

DOCUMENT DE RÉFLEXION DE GAZ MÉTRO

INDICATEUR DE PERFORMANCE
VISANT L'OPTIMISATION DES OUTILS
D'APPROVISIONNEMENT GAZIER

(Suivi de la décision D-2013-091)

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INTRODUCTION

1 Dans le cadre du dossier R-3693-2009, la Régie de l'énergie (la « Régie ») rendait la décision
2 D-2010-116 par laquelle elle autorisait le Groupe de travail à amorcer les négociations entourant
3 le renouvellement du mécanisme incitatif de Société en commandite Gaz Métro (« Gaz Métro »).
4 Dans cette même décision, la Régie demandait au Groupe de travail de suivre certaines directives
5 quant au contenu du prochain mécanisme et de se pencher sur un nouvel incitatif visant à
6 optimiser les outils de transport et d'équilibrage en début d'année en fonction du coût global de
7 fourniture, de transport et d'équilibrage et basé sur des revenus réels. Un indicateur a donc été
8 conçu par Gaz Métro et présenté au Groupe de travail et au personnel technique de la Régie lors
9 de rencontres tenues à l'automne 2011 visant à échanger sur les modalités entourant
10 l'élaboration d'un tel incitatif.

11 Par la décision D-2012-076, la Régie rejetait l'entente intervenue entre Gaz Métro et le Groupe
12 de travail relativement au renouvellement du mécanisme incitatif applicable au service de
13 distribution. Cependant, en ce qui a trait à l'incitatif associé à la gestion des approvisionnements
14 gaziers du distributeur, la Régie indiquait que : « *la phase 1 du dossier tarifaire 2013 est le forum*
15 *approprié pour traiter, s'il y a lieu, des modalités de bonification des transactions d'optimisation*
16 *au cas où le nouvel incitatif ne serait pas mis en place »¹.*

17 Ainsi, Gaz Métro déposait auprès de la Régie sa proposition d'un nouvel indicateur qui visait une
18 mise en application pour les années financières 2013-2014 et suivantes dans le cadre de la
19 Cause tarifaire 2013². Axée sur un incitatif basé sur la comparaison entre un coût moyen
20 d'approvisionnement à l'année référence ou « année étalon » et un coût moyen
21 d'approvisionnement réel de l'année examinée, cette proposition permettait de mesurer la valeur
22 créée ou perdue par l'optimisation de la structure d'approvisionnement du distributeur. Cet
23 indicateur utilisait les résultats réels constatés aux rapports annuels (actualisés pour l'année
24 étalon) et considérait l'ensemble des coûts du plan d'approvisionnement reliés aux services de
25 transport et d'équilibrage, à l'exception de ceux liés à la fourniture. Selon Gaz Métro, cette

¹ R-3693-2009, D-2012-076, paragraphe 187

² R-3809-2012, B-0023, Gaz Métro-4, Document 1

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1 proposition permettait de rencontrer les directives de la Régie dans la décision D-2010-116 en se
2 voulant fondée sur un indicateur global et reposant sur des résultats réels.

3 Dans la décision D-2013-091, la Régie approuvait le principe de base comparant l'année réelle à
4 l'année étalon avec toutefois des modifications et des pistes d'amélioration. Cependant, elle
5 admettait que le contexte à ce moment-là n'était pas propice à l'implantation rapide d'un incitatif
6 compte tenu que la migration des approvisionnements vers Dawn n'était pas encore complétée.
7 Conséquemment, elle stipulait que : « *La Régie retient donc l'année tarifaire 2017 comme*
8 *première année d'application d'un indicateur de performance visant l'optimisation du coût global*
9 *de fourniture, de compression de transport et d'équilibrage, comme indiqué dans sa décision*
10 *D-2010-116* »³.

11 Dans cette même décision, la Régie ordonnait également à Gaz Métro de présenter un calendrier
12 détaillé permettant d'encadrer la conception de cet indicateur dans le cadre de la Cause
13 tarifaire 2015 incluant des rencontres avec les intervenants représentant les consommateurs et
14 le personnel technique de la Régie. Ainsi, le 1^{er} mai 2014, Gaz Métro déposait auprès de la Régie
15 une proposition de calendrier visant un dépôt de l'indicateur pour le 15 décembre 2014⁴.
16 Cependant, le 11 décembre 2014, dans une correspondance à la Régie (R-3879-2014, B-0278),
17 Gaz Métro annonçait son incapacité à respecter la date du dépôt du document de réflexion
18 indiquée dans sa proposition initiale de calendrier, compte tenu de l'importante charge de travail
19 découlant de divers dossiers prioritaires. Subséquemment, dans le cadre de la Cause tarifaire
20 2016⁵, Gaz Métro déposait une révision du calendrier et exposait les contraintes l'empêchant de
21 respecter les échéances initialement proposées, dont le traitement de sujets prioritaires ayant
22 une incidence importante sur l'élaboration d'un incitatif.

