**Q. Coyne Evidence: Please provide a copy of the Moody's report referenced on page A-26.**

A. Please see Attachment A to this response.

**Moody's Report**

MOODY'S
INVESTORS SERVICE

REQUEST FOR COMMENT

# Proposed Refinements to the Regulated Utilities Rating Methodology and our Evolving View of US Utility Regulation

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## Introduction

We are seeking market feedback on a number of refinements that we are proposing to make in an update to our Regulated Electric and Gas Utilities Rating Methodology, which was last published in August 2009. The proposed updated rating methodology will continue to have a particular focus on regulatory risk and financial performance. The grid that is part of the proposed updated rating methodology is comprised of the same four factors as the existing grid: regulatory framework, ability to recover costs and earn returns, diversification, and financial strength. However, it will provide additional granularity on individual factor scores, add new sub-factors, and increase the relative weighting of the financial metrics when determining the grid-indicated rating. We do not expect that implementation of the proposed refinements will lead to any changes in current ratings.

On a separate issue, we are also seeking market commentary on our evolving view of the credit supportiveness of the US utility regulatory framework. Based on our observations of trends and events, we propose to adopt a generally more favorable view of the relative credit supportiveness of the US utility regulatory environment. Our updated view considers improving regulatory trends that include the increased prevalence of automatic cost recovery provisions, reduced regulatory lag, and generally fair and open relationships between utilities and regulators. While US state regulatory environments have been characterized by a process that is more openly adversarial than some other global jurisdictions, there have been very few instances where eventual regulatory outcomes deviated enough from the established regulatory framework to severely undercut utility creditworthiness. In the few instances where inconsistent regulatory decisions have led to serious credit stress, courts have proved to be a reliable secondary support for utility credit worthiness through rulings that mandate that regulatory decisions must follow the established regulatory framework.

Our revised view that the regulatory environment and timely recovery of costs is in most cases more reliable than we previously believed is expected to lead to a one notch upgrade of most regulated utilities in the US, with some exceptions. This evolving view is independent of the proposed changes in the methodology that are highlighted in the Summary section that follows, and would have taken place even if the 2009 methodology were to remain in place without modification.

Although the change of our US regulatory view does not by itself require the publication of a Request for Comment, based on an unusual confluence of factors in this instance, including the proximity in time of this change in view to an expected update in the methodology (even though the two are unrelated), the heavy weighting that regulatory factors have in our ratings as reflected in both the existing and proposed methodologies, the large number of US utilities that are potentially affected and the magnitude of debt outstanding in the sector, we think it is important to clearly communicate our developing views in this document and to solicit comments from market participants who may have interest.

We invite market participants to provide comments on this proposal and to make other suggestions for consideration by sending comments by October 23, 2013. Comments should be sent to RFC@moodys.com using the Request for Comment Form (the "RFC Response Form") available on the Request for Comment topic page on www.moodys.com. If your comments pertain to the proposed refinements to the rating methodology, please reference "Part I: Regulated Utility Methodology" in the topic line of your response. If your comments pertain to our evolving view of US utility regulation, please reference "Part II: US Utility Regulation" in the topic line of your response. The RFC response period for each of these topics will be open for at least 30 days from the date of publication of this Request for Comment.

## Summary

### PART I: Proposed Update of the Regulated Electric and Gas Utilities Methodology
### Changes to the Grid: Additional sub-factors and changes to factor weighting

» We propose to add sub-factors under Factor 1- Regulatory Framework and Factor 2- Ability to Recover Costs and Earn Returns, to provide more granularity and to better distinguish among regulated utilities. The sub-factors include Sub-factor (1a) – Legislative and Judicial Underpinnings to Regulatory Framework (12.5% weighting) , Sub-factor (1b) – Consistency and Predictability of Regulation (12.5%), Sub-factor (2a) – Timeliness of Recovery of Operating and Capital Costs (12.5%), and Sub-factor (2b) - Sufficiency of Rates and Returns (12.5%). A preliminary draft of the grid for the updated rating methodology is included in Appendix A and shows the new sub-factors.

» We propose to refine Factor 3 – Diversification to focus more on regulatory diversity and the strength of the service territory economy as the key considerations in the scoring of the Market Position sub-factor. We also propose to change the Generation and Fuel Diversity sub-factor by replacing the emphasis on carbon fuels with the broader concepts of "challenged" and "threatened" sources of generation, as detailed in Appendix B.

» The range of possible scores under each factor, previously Aaa to B, has been expanded to include the Caa rating category. The purpose is to provide greater transparency in the thinking behind our ratings for issuers at the lower end of the spectrum.

» The Liquidity sub-factor, currently weighted at 10% in the grid, will be removed from the methodology grid entirely and instead analyzed as a key rating consideration outside the grid. However, there will be no diminution in our emphasis on liquidity as a key rating driver, since it always an important credit consideration and can become the primary rating consideration if it is mismanaged or becomes problematic for a utility.

» The weighting in the grid for the four financial ratios that comprise Factor 4 – Financial Strength will increase to 40% from 30%, although the specific ratios will remain the same. Additional weighting and importance will be given to the two cash flow to debt ratios: CFO pre-WC/Debt (to 15% from 7.5%) and CFO pre-WC less Dividends/Debt (to 10% from 7.5%), with the other two ratios continuing to be weighted at 7.5%. The above-mentioned expansion of the scoring range will cause some changes in grid parameters outlined for each rating category, primarily at the lower end of the grid.

» The scoring grids, including the ranges for financial ratios, are primarily oriented toward vertically integrated utilities. We are contemplating lowering the financial ratio threshold ranges by approximately one category for certain utilities viewed as having lower business risk, for instance many US natural gas local distribution companies (LDC's) and certain US electric transmission and distribution companies (T&D's, which lack generation but generally retain some procurement responsibilities for customers). The purpose would be to better align the grid-scoring to our view, reflected in current ratings, that utilities at the same rating category level with an inherent lower business risk can have somewhat lower financial metrics. Alternately, business risk may be addressed in a different manner; for instance, by incorporating it more broadly into the qualitative factor scoring grids. Typically, lower risk utilities would be those having no electric generation assets, very strong insulation from commodity risks, good protection from volumetric risks, fairly limited capex needs and low exposure to storms, major accidents and natural disasters.

Additional summary comments about the updated rating methodology:

» As is our current practice, actual ratings of utility holding companies may be lowered by a notch or more because of structural subordination, and we are contemplating the potential of including this notching into our grid-indicated ratings to provide greater transparency. Our approach has and will consider the relative percentage of debt at the holding company versus debt at the operating subsidiaries, the diversity of holding company cash flows, the composition and materiality of non-utility businesses, and other considerations.

» We also propose to maintain our existing approach to notching between classes of debt. In most regions, we rate the senior secured debt of a utility one notch above its senior unsecured debt. However, US utility first mortgage bonds are typically rated two notches higher than the senior unsecured debt of the same issuer, given their first priority lien on critical infrastructure assets and the very high historical recovery rates for this class of debt in default situations.

The grid in the proposed methodology contains the same four factors as the existing rating methodology with the same weighting for each factor, but there are changes in the sub-factors and their weighting. We propose to assign equal weighting to four new sub-factors related to the regulatory framework and ability to recover costs and earn returns because we believe these sub-factors typically work together in approximately equal proportion as indicators of regulatory risk. These four sub-factors would still total 50% of the overall grid score, reflecting our view that the regulatory environment is the most important determinant of credit quality in the sector and generally comprises about half of the elements that are most pertinent for credit quality.

The grid in the proposed rating methodology would use the same four financial ratios but with some changes in weighting. The weighting of the two existing measures of cash flow generation relative to debt is to be increased because we believe these financial ratios are the strongest direct indicators of current capacity to service debt. The proposed 15% weight for CFO Pre-WC/Debt reflects our view that this is the single most predictive financial measure, followed in importance by CFO Pre-WC -

Dividends/Debt with a proposed 10% grid weighting. The additional weighting of these ratios is to be balanced by elimination of the separate liquidity sub-factor that has a 10% weighting in the existing grid. We propose to remove liquidity from the grid and consider it as a qualitative assessment outside the grid because its credit importance varies greatly over time and by issuer and accordingly is not well represented by a fixed grid weight. The weighting of the grid indicators for diversification are unchanged, but the proposed descriptive criteria have been refined to place greater emphasis on the economic and regulatory diversity of each utility's service area rather than the diversity of operations, because we think this emphasis better distinguishes credit risk.

As noted in the Summary above, we do not expect that implementation of the proposed refinements in the updated rating methodology will by themselves lead to any changes in current ratings.

