concession agreement was set so that the investment required to increase Cálidda's system capacity to 420 MMCFD (from 250 MMCFD was economically feasible, another credit positive. Furthermore, we view the regulatory framework as being supportive of credit quality given that Cálidda's tariffs are set for four-year periods and allow the issuer to recover and generate returns not only on past investments but also on those capital outlays earmarked for the next four years. These outlays are based on a five-year capex program that MEM and Cálidda have pre-agreed on, an approach that in theory further enhances Cálidda's ability to recover capital spending, another credit positive.

Our assessment also considers the fact that Cálidda's contracted prices for the procurement of natural gas and transportation services on behalf of its regulated customers are subject to annual adjustments. This is the same frequency applied to the adjustments of the related charges embedded in the end-user bills. The limited volatility and recovery-lag enhance the utility's ability to recoup these pass-through costs, while they also decrease liquidity needs as compared to those of the other LDCs that we rate in the Americas, a credit positive.

...Albeit One With A Limited Track-Record And Some Inconsistencies In Application

Tempering the above credit positives somewhat is the fact that the Peruvian regulatory framework for natural gas distribution is relatively new and has a limited track record. It has also shown some inconsistencies in the application of certain tariff review mechanisms. We also understand that the relationship between Cálidda and OSINERGMIN is less constructive than that between Cálidda and the MEM, largely because of some disagreements about the path of the natural gas expansion program among residential customers. Our assessment further factors in some uncertainty over the outcome of the next natural gas distribution tariff review due in May 2014, particularly after the first tariff review did not progress in a very smooth fashion. In this regard, while the tariffs were due to become effective in 2008 after the initial four years of operation, they were not implemented until May 2010. Factors contributing to this significant delay included the newness of the review process along with some degree of inexperience among the parties involved in the review process. Furthermore, we understand that certain costs were disallowed, which raises some concerns about the regulatory body's discretion to

determine what efficient costs utilities can recover, a recurrent concern across several Latin-American frameworks.

That said, we understand that although the final outcome of the tariff review was still below Cálidda's initial requested increase the OSINERGMIN did reconsider and modify its initial distribution tariff decision, a modest credit positive. On a further positive note, we understand that the quarterly tariff adjustments (refer to Appendix 4) have been applied consistently since implementation in 2010. Furthermore, the last biannual tariff review in 2012 progressed smoothly, which somewhat eases our concerns about the outcome of the next four-year review. OSINERGMIN did not point out any significant deviations between the planned and actual costs and investment program, while the stronger than anticipated demand when the 2010 tariffs were set caused Cálidda to over-earn. The parties agreed that instead of returning the additional cash back to customers, the amounts in question would be put into a fund to foster expansion of natural gas services among mid- to lower-income residential customers via discounts, which we consider credit neutral.

Expansion Strategy Is Not Without Risk But Failure To Implement Cálidda's Plans Has No Implications For The Concession

As shown in the table below and also in the appendixes, Cálidda's customer base at year-end 2012 already exceeded the expansion targets agreed to in the 2010 addendum to the BOOT concession agreement. Under its terms, Cálidda is only required to add a "certain number of total customers" every year, such that its customer base grow to 91,000 by 2015.

While Cálidda's public plans to provide natural gas to 560,000 total end-users by 2017 are aggressive, we note the material growth of its historical customer base which at year-end 2007 stood at only 17,550 end-users while by year-end 2012 that number had grown to 103,712.

TABLE 2
Breakdown of Cálidda's customer base by number and volumes consumed

As of year-end 2012	Number of Clients	Volume in 2012 (Millions of Cubic Meters)	% of Total Volume
Residential and Commercial	103,090	30	0.60%
Industrial	417	927	19.50%
GNV	192	511	10.70%
Power Generators	13	3,295	69.20%
Total	103,712	4,763	100.00%