23 De plus, par souci d'efficience et afin de s'assurer que sa seconde proposition d'un indicateur
24 visant les outils d'approvisionnement soit le reflet du contexte global, Gaz Métro annonçait à la
25 Régie son intention de traiter ce sujet dans le cadre d'un dossier distinct. Ce dernier inclurait
26 notamment un document de réflexion ainsi qu'un calendrier révisé reflétant les séances de travail

³ D-2013-091, paragraphe 45

⁴ CT-2015, R-3879-2014, B-0011, Gaz Métro-4, Document 4

⁵ CT-2016, R-3879-2014, B-0447, Gaz Métro-103, Document 6

1 approuvées par la Régie dans la décision D-2014-201. Aussi, Gaz Métro informait la Régie de
2 son désir d'être accompagnée dans sa réflexion par un expert externe.

3 Depuis ce dernier statut du dossier, Gaz Métro a retenu les services de la firme Black & Veatch
4 Management Consulting, LLC (« Black & Veatch ») afin qu'elle effectue un balisage des
5 meilleures pratiques d'affaires chez les distributeurs gaziers comparables ayant un mécanisme
6 ou un incitatif visant l'optimisation des outils d'approvisionnement gazier, spécialement à la
7 lumière des profonds changements survenus récemment au sein de l'industrie gazière en
8 Amérique du Nord.

9 Le présent document résume donc le rapport de balisage de Black & Veatch qui est déposé à
10 l'annexe 1 et présente les pistes de réflexion de Gaz Métro qui en découlent et qui permettront
11 d'encadrer les discussions à venir lors des séances de travail qui seront tenues en 2017. Un
12 calendrier présentant les prochaines étapes est proposé à la section 5.

13 Gaz Métro souhaite adopter une approche consultative en utilisant les séances de travail
14 autorisées par la Régie⁶ pour partager ses réflexions auprès du personnel technique de la Régie
15 et sonder l'opinion des intervenants sur les différents aspects détaillés à la section 4 de la
16 présente. Cette démarche se veut une approche coopérative qui cherche à en venir à une
17 proposition raisonnable et qui sera au bénéfice de la clientèle et de Gaz Métro.

1. MISE EN CONTEXTE

18 Au cours des dernières années, les marchés gaziers et plus particulièrement, le marché gazier
19 de l'Est du Canada, ont subi d'importants bouleversements qui sont venus modifier de manière
20 significative le contexte dans lequel Gaz Métro évoluait au moment du dépôt de sa proposition
21 initiale en juillet 2012. L'émergence de nouveaux bassins prolifiques de production de gaz naturel
22 a complètement transformé la dynamique gazière au Canada en venant à la fois créer de
23 nouvelles opportunités, mais également soulever des enjeux relatifs à la capacité de TCPL de
24 recouvrer ses coûts et son rendement comme conséquence de la décision RH-003-2011.
25 D'ailleurs, la conséquence de cette décision a été le gel dans la construction par TCPL
26 d'infrastructures de transport courte distance devant permettre à Gaz Métro et aux distributeurs

⁶ D-2014-201

1 gaziers de l'Ontario de bénéficier de ces nouveaux bassins de production et du bas coût du gaz
2 naturel livré dans les territoires respectifs de ces derniers. Cette situation est venue créer de
3 grandes incertitudes au sein de l'industrie gazière et ce, durant plusieurs mois. Cette situation
4 sans précédent, ayant causé un profond déséquilibre du marché gazier canadien, a néanmoins
5 abouti à la conclusion d'une entente de principe entre TCPL, Gaz Métro et les distributeurs de
6 l'Ontario à l'automne 2013 (« l'Entente »).