## PART II: Revised View of US Utility Regulation

» Our view of the credit supportiveness of regulatory jurisdictions around the globe is constantly evolving along with events. In most cases we would expect to simply update our view and to simultaneously make any rating changes that result. However, considering the large number of rated US utilities and the volume of their rated debt, combined with the magnitude of change in our view, we are soliciting comments on our rationale for a more favorable view of the US regulatory environment. We believe that many US regulatory jurisdictions have become more credit supportive of utilities over time and that the assessment of the regulatory environment in the US that has been incorporated in ratings may now be overly conservative.

» While we had previously viewed individual state regulatory risks for US utilities as generally being higher than utilities in most other developed countries (where regulation usually occurs at the national level), we have observed an overall decrease in regulatory risk in the US. While state regulatory jurisdictions seem to be more prone to highly visible disputes and parochial political intervention than national regulatory frameworks, which has sometimes raised concerns about regulatory consistency, we now believe that the more openly adversarial process in the US does not lead to materially less reliable regulatory outcomes for credit quality.

» There have been a number of favorable regulatory changes in recent years. For example, the increasing prevalence of riders, trackers, and other automatic cost recovery provisions in the US has reduced the amount of time between when a utility incurs and recovers costs, or "regulatory lag." These changes have happened incrementally - jurisdiction by jurisdiction or even issuer by issuer. We now believe that these changes, in aggregate, represent a significant improvement in the timeliness of cost recovery.

» We believe the majority of US utilities enjoy relatively fair and open relationships with their regulators, and that most regulators strive to maintain reliable, financially viable utilities in their states, while also balancing the needs of the state's commercial, industrial, and residential utility customers.

» There have been selected instances of regulatory and political pressure leading to financial distress for utilities in some US states, such as California, Illinois, and Maryland. However, it is noteworthy that state regulators have stopped short of triggering defaults after the experience in California where subsequent court rulings reversed regulatory actions that contributed to defaults by the two largest utilities in the state. We think regulatory decisions consider eventual judicial outcomes, and we propose to give more emphasis to the relatively consistent US judicial

framework as a factor that discourages highly inconsistent regulatory actions that would have a severe credit impact.

» Part of the evolution to our thinking is to give greater emphasis to the judicial framework into our analysis. A material number of litigated regulatory matters over the past decade could be viewed as an indication of a less supportive framework. However, the resultant body of case law has provided greater clarity into the rules of engagement for both utilities and regulators, which we view as providing a generally greater level of stability.

» We continue to believe US utilities may have more incentives to enter bankruptcy proceedings relative to similarly rated corporate issuers, due to their good track record of being able to reorganize and obtain rate relief while under the protection of federal bankruptcy courts. Nonetheless, utilities have experienced default rates that are lower than non-financial corporate issuers and much lower losses given default. This has been well documented in Moody's default and recovery studies on regulated utility debt.

» A comparison of key financial ratios used under the Regulated Electric and Gas Utilities Rating Methodology in rating utilities across several developed international jurisdictions with credit supportive regulatory frameworks (including Canada and Japan) shows that US regulated utilities in recent years have exhibited stronger financial ratios relative to similarly rated regulated international utility peers.

» We acknowledge that every regulatory framework will need to accommodate new realities and challenges that arise to confront the industry. Current examples of such challenges in the US include new nuclear construction, public policy initiatives on renewable energy, and the rise of distributed generation. However, our current view is that regulators and utilities will be able to reach reasonable agreements regarding these issues.

» As previously noted, our view of regulatory environments is constantly evolving and we normally make changes in our view and resulting rating changes without publishing a Request for Comment. We have seen a decline in the credit supportiveness of some regulatory environments that had been previously viewed as highly credit supportive. For example, we adopted a more conservative assessment for the regulatory environment and timely cost recovery for all of the Japanese utilities following the Fukushima disaster in 2011. This led to downgrades of their ratings and was reflected in lower scoring in our assessment of the regulatory and cost recovery factors in the grid.

For these reasons, we believe a more positive view of US utility regulation is warranted. This is expected to lead to a one notch upgrade of the ratings of most regulated utility credits in the US, with some exceptions. An improved view of US state regulatory frameworks is also likely to lead to higher scoring for many US utilities under the grid factors for utility regulatory frameworks and/or cost recovery provisions.

In most cases, we would expect all of the debt classes of a utility's capital structure to be upgraded by the same number of notches, although there could be some limited exceptions to this general rule. Most utility holding companies will be upgraded by the same number of notches to the extent that the upgraded regulated utility subsidiaries represent the holding company's predominant business and there are no extenuating circumstances, such as a large amount of holding company debt, substantial unregulated or other higher risk businesses, or other factors that may increase credit risk at the holding company.

While we anticipate that most US regulated utilities will be upgraded, there are issuer specific circumstances that may preclude an upgrade. These may include but are not limited to the following:

» Utilities that are part of corporate families that have significant unregulated or other higher risk operations as part of their overall business mix;

» Other corporate family considerations, such as a highly levered holding company, a complex corporate structure, or exposure to contagion risk due to the existence of lower rated affiliates;

» Utilities that are engaged in substantial construction programs for new generation plants (especially those with long lead-times or with technology that is less tested) or are in the midst of other major capital projects;

» Utilities that face material cost recovery risks or challenges related to significant capital investments;

» Utilities subject to concentration and/or event risk that are exposed to potentially sudden and unexpected changes in credit profile; and

» Utilities that are under downward credit pressure, particularly where this is reflected in a review for downgrade or a negative rating outlook.

## Part I: Detailed Explanation of Proposed Refinements to Regulated Utilities Rating Methodology

This report includes a detailed rating grid that provides a reference tool that can be used to approximate credit profiles within the regulated electric and gas utility sector in most cases. The grid provides summarized guidance for the factors that are generally most important in assigning ratings to companies in this sector. However, the grid is a summary that does not include every rating consideration. The weights shown for each factor in the grid represent an approximation of their importance for rating decisions, but actual importance may vary substantially. In addition, the illustrative mapping examples typically included in the rating methodology and some of our other published research use historical results while ratings are based on our forward-looking expectations. As a result, the grid-indicated rating is not expected to match the actual rating of each company in most cases.

The rating methodology is not intended to be an exhaustive discussion of all factors that our analysts consider in assigning ratings in this sector. We note that our analysis for ratings in this sector covers factors that are common across all industries such as ownership, management, liquidity, corporate legal structure, governance and country related risks which are not explained in detail in this document as well as factors that can be meaningful on a company-specific basis. Our ratings consider these and other qualitative considerations that do not lend themselves to a transparent presentation in a grid format. The grid used for this methodology reflects a decision to avoid greater complexity that would result in grid-indicated ratings that map more closely to actual ratings in favor of a simple and more transparent presentation.

## Addition of Sub-factors under Factor 1 - Regulatory Framework and Factor 2 - Ability to Recover Costs and Earn Returns

We have added sub-factors under Factor 1 – Regulatory Framework and Factor 2 – Ability to Recover Costs and Earn Returns, to provide more granularity and to better distinguish among regulated utilities. With Factors 1 and 2 each weighted at a relatively high 25% of the overall grid outcome in the current methodology, incremental changes in a utility's regulation or cost recovery provisions are not easily indicated. Breaking down these two broad factors into two sub-factors will allow us to better reflect and communicate sometimes subtle differences in regulatory and/or cost recovery provisions among utilities. The new sub-factors include Sub-factor (1a) – Legislative and Judicial Underpinnings to Regulatory Framework (12.5% weighting) , Sub-factor (1b) – Consistency and Predictability of Regulation (12.5%), Sub-factor (2a) – Timeliness of Recovery of Operating and Capital Costs (12.5%), and Sub-factor (2b) - Sufficiency of Rates and Returns (12.5%). A draft of each of these new methodology sub-factors is included in Appendix A.

### Factor 1 – Regulatory Framework

*Sub-factor 1a – Legislative and Judicial Underpinnings to Regulatory Framework (12.5% weighting)*

For this sub-factor, we consider the scope, clarity, transparency, supportiveness and granularity of utility legislation, decrees, and rules. We also consider the strength of the regulator's authority over rate-making and other regulatory issues affecting the utility, the effectiveness of the judiciary or other independent body in arbitrating disputes in a disinterested manner, and whether the utility's monopoly has meaningful or growing carve-outs. In addition, we look at how well developed the framework is – both how fully fleshed out the rules and regulations are and how well tested it is, as well as the extent to which regulatory or judicial decisions have created a body of precedent that will help determine future rate-making. Finally, we consider how effective the utility is in navigating the regulatory framework – both the utility's ability to shape the framework and adapt to it. The inclusion of this sub-factor also represents a more explicit acknowledgement that the judicial system can be a major determinant of the regulatory framework.

*Sub-factor 1b – Consistency and Predictability of Regulation (12.5%)*

For this sub-factor, we consider the track record of regulatory decisions, in terms of consistency, predictability and supportiveness. We evaluate the utility's interactions in the regulatory process as well as the overall stance of the regulator toward the utility. In scoring this sub-factor, we will primarily evaluate the actions of regulators, politicians and jurists rather than their words. Nonetheless, words matter when they are an indication of future action. We seek to differentiate between political rhetoric that is encouraged by a relatively open regulatory process, and statements that are more clearly indicative of future actions and trends in decision-making.