Source: Offering memorandum

To grow its customer base Cálidda's planned 2013-18 capital outlays will aggregate US\$488 million and annual investments will stay at levels similar to those registered after the significant peak recorded during 2011 (US\$85.7 million) and 2012 (US\$96 million), much higher than previous years (2010: US\$49.80 million). These investments are largely directed to increasing the system's capacity to 420 MMCFD (from 250 MMCFD0) through the expansion of its main grid. Cálidda expects the expansion to be completed before mid-year (total associated capex: US\$90.4 million) after a 24 month construction period. The balance of the earmarked investments are largely associated with the extension of the secondary network to reach different types of consumers. Cálidda plans for the second phase of its main grid expansion to start in 2020, a 2-year construction program. Over the next several

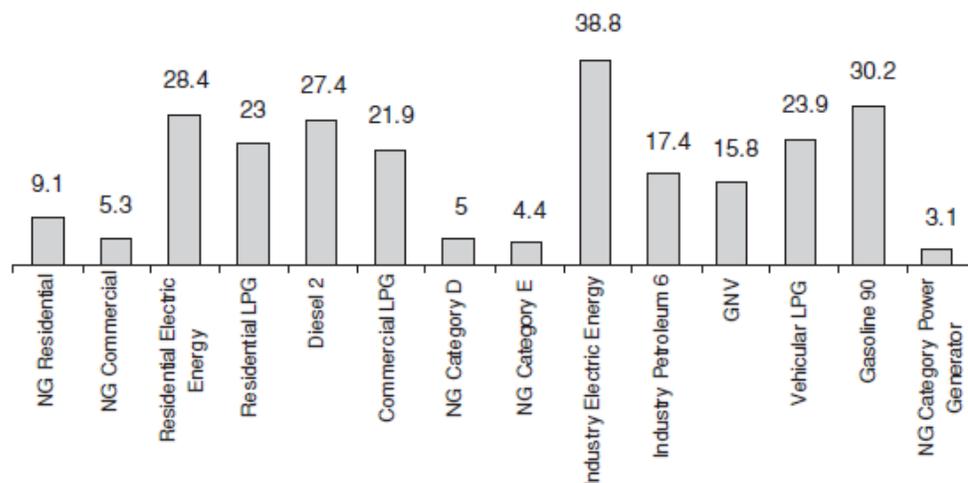
years it also plans to invest in new natural gas distribution clusters to meet localized demand, mainly industrial clients.

These programs are not completely without risks, including those from executing construction work in densely populated areas. Furthermore, the rate of end-users' converting from propane or electric to natural gas may progress more slowly than anticipated despite the economic incentives. That said, we also note that a failure by Cálidda to implement its aggressive expansion plan would not have any negative implications for the BOOT concession, a credit positive. Furthermore, the company also has discretion over the areas for expanding its main and secondary grids, and thus can focus on those areas where end-users have higher incentives for switching to natural gas.

Growing Its Residential Customer Base Is Credit Positive.....

Cálidda's service territory of Lima and Callao holds about 30% of the country's total population of approximately 30 million and accounts for about 50% of the Peruvian GDP. Underpinning the potential for growth among the residential consumers is the low penetration rate for natural gas since the use of natural gas in the households is a relatively new phenomena. Transportation and distributions systems bringing the natural gas from the jungle region to the coastal area (over 700 kilometers away) only started operations in 2004. Expansion is also supported by the Government of Peru's initiatives to extend the use of natural gas throughout the country, its low price (controlled for the country's domestic consumption) compared to alternative fuel-sources, which should incentivize end-users to switch to natural gas. In this regard, we note that the offering memorandum includes a comparison of the prices of alternative sources of natural gas.

FIGURE 2
Natural Gas vs. Alternative Fuel Sources
(US\$/MMBTU)



Source: Offering Memorandum

Cálidda's expansion strategy mainly focuses on regulated customers in the mid to low income sub-categories since these are more likely to convert to natural gas and to live in areas where Cálidda believes it can maximize economies of scale. While the high costs of the installation and connection devices could deter some conversions, these sub-categories also benefit from the existing promotional discounts and installation financing arrangements provided by Cálidda.