7 Cette Entente est venue, entres autres, modifier les règles entourant l'obtention de capacités de
8 transport sur le réseau principal de TCPL et fixer certains paramètres de la structure
9 d'approvisionnement de Gaz Métro tel que l'engagement des distributeurs à conserver des
10 contrats de transport longue distance fermes à partir d'Empress jusqu'au 31 décembre 2020
11 (représentant 85 000 GJ/jour pour Gaz Métro). De surcroît, avec l'accroissement de la durée des
12 contrats de transport ferme (15 ans pour l'ajout de nouvelle capacité et 5 ans pour le
13 renouvellement de contrats existants dans le cas de la procédure de « *term up* »), le préavis de
14 renouvellement de 2 ans et le préavis de 3 ans exigé par TCPL pour construire de nouvelles
15 capacités, les nouvelles règles établies font en sorte de restreindre la flexibilité opérationnelle de
16 Gaz Métro et de limiter les opportunités d'optimisation de sa structure d'approvisionnement. Par
17 ailleurs, la concrétisation de la migration de sa structure d'approvisionnement vers Dawn au
18 1^{er} novembre 2016 est également venue grandement influencer la manière dont Gaz Métro gère
19 son portefeuille d'outils afin de s'adapter adéquatement aux nouvelles dynamiques gazières.

20 Ce nouvel environnement vient donc appuyer la décision D-2013-091 de la Régie de reporter
21 l'application d'un indicateur de performance global visant l'optimisation des outils
22 d'approvisionnement après le déplacement de la structure d'approvisionnement à Dawn, soit une
23 fois la stabilisation de cette dernière assurée.

2. PRÉSENTATION DU RAPPORT DE L'EXPERT

24 Comme mentionné précédemment, Gaz Métro a fait appel à la firme Black & Veatch afin
25 d'effectuer un rapport de balisage sur les grandes tendances en Amérique du Nord en matière
26 de mécanisme incitatif visant les approvisionnements gaziers et pour identifier les divers éléments
27 de conception de tels mécanismes. Ce rapport de balisage est présenté à l'annexe 1 du présent
28 document.

1 En résumé, les observations de l'expert sont les suivantes :

2 Deux grandes catégories de mécanisme incitatif se retrouvent dans le marché :

- 3 • Mécanisme complet prenant en compte l'ensemble des approvisionnements, soit, la
4 fourniture de gaz naturel, le transport et l'entreposage;
- 5 • Mécanisme partiel prenant en compte uniquement le transport et l'entreposage, la
6 fourniture de gaz naturel n'étant pas considérée.

7 Les principales conclusions du rapport de Black & Veatch (section 1.3) sont les suivantes :

- 8 1. Des distributeurs gaziers dans 16 états américains et 3 provinces canadiennes ont des
9 mécanismes incitatifs. Le nombre de distributeurs utilisant un mécanisme complet est en
10 décroissance considérant la baisse de la volatilité des prix, l'abondance de la fourniture
11 et les faibles prix ainsi que les gains continus en efficacité énergétique;
- 12 2. Sous un mécanisme complet, l'équilibre entre le risque et le bénéfice doit être viable pour
13 la clientèle et le distributeur de sorte que les économies et les dépassements de coûts
14 sont partiellement partagés entre les deux. Il s'agit d'un élément critique dans l'élaboration
15 d'un mécanisme incitatif;
- 16 3. La flexibilité de la structure d'approvisionnement est un élément clé pour réaliser des
17 transactions engendrant des économies. De même, des capacités de transport et
18 d'entreposage plus importantes représentent un levier plus grand pour créer des
19 opportunités d'optimisation des coûts;
- 20 4. Les seuils de référence pour les prix de fourniture de gaz naturel sont reconnus comme
21 des standards objectifs et doivent être établis en fonction d'indices publiés ou rapportés;
- 22 5. Les gains annuels résultant des différents mécanismes incitatifs ne sont pas toujours
23 rendus publics. Le dépôt confidentiel est quelquefois retenu par le régulateur étant donné
24 le caractère sensible des informations sur les prix; et
- 25 6. Certains distributeurs font appel à une tierce partie pour effectuer la gestion des
26 approvisionnements (« Asset Management Agreements ») et en optimiser les coûts. Les
27 résultats sous de telles ententes de gestion sont inconnus de par leur caractère
28 confidentiel.

1 Considérant ces conclusions, Black & Veatch recommande alors :

- 2 1. De ne pas implanter un mécanisme incitatif complet pour le moment. Il recommande
3 d'attendre que le portefeuille de capacité de transport et d'achat de fourniture soit stable
4 et cohérent sur une période d'au moins 3 ans avant de considérer l'implantation d'un
5 mécanisme complet.
- 6 2. De maintenir l'application d'un mécanisme incitatif partiel, similaire à celui présentement
7 en vigueur, avec potentiellement des ajustements aux transactions considérées.