### Factor 2 – Ability to Recover Costs and Earn Returns

*Sub-factor 2a – Timeliness of Recovery of Operating and Capital Costs (12.5%)*

The criteria we consider in our assessments for this sub-factor include provisions and cost recovery mechanisms for operating costs, mechanisms that allow actual operating and/or capital expenditures to be trued-up periodically into rates without having to file a rate case (this may include formula rates, rider and trackers, or the ability to periodically adjust rates for construction work in progress) as well as the process and timeframe of base rate cases – those that are fully reviewed by the regulator, generally in a public format that includes testimony of the utility and other stakeholders and interest groups. We also look at the track record of the utility and regulator for timeliness. For instance, having a

formula rate plan is positive, but if the actual process has included reviews that are delayed for long periods, it may dampen the benefit to the utility. In addition, we seek to measure, or at least estimate, the lag between the time that a utility incurs major construction expenditures and the time that the utility will start to recover and/or earn a return on that expenditure.

*Sub-factor 2b - Sufficiency of Rates and Returns (12.5%)*

The criteria we consider in our assessments for this sub-factor include statutory protections that assure full cost recovery and a reasonable return for the utility on its investments, the regulatory mechanisms used to determine what a reasonable return should be, and the track record of the utility in actually recovering costs and earning its allowed returns. We examine rate case outcomes and compare them to the rate request submitted by the utility, to prior rate cases for the same utility and to recent rate case outcomes for a peer group of comparable utilities. We look at regulatory disallowances of costs or investments, with a focus on their financial severity and also the reasons given by the regulator, to determine the likelihood that such disallowances will be repeated in the future.

## Refinement and Broadening of Factor 3 - Diversification

*Sub-factor 3a – Market Position (5% or 10%)*

The market position sub-factor will be refined to focus primarily on the economic diversity of the utility's service territory and the diversity of its regulatory regime. We will also consider the diversity of utility operations (e.g., regulated electric, gas, water, steam) when there are material operations in more than one area. Economic diversity is typically a function of the size and breadth of the territory and the businesses that drive its GDP and employment. For diversity of regulatory regimes, we typically look at the number of regulators and the percentages of revenues and utility assets that are under the purview of each. For vertically integrated utilities that have a meaningful amount of generation, this sub-factor will continue to have a weighting of 5%. For electric and transmission utilities without meaningful generation and for natural gas local distribution companies, this sub-factor will continue to have a weighting of 10%.

*Sub-factor 3b – Generation and Fuel Diversity (0% or 5%)*

We have changed this sub-factor by replacing the emphasis on exposure solely to carbon fuels in the current methodology with the broader concepts of exposure to "challenged" or "threatened" sources of generation. The sub-factor will continue to consider the fuel type of the issuer's generation and important power purchase agreements, the ability of the issuer to economically shift its generation and power purchases when there are changes in fuel prices, the degree to which the utility and its rate-payers are exposed to or insulated from changes in commodity prices, and exposure to the aforementioned "challenged" or "threatened" sources. For issuers with a meaningful amount of generation, this factor will continue to have a weighting of 5% and for those with no generation, 0%. The definition of "challenged" and "threatened" sources of generation is included in Appendix B.

## Liquidity Analyzed as Key Rating Consideration Outside of Methodology Grid

The Liquidity sub-factor, weighted at 10% in the current grid, will be removed from the grid and will be analyzed as a key rating consideration outside the grid. However, there will be no diminution in our emphasis on liquidity as a key rating driver. Liquidity is always an important credit consideration and can become the primary rating consideration if it is mismanaged or becomes problematic for a utility. Liquidity can be of particular importance in an industry in which companies frequently generate negative free cash flow due to high capital expenditures and significant dividend payments.

Our fundamental analysis of a utility's liquidity will remain unchanged in the updated rating methodology. Using our projections of the financial performance of an issuer, we evaluate how its projected sources of cash (cash from operations, cash on hand, and existing multi-year credit facilities) compare to its projected uses (including all planned capital expenditures, dividends, maturities of short and long-term debt, and our projection of potential liquidity calls on financial hedges). Our assessment of liquidity assumes no access to capital markets, no incremental credit facilities, no renewal of existing credit facilities, no decrease in capital expenditures from the plan, and no reduction in dividends.

## Methodology Grid Expanded to Include "Caa" Category

The range of possible scores under each factor in the grid, currently ranging from Aaa to B, will be expanded to include a "Caa" category. The purpose of this change is to provide greater transparency in our scoring of the grid for ratings at the lower end of the spectrum. While regulated utilities predominantly comprise an investment grade sector, with most issuers unlikely to be assigned grid scores of Caa, regulated utilities experiencing severe financial stress and some utilities in certain emerging markets are more likely to be scored at the lower end of the grid. As is demonstrated in the revised methodology sub-factor grids included in Appendix A, the criteria for Caa scoring is categorized as utilities with very unsupportive regulatory frameworks, poor or highly uncertain cost recovery provisions, little to no diversification, and extremely weak financial metrics. The inclusion of the Caa level in the grid will provide greater granularity that better enables distinctions among utilities at the lower end of the grid.

## Weighting of Four Key Financial Ratios Increased to 40% from 30%

The overall weighting of the four key financial ratios included in Factor 4 – Financial Strength will increase to 40% from 30%, although the ratios themselves will remain the same. The ratios will continue to include Moody's standard adjustments and, in certain instances, analyst-determined adjustments specific to the issuer.

In the revised grid that is part of the proposed updated methodology, additional weighting will be given to the two cash flow to debt ratios to better reflect their importance in our financial analysis and in our credit rating discussions. For the most part, the financial parameters outlined for each scoring category will remain the same, except at the lower end of the grid, where slight adjustments to the parameters have been made to accommodate the aforementioned expansion of the grid to include a "Caa" scoring category.

The four financial ratios and their revised weightings where applicable are listed below:

» Cash from operations before changes in working capital (CFO Pre-W/C) + interest / interest – 7.5%*

» CFO Pre-W/C / debt – 15% (up from 7.5%)*

» CFO Pre-W/C - dividends / debt – 10% (up from 7.5%)*

» Debt / capitalization or debt / regulated asset value (RAV) – 7.5%*

*It is anticipated that the illustrative examples in the updated rating methodology document will use three year historical averages for financial ratios. However, the factors in the grid can be assessed using various time periods and rating committees may find it analytically useful to examine both historic and expected future performance for various periods of time.

## Financial Ratio Threshold Ranges May Be Lowered Based on Business Risk

In our view, the different types of utility entities covered under this methodology have different levels of business risk. Vertically integrated utilities generally have a higher level of business risk because they are engaged in power generation. We view power generation as the highest-risk component of the electric utility business, as generation plants are typically the most expensive part of a utility's infrastructure (representing asset concentration risk) and are subject to the greatest risks in both construction and operation, including the risk that incurred costs will either not be recovered in rates or recovered with material delays. Other types of utilities may have lower business risk, due to factors that could include a generally greater transfer of risk to customers, very strong insulation from exposure to commodity price movements, good protection from volumetric risks, fairly limited capex needs and low exposure to storms, major accidents and natural disasters For instance, we tend to view many US natural gas local distribution companies (LDC's) and certain US electric transmission and distribution companies (T&D's, which lack generation but generally retain some procurement responsibilities for customers), as typically having a lower business risk profile than their vertically integrated peers.

The scoring grids, including the financial ratio ranges in the Factor 4 grid shown in Appendix A, are primarily oriented toward vertically integrated utilities. We are contemplating lowering the financial ratio threshold ranges for utilities with lower business risk, including lower risk T&D's and LDC's in the US, by approximately one category. As an example, the threshold for a Baa category scoring in interest coverage for a vertically integrated utility (3.0x - 4.5x) would, for a utility with lower business risk, be the range for an A category scoring. The purpose would be to better align the grid-scoring to our view, reflected in current ratings, that at the same rating category, utilities with lower business risk can have somewhat lower financial metrics. Alternately, business risk may be addressed in a different manner, for instance by incorporating it more broadly into the qualitative factor scoring grids. In cases of T&D's that we do not view as having materially lower risk than their vertically integrated peers, for instance due to increased risks from substantial storm exposure, a regulatory framework that exposes T&D's to energy supply risk, large capital expenditures for required maintenance or upgrades, or increased regulatory scrutiny due to poor reliability or other issues, we may instead use the same Factor 4 grid ranges as those for integrated utilities. The same may be true for LDC's that in our view do not have materially lower risk; for instance, due to their ownership of high pressure pipes or older systems requiring extensive gas main replacements, where gas commodity costs are not fully recovered in a reasonably contemporaneous manner, or where the LDC is not well insulated from declining volumes.

