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*In the Community to Serve®*

August 13, 2013

Oregon Public Utility Commission  
P.O. Box 1088  
Salem, OR 97302-1166

RE: Cascade Natural Gas Corporation's 2011 Integrated Resource Plan (LC 54) Update

As required under OAR 860-027-0400, Cascade is submitting the enclosed informational filing with the Oregon Public Utility Commission which is an update to the Company's 2011 Integrated Resource Plan Action Plan.

The update describes the Company's progress on implementing its 2011 Two-Year Action Plan, provides an assessment of what has changed since the acknowledgement of the plan in August 2012, and justifies any deviations from the acknowledged action plan.

Cascade will provide a copy to all interested parties that participated in the Company's 2011 Planning process.

Please let me know if you have any questions. I can be reached at (509) 734-4589 or via email at [mark.sellers-vaughn@cngc.com](mailto:mark.sellers-vaughn@cngc.com).

Regards,

CASCADE NATURAL GAS CORPORATION

Mark Sellers-Vaughn  
Manager, Supply Resource Planning

**Annual update to the 2011 Action Plan Update (LC 54)**

As required subsequent to the acknowledgement order of Cascade's 2011 Integrated Resource Plan (Order 12-342, dated August 14, 2012), Cascade provides an update on the Two-Year Action Plan that was filed in Section 8 of the reference document. The update will cover the following areas:

- Demand Forecasting
- Distribution System Constraint Analysis
- Demand Side Resources
- Supply Side Resources
- Integration

The 2 year action plan embodies Cascade's commitment to maximizing the efficiency from its Integrated Resource Plan and to achieving the lowest cost resource portfolio of reliable natural gas services and conservation.

***Distribution Enhancements actions to be taken in the near term to meet core growth***

*Cascade has a replacement project scheduled for Bend, Oregon between 2012 and 2016 which is being undertaken to replace a neighborhood pipeline distribution system. In addition to replacement, we will be replacing critical pipelines with larger diameter pipe in order to boost overall capacity to the City of Bend with the intent of meeting our 20-year growth forecast. We are currently in the process of developing a more detailed action plan including specific tasks for each year and more detailed cost estimates. Currently we anticipate budgeting an average of \$2 to \$3 million each year towards the project, with about 15% of that total being dedicated towards capacity enhancement. It should be noted that the current estimates for this project have increased considerably from the previous year's budget, due to recent developments in Cascade's Distribution Integrity Management Program (DIMP) and our increasing focus on replacement of aging facilities.*

**Update:** Cascade is in the process of an on-going effort to refresh its modeling inputs and to update its analysis of the distribution system integrity. We plan to provide an expanded discussion about planned projects in the next formal IRP. Additionally, Cascade is working to modify its SENDOUT optimization modeling to focus capacity on the city-gate as opposed to the zonal level within the main body of the next IRP.

***Oregon Public Purpose Fund***

*Cascade and the Energy Trust of Oregon (ETO) will work with OPUC staff during 2012 to determine the best and most efficient manner to collect public purpose revenues that meet the approved budget needs of Energy Trust. Additionally, there will be discussions and related decisions during 2012 regarding the low-income program funding portion of the public purpose charge.*

**Update:** Cascade and OPUC staff determined during 2012 that the most efficient manner for collecting revenues that meet the annual budget needs of the Energy Trust of Oregon is solely through the public purpose charge. Cascade will no longer be utilizing deferrals to provide portions of annual ETO funding. Cascade is keeping closely apprised of the establishments of ETO's future therm savings targets and budget requirements so that any associated public purpose charge modifications will be timely and will collect the required funds. Discussions related to the funding and program design of the low-income programs took place during 2012 between Cascade, OPUC staff, CAPO and the agencies. It was determined that prior to recommending substantive modifications of the low-income program to the OPUC, it was necessary for Cascade to commission a third-party, independent, evaluation of the program as authorized in Oregon tariff Schedule 33. This

evaluation will be complete in 2013.

*NWP delivery rights re-alignment and incremental vintage capacity acquisition program*

*Cascade was able to take advantage of an opportunity to acquire long-term, vintage capacity that was turned back to Northwest Pipeline. Acquiring the 37,563 dths/day of capacity at current rates allows Cascade to mitigate projected capacity shortfalls from 2021 to 2031 of between 30,000 dths and 60,000 dths per day in the Bellingham, WA area and 3,000 to 6,000 dths per day in portions of the Mecham Zone (southeast WA and northeast OR) of Northwest Pipeline's system. This action is part of a larger effort to address capacity shortfalls by acquiring or modifying existing upstream pipeline capacity resources. To that end, Cascade will be working with Northwest Pipeline in the near term to re-align Cascade's contractual delivery rights, where operationally feasible, from citygates where we are forecasting an excess of pipeline capacity to citygates where we are projecting a pipeline capacity shortfall, thereby minimizing the costs to secure incremental capacity and facilities in order to meet peak day loads in those areas.*