3. COMMENTAIRES DE GAZ MÉTRO

8 Considérant le rapport de Black & Veatch, ses conclusions et ses recommandations, Gaz Métro
9 est d'avis qu'il n'est pas opportun de mettre en place un mécanisme incitatif complet. En effet, au
10 cours de l'année 2016, Gaz Métro a modifié sa structure d'approvisionnement de façon
11 importante en remplaçant une grande partie de ses capacités de transport longue distance (LH)
12 par des contrats de courte distance (SH). L'historique de son portefeuille ne constitue donc pas
13 une base de référence qui reflète la nouvelle structure d'approvisionnement. Une structure stable
14 et cohérente d'au moins trois ans amènerait la considération d'un éventuel mécanisme complet
15 à partir de 2020-2021.

16 Un autre élément qui milite également à la non-application d'un mécanisme incitatif complet pour
17 le moment est l'absence de flexibilité de la structure d'approvisionnement présentement en
18 vigueur. Près de 55 % des contrats ont des dates d'échéance au 31 octobre 2022, les autres
19 contrats se terminant au 31 octobre 2030 ou après. Cela réduit de façon importante les
20 opportunités de modification à la structure, au cours des prochaines années, afin d'en réduire les
21 coûts. Ce sont principalement les ventes de capacité excédentaires, le cas échéant, qui offrent
22 un potentiel d'optimisation.

23 Le contexte actuel au sein du marché gazier rend également plus difficile l'optimisation de la
24 structure d'approvisionnement globale considérant que le marché secondaire est beaucoup plus
25 restreint durant l'hiver et que l'ampleur des capacités de transport courte distance contractées
26 par les distributeurs de l'Est amène une offre plus grande que la demande durant l'été.

1 D'autre part, en fonction des observations de l'expert quant au balisage des mécanismes incitatifs
2 complets, Gaz Métro est d'avis que l'indicateur de performance visant l'optimisation des outils
3 d'approvisionnement proposé dans le cadre de la Cause tarifaire 2013 ne correspond pas aux
4 caractéristiques des mécanismes incitatifs complets appliqués dans le marché et ne serait
5 probablement pas applicable dans l'environnement actuel. En effet, la proposition de Gaz Métro
6 avait pour effet de mesurer ses propres résultats de l'année réelle à ceux de l'année étalon. Or,
7 les mécanismes incitatifs complets visent plutôt à comparer les résultats de l'année réelle à des
8 indices de marché pour la même période, en d'autres mots : bonifier le distributeur s'il a pu offrir
9 son service à un prix inférieur à celui du marché. Ainsi, lors de l'élaboration d'un mécanisme
10 incitatif complet, Gaz Métro croit qu'il serait nécessaire d'amorcer une nouvelle analyse afin de
11 développer un mécanisme qui corresponde davantage aux caractéristiques observées dans les
12 mécanismes complets appliqués dans le marché.

13 Comme recommandé par l'expert, Gaz Métro est d'avis que le maintien d'un incitatif à la
14 performance appliqué aux transactions spécifiques qu'elles réalisent est souhaitable. Un
15 mécanisme incitatif partiel, ci-après l'indicateur de performance actuel, est d'ailleurs en
16 application depuis l'année financière 2013, tel qu'approuvé dans les diverses décisions de la
17 Régie⁷. Toutefois, Gaz Métro envisage d'y apporter certaines modifications. La section suivante
18 présente les réflexions de Gaz Métro à ce sujet.

4. APPROCHE CONSULTATIVE DE GAZ MÉTRO

19 Comme mentionné précédemment, Gaz Métro souhaite aborder et examiner différentes pistes
20 de réflexion à considérer dans l'élaboration d'un incitatif visant l'optimisation de transactions
21 ciblées.

22 Pour développer un mécanisme incitatif partiel, Gaz Métro juge important de revoir les
23 transactions à assujettir à la bonification considérant, entre autres, le déplacement de sa structure
24 d'approvisionnement vers Dawn.

⁷ D-2013-054, D-2014-077, D-2014-201, D-2015-181

1 De prime abord, la description du mécanisme actuel sera présentée dans cette section. Par la
2 suite, Gaz Métro développera diverses avenues qu'elle désire présenter pour des fins de
3 discussions en groupe de travail.

4.1. Incitatif à la performance actuel

4 Actuellement, les transactions d'optimisation réalisées par Gaz Métro sont réparties en deux
5 catégories : les transactions opérationnelles et les transactions financières.

- 6 • Transactions opérationnelles

7 Les transactions opérationnelles sont effectuées afin de pallier les variations
8 journalières et saisonnières de la demande réelle. Seules les ventes de capacité de
9 transport *a priori* (SH ou LH) et les ventes de capacité de transport LH non utilisée
10 (avec ou sans molécule) sont considérées sous cette catégorie.