## Notching of Utility Holding Company Ratings Due to Structural Subordination May Be Included as a Grid Adjustment

Many utility company structures consist of a holding company that owns one or more operating subsidiaries. Under our current practices, ratings of utility holding companies are in many cases likely to be below those of operating companies due to structural subordination, since creditors of an operating subsidiary typically have a more direct claim on the cash flows and assets of these subsidiaries than do creditors of a holding company. When deciding whether or not to rate a holding company lower than it would be rated if it were an operating company, our considerations may include the relative percentage of debt at the holding company versus debt at the utility operating subsidiaries, operating company debt as a percentage of consolidated assets, the regulatory or effective limitations on movement of cash among the companies in the corporate family, the diversity of holding company cash flows, the composition and materiality of non-utility businesses, as well as other considerations. While structural subordination may exist in any industry sector, it is a particularly prevalent credit

issue in the utility sector, because incurrence of debt at both operating and holding companies is more widespread. We are contemplating the potential of including our notching practices into our grid-indicated ratings to provide greater visibility into the impact of this risk factor on ratings.

### US Utility First Mortgage Bond Ratings are Typically Two Notches Above the Senior Unsecured Rating

In most regions, the typical rating relationship between different debt classes of regulated utilities is the same as for other investment grade non-financial corporate sectors, with senior secured debt rated one notch higher than the same issuer's senior unsecured rating. For the relatively small number of speculative grade utility issuers in certain regions, we apply our loss given default ratings methodology. However, our existing practice is to generally apply a two notch uplift to the first mortgage bond ratings of regulated electric and gas utilities in the US, and the updated rating methodology will not affect such rating relationships.

First mortgage bond holders in the US generally benefit from a first lien on most of the fixed assets used to provide utility service, including such assets as generating stations, transmission lines, distribution lines, switching stations and substations, and gas distribution facilities, as well as a lien on franchise agreements. In our view, the critical nature of these assets to the issuers and to the communities they serve has been a major factor that has led to very high recovery rates for this class of debt in situations of default, thereby justifying a two notch uplift. The combination of the breadth of assets pledged and the bankruptcy-tested recovery experience has been unique to the US.

We may not always rate US first mortgage bonds two notches higher than the senior unsecured rating, for instance if the pledged property is not viewed by Moody's as being critical infrastructure, or if the mortgage is materially weakened by carve-outs, lien releases or similar creditor-unfriendly terms.

## PART II: Additional Details on Our Evolving View of US Utility Regulation

Note that the following discussion of our evolving view of US utility regulation does not represent a change in our rating methodology and does not require that a Request for Comment be published. However, given the large number of US utilities affected and the magnitude of debt outstanding in the US utility sector, in the interest of clarity, we thought it was important to share our views broadly by including them in this document and soliciting comments from those who may have interest. This change in our view of US utility regulation is independent of proposed revisions to the rating methodology and would have the same rating impact under the existing rating methodology and the proposed update to the rating methodology.

### The Overall US Regulatory Environment Has Become More Credit Supportive

In recent years we believe that some regulatory jurisdictions have become more credit supportive of regulated utilities, most notably in the US. While we had previously viewed the regulatory risk of US utilities, typically regulated at the state level, as being higher than utilities in most other developed countries where regulation occurs at the national level, we are contemplating a significant revision of our view. We see improved levels of regulatory support across the US, which includes the increased use of single issue riders and trackers, timely rate case outcomes or rate settlements, and a collaborative approach toward infrastructure investment and refurbishment.

The increased prevalence of riders, trackers, and other automatic cost recovery mechanisms in the US has materially reduced the amount of time between when a utility incurs and recovers costs, otherwise known as "regulatory lag." These changes have occurred incrementally – jurisdiction by jurisdiction or even issuer by issuer. We now believe that these changes, in aggregate, represent a significant improvement in cost recovery.

EXHIBIT 1
**Average Regulatory Lag**


*Source: SNL Financial/Edison Electric Institute*

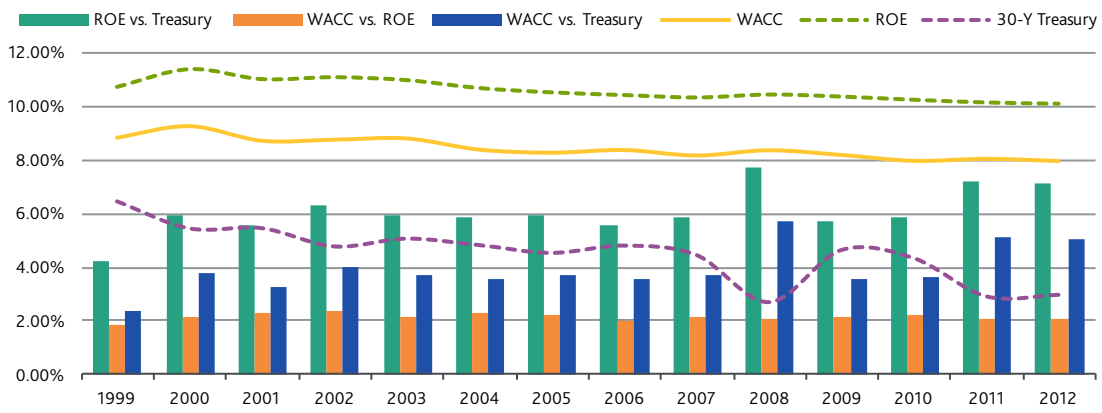
We also believe that the majority of US utilities enjoy relatively fair and open relationships with their regulators, and that most regulators strive to maintain reliable, financially viable utilities in their states, while also balancing the needs of the state's commercial, industrial, and residential utility customers. We see a high degree of regulatory support continuing for much of the sector, as sustained low natural gas prices help to foster a collaborative relationship between utilities, regulators, and customers. Low fuel prices, which are the industry's most significant expense, provide increased economic flexibility for regulators to more easily approve and for utilities to implement base rate increases and other cost recovery mechanisms.

While state regulation has the potential to reflect more intensive disputes and parochial interests, a regional business model is particularly well suited to effective constituency outreach efforts. Utilities are important contributors to the well-being of their local communities, and are typically one of the largest publically traded companies and largest employers in their areas, as well as a major source of property taxes for state and local governments.

Although allowed ROE's are in decline, we observe that they remain at favorable levels compared to the historical average 30 year treasury rates and that ROE's are in line with historical levels of a utility's weighted average cost of capital. However, as treasury rates have begun to increase in 2013, we note that US utility ROE levels may not increase commensurately or on as timely a basis, potentially pressuring industry profitability going forward.

EXHIBIT 2

**US Regulated Utility Returns vs. Costs**




*Source: SNL Financial/Bloomberg*

Over the intermediate term, we see utilities experiencing a decline in general rate case filings, whether due to prescriptive and forward looking rate plans that have been approved by their regulators, or due to a utility's willingness to postpone rate cases and focus on managing costs in an environment of low inflation and low fuel costs. This has been an evolution from historical experience, where many utilities filed more frequent rate cases requesting smaller rate increases in order to reduce regulatory lag and avert potential customer resistance. We view this change as a result of several factors, including the aforementioned growing use of tracking mechanisms, as well as increased willingness of regulators to be more forward looking in their rate setting than historically. We have also found that differentiating among rate case outcomes among individual states has become increasingly difficult, as most utilities have in recent years experienced fair and balanced rate case outcomes, with many agreeing to rate settlements or other negotiated outcomes.

Part of the evolution of our thinking has been an increased emphasis on the relevant judicial framework in our assessment of a utility's regulatory framework. The material number of litigated regulatory matters in the US could be viewed as indication of a less supportive framework. However, it may simply reflect a greater tendency for parties to pursue court remedies, and the resultant body of relatively consistent case law has provided greater clarity into the rules of engagement for utilities and their regulators as well as greater visibility into the legal outcomes that would result from a regulatory dispute, thereby reducing the likelihood that a critical regulatory issue between a utility and regulatory commission would depart so far from expectations as to trigger a default.

We are contemplating a more favorable view of US regulatory environments, which would be reflected in stronger grid scoring for the regulatory framework and/or cost recovery factors for some US regulated utilities. We acknowledge that regulatory frameworks will need to accommodate new challenges and some may not support higher scoring under the methodology. Current examples of such challenges include utilities that are pursuing new nuclear construction projects in Georgia and South Carolina, public policy initiatives encouraging greater use of renewable energy, and the growth of distributed generation. These new market developments will continue to require collaborative solutions on the part of utilities, regulators, and political stakeholders. New rate compacts and incentive pricing mechanisms will need to be implemented that maintain both electricity network reliability and the financial health of the incumbent utility. Our current view is that regulators and utilities will be able to reach reasonable agreements regarding these issues.