Given the mild coastal climate that usually prevails over Cálidda's concession area, the main use of natural gas in households is for cooking and providing hot water for bathing. This dominant use is credit positive, because it enhances the visibility of the cash flows Cálidda generates within the residential sector while the importance of the use reduces exposure to potential bad debt expense risk.

That said, we consider the anticipated increase in Cálidda's reliance on the cash flows generated by its unregulated ancillary services a credit negative. Nevertheless, we also recognize that Cálidda as the distribution company has a competitive advantage in providing these types of services over other potential service providers, somewhat offsetting our concerns.

.... But significant exposure to unregulated customers remains

Cálidda's exposure to unregulated customers in terms of gross margins, particularly to the three largest power generation companies (Kallpa, Enersur and Edegel) is significant and ranks among the highest across Moody's rated universe of regulated natural gas distribution companies in the Americas.

Competitive domestic natural gas prices have been driving the expansion of the natural gas fired fleet in Peru as the country's demand for electricity grows; the low gas prices have positioned the natural gas fired fleet behind the hydroelectric facilities and ahead of coal-fired plants along the dispatch curve. Furthermore, some industries (including the cement and the ceramic industries) are also using natural gas in their operations.

We note that Cálidda's material exposure to unregulated customers results from the fact that a significant portion of the country's natural gas fleet was installed close to the only major transportation infrastructure available in the country, that is around the City Gate in Lurin (south part of Lima area). The MEM estimated in January 2013 that the unavailability of TgP's natural gas pipeline amid growing security concerns could cause the country's power grid to lose supply from 2,360MW of installed capacity (disregarding that certain units could use diesel under contingency circumstances). Cálidda's exposure to unregulated customers will continue to grow as new natural gas fired facilities progressively start operations during 2013. According to COES, the Peruvian grid operator, this includes the 534MW combined cycle Fenix (AEI) and the 268.7MW Chilca (Enersur) facilities.

Somewhat offsetting the credit concerns associated with this material exposure is the growing contribution to Cálidda's cash flows of the revenues generated under firm distributions contracts; these currently represent around 46% of its distribution revenues. Furthermore, concerns about the negative impact thermal generation companies could have on the variable portion of Cálidda's operating distribution margins through fluctuations in their demand for natural gas are somewhat mitigated by the significant role that natural gas fired generation facilities play in the Peruvian energy mix compared to other countries in the region. Historically, their consumption accounts for at least 30% of the total output regardless of season.

Deteriorating Credit Metrics But Expected To Be Again Commensurate With The Baa-Rating Category

The rating further captures the deterioration in Cálidda's credit metrics that we anticipate over the short term due to the increased leverage associated with the new notes. Proceeds will not only be used to refinance existing indebtedness but also to fund the material capex program earmarked for adding new end-users. As shown in the appendixes, Cálidda's equity ratio will drop to around 39% from approximately 51% because of the increased financial leverage. The shareholders' equity contributions during 2012 and 2013 aggregating US\$55 million is a credit positive, albeit this is offset by the full

repayment of the US\$47 million subordinated shareholders' loan using the proceeds raised in connection the notes issuance. However, we also recognize that conditions of the subordinated loan in terms of interest rates were more onerous than those the current market conditions now offer.

We expect the company to report key credit metrics that are weak for the Baa-rating category over the short-to-medium term. Specifically, we expect a CFO pre-W/C to debt and interest coverage of around 9% and 3x, respectively. However, the rating also assumes that the weak metrics will be temporary and that over the medium-to-long term, Cálidda's cash flow generation will improve as its customer base continues to grow. We expect it will again report credit metrics well positioned within Moody's Baa-rating category; namely CFO pre-W/C to debt and interest coverage in excess of 13% and 3.5x times, respectively. The rating also assumes Cálidda will maintain a responsible dividend policy, particularly amid its current robust expansion program, such that it reports RCF to debt in the mid-to-high teens.