11 Les ventes de capacité de transport *a priori* correspondent aux capacités de transport
12 excédentaires aux outils d'approvisionnement requis pour l'année donnée, soit le
13 maximum entre la demande continue en journée de pointe et les besoins pour répondre
14 à la demande saisonnière de l'hiver extrême.

15 Les ventes de capacité de transport LH non utilisée sont possibles, une fois la demande
16 totale (incluant les besoins d'injection) répondue. Gaz Métro revend alors ces
17 capacités excédentaires plutôt que de les laisser vides.

- 18 • Transactions financières

19 Toutes autres transactions dont le motif est financier sont considérées sous cette
20 catégorie. Ces transactions sont réalisées lorsqu'une opportunité de marché se
21 présente et que la clientèle demeure opérationnellement indemne ou même
22 avantagée, le cas échéant. Par exemple

- 23 ○ lorsque Gaz Métro dispose d'un outil qui n'est pas pleinement utilisé par la
24 demande de ses clients (cessions de capacité de transport en été);

- 1 ○ lorsque la capacité est utilisée par la demande, mais que la transaction assure
2 une livraison en franchise (cessions de capacité de transport en hiver)

3 Ces transactions sont réalisées parce qu'elles sont financièrement favorables en
4 généralisant des revenus d'optimisation. Certaines transactions peuvent également
5 permettre de réduire les coûts d'approvisionnements qui auraient été autrement
6 encourus, n'eût été celles-ci, par exemple des coûts de compression.

7 Plusieurs types de transactions se retrouvent sous cette catégorie dont : les cessions
8 d'optimisation (LH), les cessions ou ventes de transport SH non utilisé en été (avec ou
9 sans échange de gaz naturel), les transactions d'échange de gaz naturel entre deux
10 points géographiques, les prêts d'espace d'entreposage, etc.

11 Sous l'indicateur de performance actuel, les transactions opérationnelles ne sont pas
12 assujetties à la bonification contrairement aux transactions financières où le partage appliqué
13 aux revenus générés est de 90 % à la clientèle et 10 % à Gaz Métro.

4.2. Nouvel incitatif à la performance pour fins de consultation

14 Certains constats amènent Gaz Métro à revoir les transactions qui seraient assujetties à la
15 bonification :

- 16 • La catégorie « transactions opérationnelles » découlait principalement des structures
17 historiques où le transport était en provenance d'Empress (LH) et le transport courte
18 distance (STS) n'était disponible que l'hiver. Avec les années, Gaz Métro a contracté
19 des capacités de transport courte distance (SH) à partir de Dawn pour réduire ces
20 coûts totaux d'approvisionnement. Or, ces capacités étaient utilisées sur les mois
21 d'hiver ou les mois d'épaulement (novembre et avril). Gaz Métro se retrouvait
22 inévitablement avec des excédents de capacité durant la période d'été. L'optimisation
23 de ces transactions a alors été définie comme des transactions financières puisque
24 ces capacités étaient non utilisées de toute façon et que leur vente ne résultait pas
25 d'une variation de la demande et des outils d'approvisionnement pour y répondre. Dans
26 le contexte du déplacement à Dawn, le traitement distinct des capacités de transport
27 LH non utilisées et les capacités de transport SH non utilisées n'est donc plus pertinent.

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- 1 • Le déplacement de la structure à Dawn et les règles de maintien du 85 000 GJ/jour de
2 transport LH font en sorte que les capacités excédentaires de transport aux outils
3 d'approvisionnement (ventes *a priori*) seront presque entièrement des capacités de
4 transport SH. La distinction entre les capacités excédentaires résultant des besoins de
5 variation de la demande et les capacités excédentaires inévitables en été serait difficile
6 à établir. La notion de FTLH non utilisé devient également obsolète.

- 7 • Selon le balisage effectué par l'expert auprès de plusieurs distributeurs, toutes les
8 ventes de capacité excédentaire sont assujetties au partage. Il ne semble y avoir
9 généralement aucune distinction quant au motif des capacités excédentaires
10 revendues.

- 11 • Les transactions purement financières peuvent occasionnellement générer des coûts
12 additionnels - inférieurs toutefois aux revenus générés - autrement Gaz Métro ne
13 procéderait pas à de telles transactions. Le cas échéant, si la transaction d'optimisation
14 a pour effet d'engendrer des coûts d'opérations, le partage devrait s'appliquer sur les
15 revenus nets de coûts.