While we have a more favorable view of US utility regulation in general, we acknowledge that challenging regulatory decisions will continue to occur in some jurisdictions as they have in the past, whether for political, populist, economic , or other reasons. The state of Florida, for example, had a long track record of credit supportive utility regulation before political intervention in utility rate cases in 2010 caused a deterioration in that regulatory framework. Following the election of a new governor and a the appointment of several new utility commissioners, Florida's regulatory framework has improved and is again considered credit supportive. Similarly, the state of California had a very good regulatory regime before the California energy crisis in 2000-2001 led to a dramatic decline in its credit supportiveness. Partly as a result of the lessons learned and improvements made following that experience, California's utility regulatory framework is again considered to be strong. Because US utility regulation remains highly fragmented and is primarily implemented at the state level, scenarios such as these will continue to emerge and influence future rating actions.

## Sector Has Experienced Few Defaults, While Recovery Has Been Extraordinarily High

While there have been selected instances of regulatory and political pressure leading to financial distress for utilities in some US states (California, Illinois, and Maryland, for example), the overall number of US regulated utility defaults have been extremely low. This has occurred despite the propensity of regulated utilities to be more likely to consider and pursue strategic bankruptcy filings at an earlier stage of distress compared to unregulated non-financial corporate issuers. In the few instances where this has occurred, the company has continued to operate as a going concern, while regulators and other parties work collaboratively to resolve issues, allowing the utility to eventually exit bankruptcy proceedings.

The essential nature of the service that regulated utilities provide, as well as the critical nature of their generation, transmission, and distribution assets, makes it almost impossible to liquidate or otherwise disaggregate a utility during bankruptcy proceedings. As result, in the few regulated utility defaults that have occurred in the US, holders of secured debt eventually recovered 100% of principal and interest on a nominal basis in most cases. Recovery on other classes of debt has also been very high. This has been documented in Moody's default and recovery studies. Although not a key driver of our evolving overall view of US utility credit risk, these studies support and corroborate our view that ratings in the US regulated utility sector could be higher.

In 2009, we published a default study on the regulated utility industry entitled "Default, Recovery, and Credit Loss Rates for Regulated Utilities, 1983-2008". This study concluded that the history of regulated utility defaults indicates that Baa-rated regulated utilities have had significantly lower one-year default rates than Baa-rated nonfinancial corporate issuers, while A-rated utilities have had modestly higher one-year default rates than A-rated nonfinancial corporate issuers. Regulated utilities have also experienced lower loss given default rates (and, by definition, higher recovery rates) than other corporate issuers. Overall, this regulated utility default study showed that regulated utilities have experienced lower credit losses than non-financial, non-utility corporate issuers.

More recently, in December 2012 we published our first report on the historical credit performance of Moody's rated long-term infrastructure debts entitled "Infrastructure Default and Recovery Rates, 1983-2012H1." The study compared historical cumulative default and recovery rates for a broader set of infrastructure debts, including US regulated utilities, with non-financial corporate issuers. Like the previous regulated utility default study discussed above, the infrastructure default study also showed that A-rated corporate infrastructure debts have higher one year default rates but lower losses given default than non-financial corporate issuers, while Baa-rated corporate infrastructure debts (representing the higher proportion of corporate infrastructure debts) have very similar one year

default rates as Baa-rated non-financial corporate debts. However, as recoveries have been better among the infrastructure debts, total credit loss rates have been about 30% lower than those of non-financial corporate debts, although in absolute terms they are of the same order of magnitude, indicating overall comparability in performance.

Credit loss rates for Ba-rated corporate infrastructure debts (representing a small proportion of corporate infrastructure debts) are lower than for non-financial corporate debts. This is driven by regulated utilities' (the major sub-factor of all Ba-rated infrastructure corporate debts) very low propensity to default and their high recovery rates. All other Ba-rated corporate infrastructure debts have credit loss rates similar to their non-financial corporate counterparts.

## US Utility Financial Metrics Are Higher Than Similarly Rated International Utility Peers

In comparing financial ratios we use in the rating methodology for Regulated Electric and Gas Utilities of approximately 150 utility companies in several developed international jurisdictions with credit supportive regulatory frameworks (including Canada and Japan), US regulated utilities exhibit stronger ratios relative to similarly rated regulated international peers. For example, US utilities produce ratios of cash flow to debt that are almost twice as high as similarly rated international peers. The analysis included utilities with senior unsecured ratings in the A or Baa rating categories, and included electric, gas, networks, and water utilities, using historical financial data from Moody's Financial Metrics, as adjusted.

EXHIBIT 3

| | Average (2005 - 2012) | | Year-end 2012 | |
|---|---|---|---|---|
| Jurisdiction | CFO / debt | FFO / debt | CFO / debt | FFO / debt |
| Average of international peers (A/Baa) | 12% | 12% | 11% | 10% |
| US - vertically integrated (A/Baa) | 22% | 23% | 24% | 23% |
| US - T&D, LDC (A/Baa) | 18% | 19% | 19% | 19% |

*Source: Moody's Financial Metrics*

We note that federal tax policies, including accelerated bonus depreciation, have helped increase cash flows for many US utilities in recent years. But even if we exclude these benefits, in this example, by reducing the ratio of cash flow to debt by 300 basis points as a simplifying assumption, we still see more robust cash flow to debt ratios, roughly 50% higher than international peers.

EXHIBIT 4

| | Average (2005 - 2012) | | Year-end 2012 | |
|---|---|---|---|---|
| Jurisdiction | CFO / debt | FFO / debt | CFO / debt | FFO / debt |
| Average of international peers (A/Baa) | 12% | 12% | 11% | 10% |
| US - vertically integrated (A/Baa) | 19% | 20% | 21% | 20% |
| US - T&D, LDC (A/Baa) | 15% | 16% | 16% | 16% |

*Source: Moody's Financial Metrics*

In addition, US regulated utilities have lower balance sheet leverage and a larger equity cushion to absorb losses than similarly rated international peers, which is in part driven by the respective regulatory framework. With that said, higher leverage exhibited by some of the international peers is a function of those specific regulatory environments and the overall rate recovery structure in those

jurisdictions. US utilities also have a sizeable contribution towards their capitalization from generous federal tax policies through the use of deferred taxes.

EXHIBIT 5

| | Average (2005 - 2012) | | | Year-end 2012 | | |
|---|---|---|---|---|---|---|
| Jurisdiction | Debt / Equity | Debt / Book Capitalization | Debt + Equity / Book Capitalization | Debt / Equity | Debt / Book Capitalization | Debt + Equity / Book Capitalization |
| Average of international peers (A/Baa) | 223% | 65% | 94% | 247% | 66% | 94% |
| US - vertically integrated (A/Baa) | 116% | 45% | 84% | 112% | 43% | 81% |
| US - T&D, LDC (A/Baa) | 124% | 45% | 81% | 125% | 44% | 78% |

*Source: Moody's Financial Metrics*

Although we believe the wide differences in historical financial ratios is partly explained by the differences in regulatory framework, we are increasingly viewing the stronger US financials as more than mitigating the slightly higher overall regulatory risk profile that the US holds relative to its international peers that typically operate under a national regulatory regime.

In the table below, we show selected median financials for the 2005 – 2012 period against the year-end 2012 financials. The international peers saw a 23% increase in debt, a 29% increase in revenue, a 21% increase in assets and an 11% decline in CFO. In the US, we see an 18% increase in debt, a 2% decline in revenue, and a 20% and 28% increase in assets and CFO, respectively.

EXHIBIT 6

| | | 2005 - 2012 Median Totals ($ Millions) | | | | 2012 total ($ Millions) | | | |
|---|---|---|---|---|---|---|---|---|---|
| Jurisdiction | Number of Companies | Debt | Revenue | Assets | CFO | Debt | Revenue | Assets | CFO |
| Total international utility peers | 58 | $309,566 | $158,364 | $513,109 | $35,967 | $374,061 | $211,673 | $628,912 | $33,824 |
| US - vertically integrated | 57 | $171,395 | $166,941 | $484,970 | $35,271 | $202,311 | $171,198 | $600,779 | $48,044 |
| US - T&D, LDC | 38 | $78,719 | $79,523 | $213,408 | $14,229 | $86,494 | $67,511 | $238,117 | $16,712 |
| Total US regulated utility | 95 | $250,114 | $246,463 | $698,378 | $49,500 | $288,805 | $238,709 | $838,896 | $64,756 |
| Total regulated utilities | 153 | $559,680 | $404,828 | $1,211,487 | $85,467 | $662,866 | $450,383 | $1,467,808 | $98,580 |

*Source: Moody's Financial Metrics*

## Credit Supportiveness of Some Regulatory Jurisdictions has Declined in Recent Years

In recent years we have perceived a decline in the credit supportiveness of some regulatory jurisdictions that we had previously viewed as highly credit supportive. For example, following the 2011 Fukushima nuclear disaster in Japan, we downgraded the ratings of nine Japanese utilities, partly reflecting our expectation of a less supportive Japanese government regulatory framework for these utilities going forward. At the same time, we re-evaluated the Japanese utility industry's relative position as a regulatory environment and modified the grid scoring for Japanese utilities accordingly.