Liquidity Profile

The proposed notes extend Cálidda's debt maturities while reducing over the short to medium term its reliance on the capital markets to fund its capex program, a credit positive. However, Cálidda's rating is tempered by the anticipated deterioration over the medium-term of its liquidity profile. Similar to the vast majority of issuers in Latin America, Cálidda has no committed bank credit facility in place (only non-committed), which results in a significant dependence on the capital markets for any future working capital and liquidity needs, a credit negative. While the lag in recovering its pass-through costs is limited, as noted earlier, we anticipate that Cálidda's working capital needs will continue growing along with its customer base and the financing provided to potential new end-users to cover their installation and connection. We also believe that Cálidda's discretion to substantially defer the investments it plans over the next years without risking consequences to its ability to generate cash flow is limited should there be liquidity stress. This is because these investments are pre-agreed with the MEM while distribution tariffs are set for the following four years to incorporate the capital outlays earmarked for that period.

The rating therefore assumes that, in the absence of such committed facilities, the issuer will maintain robust cash balances that will allow it to meet unexpected cash flow shortfalls, particularly considering its significant capex program. Further mitigating our concerns is our expectation that the issuer will not make dividend distributions until a substantial portion of its current expansion program is completed in 2016. Another mitigating factor is the shareholders' limited reliance on Cálidda's dividend distributions to meet their own funding requirements. The rating also assumes that despite the clause included in Cálidda's shareholder agreement (see appendix) to distribute all cash available after certain payments, its shareholders will allow the company to implement a responsible dividend policy. In this regard, we also acknowledge that EEB, Cálidda's majority shareholder, has a proven track-record of forgoing dividend distributions and of providing subordinated shareholder loans to its other controlled subsidiaries in Colombia and abroad.

Other Considerations

The rating also considers some currency risk exposure associated with the payments from Cálidda's regulated customers. These are invoiced in nuevos soles after monthly adjustments of the charges that are initially calculated in US dollars. This is a credit negative since the bulk of Cálidda's cost structure is largely in US-dollars, i.e. natural gas; however, we believe the high level of dollarization of the Peruvian economy, along with the monthly adjustment process, helps to lessen our credit concerns about the impact of any potential nuevos soles devaluation.

Cálidda's rating primarily reflects factors considered under Moody's rating methodology for Regulated Electric and Gas Utilities, published in August 2009. As depicted in the Appendix 5, Cálidda's indicated rating under the grid for both historical and projected metrics is Baa3, the same as its assigned senior unsecured rating.

Peer Comparison

In assigning Cálidda's rating Moody's considered a global group of operating regulated natural gas distribution companies operating in the Americas, largely comprising US and Canadian companies but also a Brazilian company (Cia de Gas de Sao Paulo, Comgas; Baa3, stable) and two Argentinean issuers (Gas Natural BAN, S.A. and Camuzzi Gas Pampeana S.A.). The sovereign government rating caps the rating of the Argentinean company. Comgas is a better peer for Cálidda given it also shows a high exposure to industrial consumers and a significant capex program. Comgas is a larger company than Cálidda in terms of asset base but its rating is currently constrained by several factors including its exposure to price volatility (by commodity and foreign exchange effects) of the gas it supplies that is not immediately passed through to consumers, therefore pressuring its short term liquidity, as well as its relatively weak liquidity in face of its significant capex program and a dividend distribution policy that is likely to aim at maximum distributions. Refer to Appendix 6 "Peer Comparison" for a summary of key financial data and key credit metrics for Cálidda and some of its peers considered in our analysis.

Appendix 1: Cálidda's System And Sources Of Natural Gas

As illustrated in the map above With a 2,455 km natural gas distribution network, Cálidda's gas distribution system is connected at the City Gate to Peru's largest natural gas pipeline system, which is operated by Transportadora de Gas del Peru (TgP). Cálidda distributes the natural gas produced at Block 88 of the Camisea basin, in the Cuzco region. This is currently the largest producing basin in the country with proven reserves estimated to exceed 8TCF. Production from the second block at the Camisea gas fields, Block 56, is fully used for liquefied natural gas exports that started in 2010. New natural gas explorations are currently under development also in the Cuzco region, Block 57 and Block 58. We understand that their production will likely be dedicated to supply southern Peru with natural gas upon the development of a energy node in that part of the country, and the development of the required infrastructure, including pipelines.