- 16 • Certaines transactions réalisées sur le marché secondaire peuvent être concrétisées
17 à un coût fixe inférieur à celui résultant de l'utilisation d'un contrat existant, par
18 exemple, une transaction d'échange en remplacement d'utilisation de capacités
19 excédentaires (« overrun ») d'un contrat régulier. Ces transactions peuvent générer des
20 revenus qui seraient alors assujettis à la bonification. Actuellement, les coûts évités ne
21 sont pas considérés dans le partage. Or, Gaz Métro a avantage à réaliser de telles
22 transactions au bénéfice de sa clientèle. Ces transactions viennent réduire les coûts
23 qui auraient autrement été générés par l'utilisation des outils déjà sous contrat. Ainsi,
24 pour ces transactions, la différence entre les coûts qui auraient autrement été encourus
25 avec les outils existants et les coûts réels de la transaction financière, soit les coûts
26 évités, représente une économie qui pourrait être assujettie au partage.

- 27 • Certaines transactions réalisées sur le marché secondaire viennent remplacer des
28 capacités de transport contractées sur le marché primaire auprès de TCPL ou
29 Union Gas. Gaz Métro a avantage à réaliser de telles transactions au bénéfice de sa

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clientèle afin de réduire les coûts totaux d'approvisionnement, tout en s'assurant de conserver des modalités contractuelles qui lui permettront de ne pas être désavantagée dans la gestion future de ses approvisionnements. Ainsi, pour ces transactions, la différence entre les coûts qui auraient autrement été encourus sous un contrat du marché primaire et les coûts réels de la transaction financière, soit les coûts évités, représente une économie qui pourrait être assujettie au partage.

Le tableau suivant présente une comparaison entre les transactions assujetties au partage sous l'indicateur de performance actuel et les transactions que Gaz Métro envisage sous le nouvel incitatif à la performance.

Tableau 1

Indicateur de performance - approvisionnement gazier		
	Actuel	Envisagé
Transactions déjà considérées		
Ventes a priori (excédent de pointe) en hiver	non	oui
Ventes FTLH non utilisé (autre qu'a priori)	non	oui
Toutes autres transactions générant des revenus	oui	oui
<i>applicable sur :</i>	<i>les revenus</i>	<i>les revenus nets des coûts</i>
Nouvelles transactions proposées		
Transactions réalisées pour réduire les coûts d'opération en cours d'année	non	oui
<i>applicable sur :</i>	<i>n/a</i>	<i>les coûts évités</i>
Transactions sur le marché secondaire pour remplacer les capacités de transport du marché primaire (TCPL/Union)	non	oui
<i>applicable sur :</i>	<i>n/a</i>	<i>les coûts évités</i>

4.3. Révision du mode de partage

Gaz Métro souhaite également échanger sur le mode de partage actuel (90 % clientèle / 10 % Gaz Métro) visant les transactions d'optimisation des outils d'approvisionnement gazier et étudier la possibilité de le réviser.

Le mode de partage de Gaz Métro est le plus restrictif des distributeurs gaziers examinés par l'expert Black & Veatch ayant un incitatif visant l'optimisation des outils d'approvisionnement gazier. En effet, Gaz Métro constate au rapport de l'expert que son mode de partage se

1 retrouve dans la tranche inférieure de l'échelle tel qu'illustrée à la figure 4, à la page 12 de
2 l'annexe 1. En effet, la majorité des distributeurs ayant un mécanisme incitatif axé sur des
3 transactions d'optimisation ciblées (mécanisme partiel dans le rapport de balisage de l'expert)
4 détiennent un mode de partage équivalent à 80 % / clientèle et 20 % / distributeur. Dans
5 certains mécanismes, la formule de partage peut aller jusqu'à 50 % / 50 %.

6 À des fins de discussions lors des futures séances de travail, Gaz Métro croit qu'il serait
7 opportun de mettre en place un incitatif dont les conditions sont alignées à celles des autres
8 distributeurs gaziers examinés par l'expert Black & Veatch et qui serait le reflet des efforts
9 d'optimisation effectués au bénéfice de la clientèle.

4.4. Évaluation quantitative

10 Afin de donner un aperçu de la bonification qui pourrait être générée en fonction de l'indicateur
11 de performance envisagé et du mode de partage, Gaz Métro a effectué une évaluation basée
12 sur les transactions effectives de l'année financière 2016.

13 Le tableau suivant présente le détail de ces transactions par type, les revenus générés, les
14 coûts additionnels générés par la transaction, le cas échéant, et les coûts évités qui auraient
15 été encourus, n'eût été la réalisation de certaines transactions.