While we continue to view the Japanese regulatory framework as credit supportive due to the strong support of the utilities by their key regulator, the Ministry of Economy, Trade, and Industry (METI), as well as the Japanese government, we felt it had become somewhat less supportive than before the

Fukushima crisis, particularly as it relates to nuclear power. As a result, we lowered the grid scoring for Factor 1 of the methodology, Regulatory Framework, to either Aa or A from Aaa, depending on each utility's particular circumstances. Based on our current view, Japan's electric utilities that have nuclear generation capabilities are currently scored A for this factor, due to the ongoing uncertainty associated with regard to nuclear generation, while in general the gas utilities and non-nuclear exposed electric utilities are currently still viewed as appropriately scored at the Aa level.

Our updated view was also reflected in the grid scoring for Factor 2 – Ability to Recover Costs and Earn Returns for Japan's utilities. Although Japanese utility regulation includes statutory provisions that insure the timely recovery of operating, capital, fuel and financing costs, plus a rate of return, there are some limitations on automatic fuel related rate increases for both electric and gas utilities. This limitation, in addition to some of the utilities expanding internationally and into non-utility businesses, resulted in our decision to slightly revise the grid scoring for this factor, with most of the utilities initially lowered to an A score from a Aa score.

Subsequently, the prolonged shut-down of nuclear plants in Japan and the resulting higher reliance on fossil fuels have significantly raised operating costs for those utilities previously reliant on nuclear power. Although some of the nuclear-dependent utilities have successfully raised their tariffs, the new rates are insufficient to return them to profitability, as they are based on cost structures that incorporate some nuclear restarts. As a result, the scoring of some of the nuclear dependent utilities for this grid factor was subsequently lowered to Baa.

## Conclusion

The refinements we are proposing to make to our Regulated Electric and Gas Utilities Rating Methodology are intended to provide additional granularity on individual factor grid scores by adding new sub-factors and to increase the relative weighting of the financial metrics when determining the grid-indicated rating. The methodology will continue to emphasize both regulatory risk and financial performance. The grid that is part of the methodology will continue to focus on the same four factors: regulatory framework, ability to recover costs and earn returns, diversification, and financial strength. The proposed refinements are not expected to lead to any rating changes. Comments on these refinements are welcome using the instructions on the cover page of this document.

At the same time, and unrelated to the update of the rating methodology, we are seeking comment on our view that the relative credit supportiveness of the US utility regulatory framework has improved, and that we should assess regulatory risks more favorably for US utilities. Improvements include the increased prevalence of automatic cost recovery provisions, reduced regulatory lag, generally fair and open relationships between utilities and regulators, and the demonstration of a strong judicial framework. As a result, we intend to take a more positive view of US utilities in factoring regulatory risks into ratings. This would also be reflected in higher grid scoring for utility regulatory frameworks and cost recovery provisions under the rating methodology. Our more favorable view of US regulation relative to other global jurisdictions is expected to lead to a one notch upgrade of most US regulated utilities, with some exceptions. In most cases, we would expect all of the debt classes of a utility's capital structure to be upgraded by the same number of notches, although there could be limited exceptions. The US utility sector's low number of defaults, high recovery levels, and comparatively strong financial metrics provide additional corroboration for our view that ratings should generally be higher. Comments on our evolving view of US utility regulation are also welcome using the instructions on the cover page of this document.

# Appendix A: Preliminary Regulated Electric and Gas Utilities Methodology Factor Grid

## Factor 1a: Legislative and Judicial Underpinnings to Regulatory Framework (12.5%)

| Aaa | Aa | A | Baa |
|---|---|---|---|
| Utility regulation occurs under a fully developed framework that is national in scope based on legislation that provides the utility a nearly absolute monopoly within its service territory, an unquestioned assurance that rates will be set in a manner that will permit the utility to make and recover all necessary investments, an extremely high degree of clarity as to the manner in which utilities will be regulated and prescriptive methods and procedures for setting rates. Existing utility law is comprehensive and supportive such that changes in legislation are not expected to be necessary; or any changes that have occurred have been strongly supportive of utilities credit quality in general and sufficiently forward-looking so as to address problems before they occurred. There is an independent judiciary that can arbitrate disagreements between the regulator and the utility should they occur, including access to national courts, very strong judicial precedent in the interpretation of utility laws, and a strong rule of law. We expect these conditions to continue. | Utility regulation occurs under a fully developed national, state or provincial framework based on legislation that provides the utility an extremely strong monopoly (see note 1) within its service territory, a strong assurance, subject to limited review, that rates will be set in a manner that will permit the utility to make and recover all necessary investments, a very high degree of clarity as to the manner in which utilities will be regulated and reasonably prescriptive methods and procedures for setting rates. If there have been changes in utility legislation, they have been timely and clearly credit supportive of the issuer in a manner that shows the utility has had a strong voice in the process. There is an independent judiciary that can arbitrate disagreements between the regulator and the utility, should they occur including access to national courts, strong judicial precedent in the interpretation of utility laws, and a strong rule of law. We expect these conditions to continue. | Utility regulation occurs under a well developed national, state or provincial framework based on legislation that provides the utility a very strong monopoly (see note 1) within its service territory, an assurance, subject to reasonable prudency requirements, that rates will be set in a manner that will permit the utility to make and recover all necessary investments, a high degree of clarity as to the manner in which utilities will be regulated, and overall guidance for methods and procedures for setting rates. If there have been changes in utility legislation, they have been mostly timely and on the whole credit supportive for the issuer, and the utility has had a clear voice in the legislative process. There is an independent judiciary that can arbitrate disagreements between the regulator and the utility, should they occur, including access to national courts, clear judicial precedent in the interpretation of utility law, and a strong rule of law. We expect these conditions to continue. | Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation that provides the utility a strong monopoly within its service territory that may have some exceptions such as greater self-generation (see note 1), a general assurance that, subject to prudency requirements that are mostly reasonable, rates will be set will be set in a manner that will permit the utility to make and recover all necessary investments, reasonable clarity as to the manner in which utilities will be regulated and overall guidance for methods and procedures for setting rates; or (ii) under a new framework where independent and transparent regulation exists in other sectors. If there have been changes in utility legislation, they have been credit supportive or at least balanced for the issuer but potentially less timely, and the utility had a voice in the legislative process. There is either (i) an independent judiciary that can arbitrate disagreements between the regulator and the utility, including access to courts at least at the state or provincial level, reasonably clear judicial precedent in the interpretation of utility laws, and a generally strong rule of law; or (ii) regulation has been applied (under a well developed framework) in a manner such that redress to an independent arbiter has not been required. We expect these conditions to continue. |

| Ba | B | Caa |
|---|---|---|
| Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation or government decree that provides the utility a monopoly within its service territory that is generally strong but may have a greater level of exceptions (see note 1), and that, subject to prudency requirements which may be stringent, provides a general assurance (with somewhat less certainty) that rates will be set will be set in a manner that will permit the utility to make and recover necessary investments; or (ii) under a new framework where the jurisdiction has a history of less independent and transparent regulation in other sectors. Either: (i) the judiciary that can arbitrate disagreements between the regulator and the utility may not have clear authority or may not be fully independent of the regulator or other political pressure, but there is a reasonably strong rule of law; or (ii) where there is no independent arbiter, the regulation has mostly been applied in a manner such redress has not been required. We expect these conditions to continue. | Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation or government decree that provides the utility monopoly within its service territory that is reasonably strong but may have important exceptions, and that, subject to prudency requirements which may be stringent or at times arbitrary, provides more limited or less certain assurance that rates will be set in a matter that will permit the utility to make and recover necessary investments; or (ii) under a new framework where we would expect less independent and transparent regulation, based either on the regulator's history in other sectors or other factors. The judiciary that can arbitrate disagreements between the regulator and the utility may not have clear authority or may not be fully independent of the regulator or other political pressure, but there is a reasonably strong rule of law. Alternately, where there is no independent arbiter, the regulation has been applied in a manner that often requires some redress adding more uncertainty to the regulatory framework. . There may be a periodic risk of creditor-unfriendly government intervention in utility markets or rate-setting. | Utility regulation occurs (i) under a national, state, provincial or municipal framework based on legislation or government decree that provides the utility a monopoly within its service territory, but with little assurance that rates will be set in a manner that will permit the utility to make and recover necessary investments; or (ii) under a new framework where we would expect unpredictable or adverse regulation, based either on the jurisdiction's history of in other sectors or other factors. The judiciary that can arbitrate disagreements between the regulator and the utility may not have clear authority or is viewed as not being fully independent of the regulator or other political pressure. Alternately, there may be no redress to an effective independent arbiter. The ability of the utility to enforce its monopoly or prevent uncompensated usage of its system may be limited. There may be a risk of creditor-unfriendly nationalization or other significant intervention in utility markets or rate-setting. |

Note 1: The strength of the monopoly refers to the legal, regulatory and practical obstacles for customers in the utility's territory to obtain service from another provider. Examples of a weakening of the monopoly would include the ability of a city or large user to leave the utility system to set up their own system, the extent to which self-generation is permitted (e.g. cogeneration) and/or encouraged (e.g., net metering, DSM generation). At the lower end of the ratings spectrum, the utility's monopoly may be challenged by pervasive theft and unauthorized use. Since utilities are generally presumed to be monopolies, a strong monopoly position in itself is not sufficient for a strong score in this sub-factor, but a weakening of the monopoly can lower the score.