Appendix 2: Cálidda's Current And Post-Transaction Capitalization; Shareholder Structure

Proceeds from the debt issuance will be used to repay the outstanding balance of the shareholders' subordinated loan due in 2014 (US\$47 million and US\$9.1 million accrued interests). We note that the subordinated loan interest rate is L6m+6.5% (annual interest payments approximated in 2012 and 2011 US\$3.3 million).

TABLE 3
Capitalization structure before and after the transaction

Capitalization (in US\$m)	Current	%	After the Notes issuance	%
International unsecured US\$ notes	0.0		320.0	
Multilateral debt	119.7		0.0	
Bank debt	30.0		0.0	
Shareholder sub debt	47.0		0.0	
Total debt	196.7	49.3%	320.0	61.2%
Shareholders' equity	202.5	50.7%	202.5	38.8%
Total capitalization	399.2		522.5	
Cash and equivalents	56.9		56.9	

Source: Cálidda, Financial Statements, Offering Memorandum

Early in 2011, the Colombian Empresas de Energía de Bogotá (Baa3, stable) became the majority shareholder of Cálidda after it acquired AEI's participation in the company. EEB also holds a 15.6% equity interest in Promigas such that its total indirect and direct stake in Cálidda aggregates 66.2%.

TABLE 4
Shareholders structure

	Number of shares (in millions)	Total ownership stake
EEB Peru Holdings Ltd	79.98	60%
Promigas S.A. ESP	53.32	40%
Total	113.30	100%

Source: Cálidda's financial statements

Info About The Shareholders

Empresas de Energía de Bogotá S.A. E.S.P. – (EEB; Baa3, stable; BCA: ba1) - EEB is an operating transmission company, and a holding company with material equity interests in controlled and non-controlled subsidiaries. These subsidiaries conduct their electric (un- and regulated) and natural gas operations in Colombia, Peru and Guatemala. EEB's Baa3 senior unsecured rating reflects its ownership structure and linkages with the District of Bogota (Baa3, stable) as the latter holds a 76.3% ownership stake. EEB's ba1 Base Credit Assessment (BCA), largely reflects the structural subordination that results from its strong dependence on the cash up-streamed from its subsidiaries to service its debt, particularly from its non-controlled subsidiaries, despite its own profitable transmission operations. However, the BCA also captures the regulated nature of the operations of

most of its subsidiaries and the aggressive dividend policy of its key non-controlled subsidiaries that enhances EEB's cash flow visibility. The BCA assumes the successful completion of the material electric transmission and natural gas capital expenditure (capex) projects currently pursued in Peru and Guatemala. It acknowledges the resulting diversification benefits and the slowly growing relevance of the controlled subsidiaries as a source of more predictable cash flows. It also incorporates the assumption that EEB will further pursue new growth opportunities in Colombia and other countries in the region with transparent regulatory frameworks. The BCA assumes that EEB will fund them in a prudent fashion, and maintain a reasonable dividend policy that allows it to continue to report robust credit metrics. In the absence of committed bank credit facilities the BCA also captures EEB's reliance on the capital markets to meet unexpected cash flow shortfalls albeit its current debt maturity profile is manageable. For more information about EEB and its ratings refer to pieces of research available in www.moodys.com

Promigas (not rated) - Promigas is the second largest natural gas transportation company in Colombia. The vast majority of its pipelines extend along the Caribbean Coast in Colombia, where the bulk of the natural gas fired generation plants are located. Promigas also holds ownership stakes in some controlled as well as non-controlled entities. The bulk of them are regulated Colombian LDCs with significant ability to make dividend distributions.