Société en commandite Gaz Métro
Indicateur de performance visant l'optimisation
des outils d'approvisionnement gazier, R-3993-2016

1 **Tableau 2**

	Transactions réalisées Année 2016	Revenus (1) 000 \$	Coûts générés (2) 000 \$	Coûts évités (3) 000 \$	Transactions assujetties			
					Indicateur actuel		Indicateur envisagé	
					(4) = (1) 000 \$		(5)=(1)-(2)+(3) 000 \$	
1	Ventes a priori	3 493	0	0	n/a		3 493	
2	Ventes FTLH non utilisé	1 390	0	0	n/a		1 390	
3	Autres transactions financières	522	7	48	522		563	
4	Transactions d'opération sans génération de revenu	0	38	225	n/a		187	
5	Transactions de remplacement du marché primaire	0	0	599	n/a		599	
6	Total sujet à bonification				522		6 231	
Exemple de partage % Clientèle / % Gaz Métro					Clientèle	Gaz Métro	Clientèle	Gaz Métro
					000 \$	000 \$	000 \$	000 \$
7	90 % / 10 %				469	52	5 608	623
8	85 % / 15 %				443	78	5 297	935
9	80 % / 20 %				417	104	4 985	1 246
10	75 % / 25 %				391	130	4 674	1 558

2 Il est à noter que l'évaluation des revenus pour les transactions de remplacement du marché
3 primaire a été effectuée en considérant la structure d'approvisionnement déplacée à Dawn
4 puisque, dans les faits, le calcul se ferait selon cette base.

**4.5. Traitement de la réserve de capacité de transport prévue par la Politique
énergétique 2030**

5 Le 7 avril 2016, le gouvernement du Québec, par l'entremise du ministère de l'Énergie et des
6 Ressources naturelles, lançait sa nouvelle Politique énergétique à l'horizon 2030 (« PE »). Le
7 9 décembre 2016, la Loi concernant la mise en œuvre de la Politique énergétique 2030 et
8 modifiant diverses dispositions législatives a été adoptée par l'Assemblée nationale (« Loi de
9 mise en œuvre »). Parmi les orientations de ce plan énergétique québécois à long terme
10 reprises dans la Loi de mise en œuvre, on retrouve notamment l'exigence pour la Régie de

1 tenir compte, dans la fixation d'un tarif de transport de gaz naturel, de la marge excédentaire
2 de capacité de transport de gaz naturel (ne pouvant excéder 10 % des livraisons annuelles du
3 distributeur) visant à favoriser l'implantation de grands projets industriels au Québec.

4 Cette capacité de transport, mise en place pour répondre aux besoins futurs de demande,
5 serait probablement excédentaire, en tout ou en partie, aux besoins d'approvisionnement de
6 l'année étudiée et donc sujette à optimisation.

7 La possibilité d'assujettir à la bonification les transactions reliées à la marge excédentaire
8 devra être examinée en considérant la complexité associée au traitement de celle-ci. En effet,
9 la marge excédentaire serait évaluée à chaque cause tarifaire et l'excédent de capacité de
10 transport aux besoins d'approvisionnement⁸ en hiver serait alors identifié. Cet excédent de
11 capacité pour l'année étudiée pourrait être inférieur (voire nul selon la croissance), égal ou
12 supérieur à la marge excédentaire prévue à la Loi de mise en œuvre. Or, selon la fluctuation
13 de la demande, les besoins d'approvisionnement peuvent varier mensuellement sur la période
14 d'hiver de l'année étudiée. Ainsi, le positionnement de l'excédent face à la réserve pour la
15 période d'hiver pourrait être appelé à changer. Cette situation amènerait alors un
16 questionnement sur l'excédent de capacité associé à la réserve pour la période d'été :
17 l'excédent identifié initialement à la cause tarifaire ou le dernier excédent évalué sur la période
18 d'hiver.

19 Ainsi, Gaz Métro souhaite consulter les intervenants sur le traitement de cette marge
20 excédentaire dans le cadre de l'application de l'indicateur de performance.

5. CALENDRIER DES ÉTAPES SUBSÉQUENTES

21 Gaz Métro vise une mise en application du nouvel indicateur de performance visant l'optimisation
22 des outils d'approvisionnement au cours de l'année financière 2018 dès la réception d'une
23 décision favorable de la Régie. Ainsi, le calendrier proposé a été établi de façon à permettre à la
24 Régie de rendre une décision dans cet horizon, mais pas obligatoirement avant le début de

⁸ Le maximum entre la demande continue en journée de pointe et les besoins pour répondre à l'hiver extrême.

1 l'année financière. Pour la période intérimaire, Gaz Métro continuerait d'utiliser l'indicateur de
2 performance actuel.

3 Le tableau suivant propose les étapes subséquentes ainsi que les échéances envisagées par
4 Gaz Métro pour le traitement de ce dossier.