## Factor 1b: Consistency and Predictability of Regulation (12.5%)

| Aaa | Aa | A | Baa |
|---|---|---|---|
| The issuer's interaction with the regulator has led to a strong, lengthy track record of predictable, consistent and favorable decisions. The regulator is highly credit supportive of the issuer and utilities in general. We expect these conditions to continue. | The issuer's interaction with the regulator has a led to a considerable track record of predominantly predictable and consistent decisions. The regulator is mostly credit supportive of utilities in general and in almost all instances has been highly credit supportive of the issuer. We expect these conditions to continue. | The issuer's interaction with the regulator has led to a track record of largely predictable and consistent decisions. The regulator may be somewhat less credit supportive of utilities in general, but has been quite credit supportive of the issuer in most circumstances. We expect these conditions to continue. | The issuer's interaction with the regulator has led to an adequate track record. The regulator is generally consistent and predictable, but there may some evidence of inconsistency or unpredictability from time to time, or decisions may at times be politically charged. However, instances of less credit supportive decisions are based on reasonable application of existing rules and statutes and are not overly punitive. We expect these conditions to continue. |

| Ba | B | Caa |
|---|---|---|
| We expect that regulatory decisions will demonstrate considerable inconsistency or unpredictability or that decisions will be politically charged, based either on the issuer's track record of interaction with regulators or other governing bodies, or our view that decisions will move in this direction. The regulator may have a history of less credit supportive regulatory decisions with respect to the issuer, but we expect that the issuer will be able to obtain support when it encounters financial stress, with some potentially material delays. The regulator's authority may be eroded at times by legislative or political action. The regulator may not follow the framework for some material decisions. | We expect that regulatory decisions will be largely unpredictable or even somewhat arbitrary, based either on the issuer's track record of interaction with regulators or other governing bodies, or our view that decisions will move in this direction. However, we expect that the issuer will ultimately be able to obtain support when it encounters financial stress, albeit with material or more extended delays. Alternately, the regulator is untested, lacks a consistent track record, or is undergoing substantial change. The regulator's authority may be eroded on frequent occasions by legislative or political action. The regulator may more frequently ignore the framework in a manner detrimental to the issuer. | We expect that regulatory decisions will be highly unpredictable and frequently adverse, based either on the issuer's track record of interaction with regulators or other governing bodies, or our view that decisions will move in this direction. Alternately, decisions may be credit supportive, but often unenforceable. The regulator's authority may have be seriously eroded by legislative or political action. The regulator may consistently ignore the framework to the detriment of the issuer. |

## Factor 2a: Timeliness of Recovery of Operating and Capital Costs (12.5%)

| Aaa | Aa | A | Baa |
|---|---|---|---|
| Tariff formulas and automatic cost recovery mechanisms provide full and highly timely recovery of all operating costs and essentially contemporaneous return on all incremental capital investments, with statutory provisions in place to preclude the possibility of challenges to rate increases or cost recovery mechanisms. By statute and by practice, general rate cases are efficient, focused on an impartial review, quick, and permit inclusion of fully forward -looking costs. | Tariff formulas and automatic cost recovery mechanisms provide full and highly timely recovery of all operating costs and essentially contemporaneous or near-contemporaneous return on most incremental capital investments, with minimal challenges by regulators to companies' cost assumptions. By statute and by practice, general rate cases are efficient, focused on an impartial review, of a very reasonable duration before non-appealable interim rates can be collected, and primarily permit inclusion of forward-looking costs. | Automatic cost recovery mechanisms provide full and reasonably timely recovery of fuel, purchased power and all other highly variable operating expenses. Material capital investments may be made under tariff formulas or other rate-making permitting reasonably contemporaneous returns, or may be submitted under other types of filings that provide recovery of cost of capital with minimal delays. Instances of regulatory challenges that delay rate increases or cost recovery are generally related to large, unexpected increases in sizeable construction projects. By statute or by practice, general rate cases are reasonably efficient, primarily focused on an impartial review, of a reasonable duration before rates (either permanent or non-refundable interim rates) can be collected, and permit inclusion of important forward -looking costs. | Fuel, purchased power and all other highly variable expenses are generally recovered through mechanisms incorporating delays of less than one year, although some rapid increases in costs may be delayed longer where such deferrals do not place financial stress on the utility. Incremental capital investments may be recovered primarily through general rate cases with moderate lag, with some through tariff formulas. Alternately, there may be formula rates that are untested or unclear. Potentially greater tendency for delays due to regulatory intervention, although this will generally be limited to rates related to large capital projects or rapid increases in operating costs. |

| Ba | B | Caa |
|---|---|---|
| There is an expectation that fuel, purchased power or other highly variable expenses will eventually be recovered with delays that will not place material financial stress on the utility, but there may be some evidence of unwillingness of regulators to make timely rate changes to address volatility in fuel, or purchased power, or other market-sensitive expenses. Recovery of costs related to capital investments may be subject to delays that are somewhat lengthy , but not so pervasive as to be expected to discourage important investments. | The expectation that fuel, purchased power or other highly variable expenses will be recovered may be subject to material delays due to second-guessing of spending decisions by regulators or due to political intervention. Recovery of costs related to capital investments may be subject to delays that are material to the issuer, or may be likely to discourage some important investment. | The expectation that fuel, purchased power or other highly variable expenses will be recovered may be subject to extensive delays due to second-guessing of spending decisions by regulators or due to political intervention. Recovery of costs related to capital investments may be uncertain, subject to delays that are extensive, or that may be likely to discourage even necessary investment. |

Note: Tariff formulas include formula rate plans as well as trackers and riders related to capital investment.

## Factor 2b: Sufficiency of Rates and Returns (12.5%)

| Aaa | Aa | A | Baa |
|---|---|---|---|
| Sufficiency of rates to cover costs and attract capital is (and will continue to be) unquestioned. | Rates are (and we expect will continue to be) set at a level that permits full cost recovery and a fair return on all investments, with minimal challenges by regulators to companies' cost assumptions. This will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are strong relative to global peers. | Rates are (and we expect will continue to be) set at a level that generally provides full cost recovery and a fair return on investments, with limited instances of regulatory challenges and disallowances. In general, this will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are generally above average relative to global peers, but may at times be average. | Rates are (and we expect will continue to be) set at a level that generally provides full operating cost recovery and a mostly fair return on investments, but there may be somewhat more instances of regulatory challenges and disallowances, although ultimate rate outcomes are sufficient to attract capital without difficulty. In general, this will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are average relative to global peers, but may at times be somewhat below average. |

| Ba | B | Caa |
|---|---|---|
| Rates are (and we expect will continue to be) set at a level that generally provides recovery of most operating costs but return on investments may be less predictable, and there may be decidedly more instances of regulatory challenges and disallowances, but ultimate rate outcomes are generally sufficient to attract capital. In general, this will translate to returns (measured in relation to equity, total assets, rate base or regulatory asset value, as applicable) that are generally below average relative to global peers, or where allowed returns are average but difficult to earn. Alternately, the tariff formula may not take into account all cost components and/or remuneration of investments may be unclear or at times unfavorable. | We expect rates will be set at a level that at times fails to provide recovery of costs other than cash costs, and regulators may engage in somewhat arbitrary second-guessing of spending decisions or deny rate increases related to funding ongoing operations based much more on politics than on prudency reviews. Return on investments may be set at levels that discourages investment. We expect that rate outcomes may be difficult or uncertain, negatively affecting continued access to capital. Alternately, the tariff formula may fail to take into account significant cost components other than cash costs, and/or remuneration of investments may be generally unfavorable. | We expect rates will be set at a level that often fails to provide recovery of material costs, and recovery of cash costs may also be at risk. Regulators may engage in more arbitrary second-guessing of spending decisions or deny rate increases related to funding ongoing operations based primarily on politics. Return on investments may be set at levels that discourage necessary maintenance investment. We expect that rate outcomes may often be punitive or highly uncertain, with a markedly negative impact on access to capital. Alternately, the tariff formula may fail to take into account significant cash cost components, and/or remuneration of investments may be primarily unfavorable. |