Appendix 3: Key Terms Under The 2000 Boot Agreement And The May 2010 addendum ; Tax Stability Agreement And Shareholder's Agreement

- » Cálidda operates under a 33-year build operate own and transfer (BOOT) concession agreement from the Peruvian government that provides exclusive right to distribute natural gas by pipeline in Lima and Callao.
- » This concession will expire in 2033, albeit it can be extended for ten year periods but limited to 2060.
- » This BOOT concession agreement was initially entered by the Peruvian government to TgP in December 2000. In 2002, TgP entered with Cálidda into an assignment agreement of the BOOT Concession Agreement.
- » An early termination of the BOOT concession agreement could be triggered if certain events occur (including Cálidda's insolvency, liquidation or insolvency) or if Cálidda fails to meet with certain regulatory operation and maintenance rules established for concessionaire companies. The latter include operating the pipeline system without an interruption greater than an aggregate of 876 hours per year and that affects 25% or more of the average volume distributed the previous year. The BOOT concession agreement also foresees the procedures and payments Cálidda is entitled to, if any, in case of an early termination. These will depend on the event that triggers the early termination. The Concession Assets will be auctioned off in case of a default by the Ministry of Energy (MEM) or Cálidda. We understand that it also limits the amount payable to Cálidda to the book value of the Concession Assets, if the termination is not due to a MEM's default. In any case, amounts payable to Cálidda rank after payment due under its labor obligations, outstanding secured debt, taxes, fines and penalties, other amounts payable to the government and other debt.
- » In May 2010, Cálidda and the Peruvian government signed the **ADDENDUM TO THE BOOT CONCESSION AGREEMENT** that set Cálidda's new commitments in terms of the number of **effective customers, namely:**

TABLE 5
Customers Breakdown At Year-End 2012

Number of Customers		Number of Customers to be Added p.a.	Cumulative
at the end of the first year	1st year	12,000	12,000
	2nd year	15,000	27,000
	3rd year	18,000	45,000
	4th year	21,000	66,000
	5th year	25,000	91,000
total customers at the end of the 5th year		91,000	

Source: BOOT concession agreement, Financial Statements, Offering Memorandum

- amended the tariffs applicable under the terms of the BOOT agreement to reflect the **Single distribution tariffs** that unified the different rates previously applicable to Cálidda's main pipeline and its secondary network.
- » Following this amendment to the BOOT concession agreement in 2010, Cálidda started reporting the rights associated with the BOOT agreement under intangible assets, and began

applying IFRIC 12 – Concession Agreements following its transition to IFRS during 2011. As a result, the revenues associated with the expansion of the main pipeline are reported as part of the operating revenue, while the value of the expansion is also amortized under cost of natural gas distribution and related services.

- » According to the **TAX STABILITY AGREEMENT** - signed in 2000 and assigned by TgP to Cálidda the company benefits from the stabilization of the income tax regime, and the hired labor regime.
- » Pursuant the **SHAREHOLDER'S AGREEMENT** - entered in 2007 by Cálidda's previous majority shareholder (AEI) and Promigas, subject to the requirements of the financing agreements, shareholder loans and to the extent permitted by Peruvian law, Cálidda shall dividend to the shareholders, on a periodic basis all of the funds on hand and not needed to pay company's obligations (including lenders under financing arrangements, taxes and any other operating or capital costs incurred) or to fund reserves that shareholders establish with respect to working capital and contingent for future liabilities, required by financing agreements, Peruvian law or the budget. However, it also foresees that no dividend would be paid until the shareholder loans have been fully repaid.

Appendix 4: Key Provisions Of The Peruvian Natural Gas Regulatory Provisions Considered In Moody's Analysis

- » **Regulated versus Unregulated Customers** - As illustrated in the table below the regulatory framework classifies customers into seven different categories depending on their consumption of natural gas and the industry that the end-user belongs to. This criteria is also used to distinguish between regulated and unregulated customers.

TABLE 6
Natural gas customers categories according to Peruvian regulation

Category	Monthly Consumption	Type of Customer
A	Less than 300 SM3	Residential and Commercial
B	Between 301 SM3 and 17,501 SM3	Commercial and Industrial
C	Between 17,501 SM3 and 300,000 SM3	Industrial
D	Greater than 300,000 SM3	Industrial
NG V	—	Service Stations
E	Greater than 900,000 SM3	Industrial
GE	—	Power Generators

Note - SMS3 - Standard cubic meter

Source: Offering Memorandum

Regulated customers are those with a demand <30,000 SM3 day for which Cálidda procures NG and transportation services (captive customers). As illustrated in the table above this includes residential, commercial end-users but also small and medium industries as well as natural gas stations (NGV).