**Update:** Based on our most recent analysis, Cascade still has a projected peak day capacity shortfall at the Bellingham gate of over 30,000 Dths per day by 2022. On a zonal basis, the aggregate of all delivery points in Zone 30 is projected to be short 65,000 Dths of peak day capacity by 2032 (down from over 85,000 Dths of receipt capability shortfall in the 2008 IRP). Cascade has consistently worked with Northwest Pipeline (NWP) over the last several years to meet this shortfall via a combination of re-alignment of existing MDDOs, securing incremental receipt throughput capacity that has been turned back by others (as identified above); and last, considering the possibility of participating in future expansions. Through these efforts we have been acquiring incremental receipt and delivery rights since 2011 to meet projected capacity shortfalls, including the acquisition of an additional account at Jackson Prairie. More recently, since 2012, we have added 21,075 Dths per day of Zone 30 capacity at vintage, not expansion rates. However, even with these acquisitions, we are still short based on peak day projections starting in calendar year 2022.

NWP and Cascade recently completed an exhaustive examination of our contract demand ("CD", or receipt rights), MDDOs, and our projected load, bearing in mind that since we have more delivery rights (MDDO) than receipt rights (CD), we had to allocate our receipt rights to the MDDOs. This pro rata MDDO alignment is based on allocating our CD to the longest path. While we have the flexibility to allocate our CD to the MDDOs based on different potential flow patterns, using the longest path is logically the most prudent for planning purposes.

Under our most recent capacity acquisition from NWP, Cascade became the Prearranged Shipper for 15,000 Dths per day of Sumas to Bellingham I and acquired the remaining Bellingham lateral capacity by exercising our rights under Contract No. 100002 to amend 12,523 Dths per day from Bellingham II to Bellingham I without a contract-specific OFO upon upgrading the Bellingham (Ferndale) meter station. The cost of the facility upgrade is anticipated to be less than \$1 million. We will also have the option to amend our principal transportation agreement and incorporate this new capacity to our principle upstream transport (contract number 100002), effective May 1, 2020, also without a contract-specific OFO. The primary term is through October 31, 2034. As the path of the capacity will be solely in Washington, the incremental demand gas costs should be assigned to Washington and not shared with Oregon.

Even after acquiring this capacity there is still a potential shortfall in Zone 30 of approximately 30,000 Dths per day on peak day after 2022. We have the opportunity to acquire additional capacity from NWP through participation in their Washington South Expansion project, which runs from Sumas to a point near Woodland, Washington, primarily to help serve the proposed Oregon LNG project. While participating in the Washington South Expansion project would likely eliminate the

remaining projected shortfall, we feel it is not prudent to participate in the expansion at this time. There are several reasons for this decision:

- The Washington Expansion is still in the initial planning stages.
- The Washington South Expansion will likely be at rates higher than current tariff rates.
- Over the last several years there have been concerns expressed regarding elements of Cascade's demand forecast, as well as the extension of our capacity and city gate studies. Our demand forecast methodology is currently being reconsidered; and a larger group is working on developing a forecast that we feel will be an improvement over past forecasts. Since the 2008 IRP, our peak day forecast has continued to drop; some of this can be attributed to the Great Recession, conservation, and switching from a district level forecast methodology in 2010. Staff has also expressed some concerns and has recommended that Cascade look at alternative forecast methods. Given the effort that is currently being undertaken to reassess our forecast methodology, it seems prudent to hold off on addressing the entire projected 65,000 Dths per day shortfall until the new forecast process/method is in place. In the meantime, it seems reasonable given the size of the projected shortfall, to acquire the 15,000 Dths of incremental, vintage priced capacity NWP is offering at this time. After we finish our next complete forecast, we will assess the potential capacity shortfalls.

Concurrently, Cascade will continue working with NWP to analyze other areas of capacity concern, such as the Wenatchee lateral in Washington, and potential peak day capacity shortfalls in eastern Oregon. As opportunities present themselves, we will keep stakeholders informed through our technical advisory group meetings leading up to our 2014 Integrated Resource Plan.

*Securing Ruby capacity to meet load growth and add supply diversity*

*In order to help mitigate the projected 30,000 Dths per day shortfall discussed in Section 5 of the IRP in the Bend, OR area by 2031, Cascade has been negotiating with Ruby Pipeline to acquire 10,000 Dths per day of firm, primary path winter-only capacity from the Opal Hub to Ruby's interconnect with GTN. We are negotiating a 25 year contract at a discounted rate that will allow Cascade to bring Rockies gas to Oregon beginning in November, 2012, increasing supply diversity (currently over 80% of Central OR is supplied by AECO) and address the need for incremental supplies. During the course of the next year, Cascade will determine if it is prudent to invoke a clause in the Ruby contract that allows Cascade to contract for up to an additional 20,000 Dths per day to the Ruby deal. This clause is set to expire in October, 2014. FERC has conditionally approved this capacity transaction subject to Ruby addressing several of FERC's concerns regarding the services Ruby's tariff allows them to provide in terms of seasonality, ratchets, and acquiring other pipeline capacity.*