## Factor 3: Diversification (10%)

| | Sub-Factor Weighting | Aaa | Aa | A | Baa |
|---|---|---|---|---|---|
| Market Position | 5% * | A very high degree of multinational and regional diversity in terms of regulatory regimes and/or service territory economies. | Material operations in three or more nations or substantial geographic regions providing very good diversity of regulatory regimes and/or service territory economies. | Material operations in two to three nations, states, provinces or regions that provide good diversity of regulatory regimes and service territory economies. Alternately, operates within a single regulatory regime with low volatility, and the service territory economy is robust, has a very high degree of diversity and has demonstrated resilience in economic cycles. | May operate under a single regulatory regime viewed as having low volatility, or where multiple regulatory regimes are not viewed as providing much diversity. The service territory economy may have some concentration and cyclicality, but is sufficiently resilient that it can absorb reasonably foreseeable increases in utility rates. |
| Generation and Fuel Diversity | 5% ** | A high degree of diversity in terms of generation and/or fuel sources such that the utility and rate-payers are well insulated from commodity price changes, no generation concentration, and very low exposures to Challenged or Threatened Sources (see definitions below). | Very good diversification in terms of generation and/or fuel sources such that the utility and rate-payers are affected only minimally by commodity price changes, little generation concentration, and low exposures to Challenged or Threatened Sources. | Good diversification in terms of generation and/or fuel sources such that the utility and rate-payers have only modest exposure to commodity price changes; however, may have some concentration in a source that is neither Challenged nor Threatened. Exposure to Threatened Sources is low. While there may be some exposure to Challenged Sources, it is not a cause for concern. | Adequate diversification in terms of generation and/or fuel sources such that the utility and rate-payers have moderate exposure to commodity price changes; however, may have some concentration in a source that is Challenged. Exposure to Threatened Sources is moderate, while exposure to Challenged Sources is manageable. |

| | Sub-Factor Weighting | Ba | B | Caa | Definitions |
|---|---|---|---|---|---|
| Market Position | 5% * | Operates in a market area with somewhat greater concentration and cyclicality in the service territory economy and/or exposure to storms and other natural disasters, and thus less resilience to absorbing reasonably foreseeable increases in utility rates. May show somewhat greater volatility in the regulatory regime(s). | Operates in a limited market area with material concentration and more severe cyclicality in service territory economy such that cycles are of materially longer duration or reasonably foreseeable increases in utility rates could present a material challenge to the economy. Service territory may have geographic concentration that limits its resilience to storms and other natural disasters, or may be an emerging market. May show decided volatility in the regulatory regime(s). | Operates in a concentrated economic service territory with pronounced concentration, macroeconomic risk factors, and/or exposure to natural disasters. | "Challenged Sources" are generation plants that face higher but not insurmountable economic hurdles resulting from penalties or taxes on their operation, or from environmental upgrades that are required or likely to be required. Some examples are carbon-emitting plants that incur carbon taxes, plants that must buy emissions credits to operate, and plants that must install environmental equipment to continue to operate, in each where the taxes/credits/upgrades are sufficient to have a material impact on those plants' competitiveness relative to other generation types or on the utility's rates, but where the impact is not so severe as to be likely require plant closure. |
| Generation and Fuel Diversity | 5% ** | Modest diversification in generation and/or fuel sources such that the utility or rate-payers have greater exposure to commodity price changes. Exposure to Challenged and Threatened Sources may be more pronounced, but the utility will be able to access alternative sources without undue financial stress. | Operates with little diversification in generation and/or fuel sources such that the utility or rate-payers have high exposure to commodity price changes. Exposure to Challenged and Threatened Sources may be high, and accessing alternate sources may be challenging and cause more financial stress, but ultimately feasible. | Operates with high concentration in generation and/or fuel sources such that the utility or rate-payers have exposure to commodity price shocks. Exposure to Challenged and Threatened Sources may be very high, and accessing alternate sources may be highly uncertain. | "Threatened Sources" are generation plants that are not currently able to operate due to major unplanned outages or issues with licensing or other regulatory compliance, and plants that are highly likely to be required to de-activate, whether due to the effectiveness of currently existing or expected rules and regulations or due to economic challenges. Some recent examples would include coal fired plants in the US that are not economic to retro-fit to meet mercury and air toxics standards, plants that cannot meet the effective date of those standards, nuclear plants in Japan that have not been licensed to re-start after the Fukushima Dai-ichi accident, and nuclear plants that are required to be phased out within 10 years (as is the case in some European countries). |

*10% weight for issuers that lack generation **0% weight for issuers that lack generation

## Factor 4: Financial Strength (40%)

| | Sub-Factor Weighting | Aaa | Aa | A | Baa | Ba | B | Caa |
|---|---|---|---|---|---|---|---|---|
| (CFO pre-WC + Interest) / Interest | 7.5% | ≥ 8x | 6x - 8x | 4.5x - 6x | 3x - 4.5x | 2x - 3x | 1x - 2x | < 1x |
| (CFO pre-WC) / Debt | 15% | ≥ 40% | 30% - 40% | 22% - 30% | 13% - 22% | 5% - 13% | 1% - 5% | < 1% |
| (CFO pre-WC – Dividends) / Debt | 10% | ≥ 35% | 25% - 35% | 17% - 25% | 9% - 17% | 0% - 9% | (5%) - 0% | < (5%) |
| Debt / Capitalization * | 7.5% | < 25% | 25% - 35% | 35% - 45% | 45% - 55% | 55% - 65% | 65% - 75% | ≥ 75% |
| Debt / RAV * | | < 30% | 30% - 45% | 45% - 60% | 60% - 75% | 75% - 85% | 85% - 95% | ≥ 95% |

* The use of Debt / Capitalization or Debt / Regulated Asset Value (RAV) will depend largely on the regulatory regime in which the utility operates. Debt / Capitalization is currently used for most of the issuers rated under this methodology, because in many regions (currently including North America and many Asian countries) RAV does not exist. Where RAV exists, the Debt / RAV ratio may be preferable. The regulated asset base is comprised of the physical assets that are used to provide regulated distribution services, and the RAV represents the value (determined by regulators) on which the utility is permitted to earn a return. RAV can be calculated in various ways, using different rules that can be revised periodically, depending on the regulatory regime. Where RAV is calculated using consistent rules, we view Debt / RAV as the better credit measure and use it for this sub-factor. Where RAV does not exist or the method of calculation is subject to arbitrary or unpredictable revisions, we use Debt / Capitalization.

## Appendix B: "Challenged" and "Threatened" Generation Sources

By "Challenged Sources", we mean generation plants that face higher but not insurmountable economic hurdles resulting from penalties or taxes on their operation, or from environmental upgrades that are required or likely to be required. Some examples are carbon-emitting plants that incur carbon taxes, plants that must buy emissions credits to operate, and plants that must install environmental equipment to continue to operate, in each where the taxes/credits/upgrades are sufficient to have a material impact on those plants' competitiveness relative to other generation types or on the utility's rates, but where the impact is not so severe that plant closure is likely.

By "Threatened Sources", we mean generation plants that are not currently able or permitted to operate due to major unplanned outages or issues with licensing or other regulatory compliance, and plants that are highly likely to be required to de-activate, whether due to the effectiveness of currently existing or expected rules and regulations or due to economic challenges. Some recent examples would include coal fired plants in the US for which retro-fitting to meet mercury and air toxics standards is not economically viable or cannot be achieved by the effective date of those standards, nuclear plants in Japan that have not been licensed to re-start after the Fukushima Dai-ichi accident, and nuclear plants that are required to be phased out within 10 years (as is the case in some European countries).

## Moody's Related Research

### Rating Methodology:

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» Loss Given Default for Speculative-Grade Non-Financial Companies in the US, Canada, and EMEA, June 2009 (114838)

» Updated Summary Guidance for Notching Bonds, Preferred Stocks and Hybrid Securities of Corporate Issuers, February 2007 (102248)

### Special Comments:

» Default, Recovery, and Credit Loss Rates for Regulated Utilities, 1983-2008, May 2009 (115424)

» Regulatory Frameworks – Ratings and Credit Quality for Investor-Owned Utilities, June 2010 (125664)

» Cost Recovery Provisions Key to U.S. Investor Owned Utility Ratings and Credit Quality, June 2010 (122304)

» Liquidity: A Key Component to Investor-Owned Utility Ratings and Credit Quality Evaluating a Utility's Liquidity Profile, September 2010 (127546)

» Re-Evaluating Japanese Utility Credit Quality post-Fukushima, July 2011 (133194)

» Pacific Northwest Utilities: Regulatory Support Paves Way for Improving Credit Profiles, November 2011 (146170)

» Infrastructure Default and Recovery Rates, 1983-2012H1 December 2012 (146791)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

» contacts continued from page 1

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