Within the residential category (A above) end-users are also sub-categorized (not depicted in the table above) depending on their income levels.

The unregulated customers (demand >30,000 SM3 day) procure the natural and Transportation services independently from Cálidda. However, Cálidda renders them natural gas distribution services. For example, in 2010 Cálidda acquired from Kallpa Generación S.A. and Enersur S.A. some distribution rights associated with the ducts that were originally built by those power generation companies to connect to the TgP natural gas transportation pipeline (increasing the value of Cálidda's recorded BOOT concession rights).

Natural Gas Distribution Tariffs Are Subject To Reviews

- » As mentioned under Appendix 3, Cálidda has applied since 2010 a Single distribution Tariff for all customers located within a single concession area, albeit it differs for each category of user depending on the category's consumption rates.
- » **Natural gas distribution tariffs** are reviewed periodically by the regulatory body, OSINERGMIN., as follows:
1. **Every four years** – The tariffs consider the current value of the executed investments but also the projected works, efficient operation and maintenance costs, as well as fixed administrative expenses. The calculations consider a 30 year period for the recovery of the investments. The Single Tariff also considers a guaranteed 12% annual return on investments. These are divided

by the total forecasted demand of natural gas (volume) during the period by customer category.

2. **Every two years** – OSINERGMIN compares actual versus forecasted investments, operating costs and demand assumptions used previously in setting the Single tariffs. Any deviations in excess of 13.7% can trigger tariffs adjustments.
3. **Every three months** – Since 2010 the regulation also foresees quarterly adjustments of the distribution rates to reflect variations in (i) the US-PPI, (ii) the Peruvian Wholesale Prices Index (IPM), (iii) the Steel index and (iv) polyethylene.

Furthermore, Cálidda's Regulated customers are invoiced in nuevos soles after monthly adjustments of the charges that are initially calculated in US\$. Unregulated customers are invoiced in US\$.

Appendix 5: Rating Factors

Cálidda

Regulated Electric and Gas Utilities ^{[1][2]}	12/31/2012		Moody's 12-18 month Forward View As of March 2013*	
	Measure	Score	Measure	Score
Factor 1: Regulatory Framework (25%)				
a) Regulatory framework		Ba		Ba
Factor 2: Ability to Recover Cost and Earn Returns (25%)				
a) Ability to recover Cost and Earn Returns		Baa		Baa
Factor 3: Diversification (10%)				
a) Market Position		Ba		Ba
b) Generation and Fuel Diversity		n.a.		n.a.
Factor 4: Financial Strength, Liquidity, & Metrics (40%)				
a) Liquidity		Ba		Ba
b) CFO (pre w/c) + Interest / Interest (3 year Avg)	4.6x	A	2.5x-4.5x	Baa
c) CFO (pre w/c) / Debt (3 year Avg)	18.8%	Baa	13%-22%	Baa
d) CFO (pre w/c) - Dividends / Debt (3 year Avg)	18.8%	A	13%-22%	Baa
e) Debt / Capitalization (3 year Avg)	52.1%	Baa	45%-55%	Baa
Rating:				
Indicated Rating from Grid		Baa3		Baa3
Actual Rating Assigned		Baa3		Baa3

* This represents moody's forward view; not the view of the issuer; and unless noted in the text does not incorporate significant acquisitions or divestitures

[1] All ratios are calculated using Moody's Standard Adjustments.