**Update:** Since the filing of the 2011 Integrated Resource Plan, Cascade has secured 10,000 Dths per day of Ruby capacity on a seasonal basis from Opal to Turquoise Flats (near Malin, Oregon) where it interconnects with GTN. Recently, Cascade has received several offers from Ruby shippers to acquire capacity deemed excess for those shippers' needs. These offers only offer short term options. Additionally, as indicated above, Cascade also has the option to invoke a clause to secure up to an additional 20,000 Dths of seasonal capacity directly from Ruby on a long-term basis. We have also been working with Ruby on proposals for incremental annual capacity to increase our flexibility to deliver Rockies gas to central Oregon. This potential capacity offers Cascade an additional tool to assist with mitigating costs associated with pipeline constraints and operation flow orders. Modeling is still in progress but we believe some combination of the options discussed above will be presented later this summer for consideration by Cascade's Gas Supply Oversight Committee.

Securing Incremental Gas Transmission Northwest Pipeline (GTN) firm backhaul capacity to meet load growth and add supply diversity

On a separate tract to address the projected 30,000 Dths per day shortfall in the Bend, Oregon area by 2031, Cascade has been working with Ruby Pipeline on an opportunity to obtain 10,000 Dths per day of primary, firm Malin north capacity on GTN through a pre-arranged agreement via Ruby. This capacity will provide the means to deliver Rockies supplies to central Oregon, thereby increasing supply diversity. Currently, GTN allows the scheduling of backhauled volumes from Malin northward on a secondary basis at maximum rate. We have discussed with Ruby the idea that should they successfully contract for backhaul capacity on GTN, Cascade would be willing to acquire the GTN backhaul capacity, subject to bid, via a posting on GTN's electronic bulletin board in accordance with existing FERC rules. We anticipate Cascade will finalize a backhaul capacity release on GTN by summer 2012. The initial backhaul capacity is expected to expire within five years at which time we expect GTN will likely file a rate case for the continuation of the primary service; Cascade will be a principle participant in any of those discussions.

**Update:** Since the filing of the 2011 Integrated Resource Plan, Cascade has secured 10,000 Dths of Ruby capacity on a seasonal basis from Opal to Turquoise Flats, where Ruby interconnects with GTN. Cascade was able to successfully acquire 10,000 Dths per day of firm, annual backhaul capacity on GTN from Turquoise Flats north along Cascade's distribution system to the Stanfield Exchange between GTN and Northwest Pipeline. In recent months, GTN has informed Cascade that additional long-term backhaul capacity is available. We also may have incremental capacity options on a forward haul basis to help address the potential peak day shortfalls around Bend, Oregon in future years. While modeling is on-going, we feel reasonably confident that some combination of incremental backhaul/forward haul GTN capacity would be a good fit for our long-term portfolio. It should also be noted that there continues to be some potential for the Palomar and Pacific Connector pipeline projects which could also be resources to help meet Oregon demand. We will actively monitor these two projects.

Secure incremental storage to meet load growth & mitigate price volatility over the planning horizon

During 2012 and 2013, Cascade will be exploring several options to acquire approximately 300,000 Dths of working inventory at Ryckman Creek Storage facility. The Ryckman Creek Storage facility is located in the Rockies in the Opal Hub area. We are in discussions with existing Ryckman storage holders and will also be considering participation in a possible open season at a negotiated rate for storage service starting in 2013. Ryckman Creek storage will primarily be used to store Rockies gas and with (we retain?) the ability to inject and withdraw via Northwest Pipeline and Ruby. This storage will help meet the projected 30,000 Dths shortfall on peak day in central Oregon and provide a significant resource for arbitrage opportunities to manage supply costs to all ratepayers.

**Update:** Cascade and Ryckman Creek Resources have held several discussions since the filing of the 2011 Integrated Resource Plan about Cascade acquiring working inventory at the Ryckman Creek Storage facility. Unfortunately, the next phase of their storage project is on delay for several more months due to a fire at the Ryckman facility earlier this spring. At this time, expectations are that the next storage expansion phase will be postponed until sometime in 2014. Cascade still views Ryckman as a viable storage alternative and will continue to work with Ryckman on developing a proposal that can be presented to Cascade's Gas Supply Oversight Committee in the coming year.



Certificate of Service

I certify that I have this day caused an Update of Cascade Natural Gas Corporation's 2011 Integrated Resource Plan to be served by electronic mail to those parties whose email addresses appear on the attached service list, and by First Class Mail, postage prepaid and properly addressed, to those parties on the services list who have not waived paper service from OPUC Docket No. LC 54.

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Dated at Kennewick, Washington, this 15<sup>th</sup> day of August 2013



Amanda Sargent  
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