[2] As of 12/31/2012; Source: Moody's Financial Metrics™

Appendix 6: Across Ratio/Raw Data Comparison Report

Across Ratio/Raw Data Comparison Report (in USD thousands)

Fiscal Year: Standard

Company Name	Moody's rating, outlook	Date	Total Assets	Revenue	CFO Pre-W/C	(CFO Pre-W/C + Interest) / Interest Expense	(CFO Pre-W/C) / Debt	(CFO Pre-W/C - Dividends) / Debt
AGL Resources Inc.		12/31/2012	14,333,000	3,922,000	851,333.33	5.19x	15.87%	11.83%
	Baa1, stable	12/31/2011	14,092,217	2,338,000	532,666.67	4.51x	10.02%	6.93%
		12/31/2010	7,640,000	2,373,000	520,333.33	5.21x	17.28%	11.97%
Atmos Energy Corporation		9/30/2012	7,697,275	3,438,483	617,658.00	4.81x	20.62%	16.42%
	Baa1, stable	9/30/2011	7,495,871	4,286,435	650,508.67	4.77x	22.51%	18.22%
		9/30/2010	6,923,996	4,719,835	732,839.67	5.31x	27.44%	22.79%
Laclede Gas Company		9/30/2012	1,765,714	767,627	153,102.00	6.03x	26.16%	19.83%
	Baa1, negative	9/30/2011	1,649,013	932,328	126,349.00	4.89x	20.87%	14.92%
		9/30/2010	1,666,461	874,624	111,169.00	4.20x	16.24%	11.14%
Southwest Gas Corporation		12/31/2012	4,678,953	1,927,778	449,286.67	6.03x	24.42%	21.54%
	Baa1, stable	12/31/2011	4,436,981	1,887,188	417,397.00	5.61x	24.45%	21.64%
		12/31/2010	4,100,593	1,830,371	368,373.33	4.82x	24.01%	21.09%
FortisBC Holdings Inc.		12/31/2012	6,049,952	1,456,759	323,168.42	2.67x	10.01%	7.38%
	Baa2, stable	12/31/2011	6,003,012	1,619,558	254,921.13	2.36x	7.61%	4.89%
		12/31/2010	5,485,259	1,527,072	218,999.10	2.48x	8.13%	5.17%
Laclede Group, Inc. (The)		9/30/2012	1,885,824	1,125,475	150,355.00	5.67x	27.43%	20.70%
	Baa2, negative	9/30/2011	1,790,426	1,603,307	136,494.00	5.14x	24.64%	18.18%
		9/30/2010	1,848,157	1,735,029	129,418.00	4.64x	18.91%	13.82%
Yankee Gas Services Company		12/31/2011	1,518,458	430,799	79,034.00	4.47x	16.54%	8.55%
	Baa2, stable	12/31/2010	1,459,221	434,277	97,653.33	5.23x	22.63%	18.27%
Cia de Gas de Sao Paulo - COMGAS		12/31/2012	2,925,683	2,483,865	291,066.40	3.74x	20.80%	13.61%
	Baa3, stable	12/31/2011	2,320,691	2,263,287	240,563.57	3.23x	18.74%	-1.98%
		12/31/2010	2,309,328	2,182,028	542,003.19	6.88x	58.35%	31.21%

Across Ratio/Raw Data Comparison Report (in USD thousands)

Fiscal Year: Standard

Company Name	Moody's rating, outlook	Date	Total Assets	Revenue	CFO Pre-W/C	(CFO Pre-W/C + Interest) / Interest Expense	(CFO Pre-W/C) / Debt	(CFO Pre-W/C - Dividends) / Debt
Gas Natural de Lima y Callao S.A. (Cálidda)		12/31/2012	495,409	367,180	36,728.00	4.94x	17.53%	17.53%
	Baa3, stable	12/31/2011	385,048	302,885	38,863.00	5.01x	22.25%	22.25%
		12/31/2010	291,168	186,974	18,936.00	3.63x	15.93%	15.93%
Camuzzi Gas Pampeana S.A.		12/31/2012	225,942	154,746	-2,301.84	0.26x	-17.02%	-17.02%
	B3, negative	12/31/2011	256,562	165,855	13,934.80	11.98x	99.41%	99.41%
		12/31/2010	280,683	160,062	18,384.23	8.48x	155.89%	155.89%

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