CALENDRIER PROPOSÉ	
Séances techniques avec la Régie et les intervenants	Printemps 2017
Dépôt des commentaires écrits des intervenants	Fin printemps 2017
Dépôt de la preuve de Gaz Métro	Été 2017

CONCLUSION

5 L'approche consultative préconisée par Gaz Métro dans le présent dossier vise à élaborer un
6 mécanisme incitatif simple, axé sur des transactions d'optimisation ciblées et fondé sur les
7 principes de l'équité et de la transparence. Une approche qui selon le distributeur, peut favoriser
8 l'émergence d'un consensus. Ainsi, Gaz Métro juge que les séances de travail prévues et
9 approuvées par la décision D-2014-201 constituent un forum opportun pour présenter ses
10 réflexions au personnel technique de la Régie et échanger avec les intervenants sur les
11 paramètres appropriés d'un incitatif qui encouragera le distributeur à accroître ses efforts
12 d'optimisation pour effectuer davantage de transactions qui seront au bénéfice de sa clientèle.

13 À la lumière des pistes de réflexion avancées précédemment et des conclusions du rapport de
14 balisage de Black & Veatch, Gaz Métro entend donc aborder en groupe de travail le type de
15 transactions à considérer à la bonification, incluant le traitement de la réserve de capacité de
16 transport prévue par la PE 2030, ainsi que la révision du mode de partage. Ce mécanisme devrait
17 être établi de façon à s'assurer d'un traitement juste et équitable tout en tenant compte de la
18 transparence entourant l'évaluation de la performance de Gaz Métro.

19 L'objectif principal de cette consultation est d'en arriver à un incitatif d'optimisation adapté aux
20 nouvelles réalités gazières, reflétant les conditions présentes chez les distributeurs gaziers
21 comparables ayant une forme de mécanisme incitatif visant les outils d'approvisionnement et qui
22 serait au bénéfice de la clientèle et de Gaz Métro.

1
2
3
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5

Gaz Métro demande à la Régie de :

- **approuver le calendrier proposé à la section 5 visant une mise en application du nouvel incitatif de performance visant l'optimisation des outils d'approvisionnement pour l'année financière 2018; et**
- **convoquer les séances de travail.**

ANNEXE

Annexe 1 : Rapport de Black & Veatch – Evaluation of Gas Procurement Incentive Mechanisms in North America

EVALUATION OF GAS PROCUREMENT INCENTIVE MECHANISMS IN NORTH AMERICA

B&V PROJECT NO. 190835

PREPARED FOR

Gaz Métro Limited Partnership

December 16, 2016



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Glossary of Terms

AMA	Asset Management Agreement
Bcf	One billion cubic feet. In the context of LNG, the gas-to-liquid equivalency is approximately 1 Bcf (gas) = 17,200 tonnes (liquid)
Bcf/d	One billion cubic feet per day
Capacity Release (CR)	The assigning of pipeline capacity to a Third-Party Shipper
FOM	First of Month Gas Index price
GPIM	Gas Procurement Incentive Mechanism
Henry Hub	Located in U.S. Louisiana, and is one of the primary pricing points for the North American natural gas market
LDC	Local Gas Distribution Company
MMcf/d	One million cubic feet per day
MMBtu	One million British Thermal Units 1 MMBtu = 1 Dekatherm (Dth).
MMBtu/d	One million British Thermal Units per day
Off-System Sales (OSS)	Sale of gas commodity to a non-regulated customer
PGA	Purchase Gas Adjustment
RCI	Residential, Commercial and Industrial
Spot Gas	Daily gas price purchases
TJ	Terajoules (one trillion joules)
WCSB	Western Canadian Sedimentary Basin

1 Executive Summary

1.1 PURPOSE AND PROJECT SCOPE

Black & Veatch Management Consulting, LLC (“Black & Veatch”) was retained by Gaz Métro Limited Partnership (“Gaz Métro”) to identify and evaluate various types of Gas Procurement Incentive Mechanisms (“GPIMs”) that have been approved by utility regulators and implemented in North America. As part of this research, Black & Veatch examined the regulatory landscape and gas market conditions that would impact the success of the various types of GPIMs we identified in our research.

Black & Veatch grouped the GPIMs currently in operation into two distinct categories:

1. A “full” GPIM refers to an incentive mechanism that includes all components of a gas utility’s supply and capacity portfolio.
2. A “partial” GPIM refers to an incentive mechanism that excludes the gas commodity cost component of the gas utility’s portfolio.

For each selected GPIM, Black & Veatch reviewed the purpose, design, and mechanics of the particular GPIM, and where available, identified the performance results of the GPIM. Using this research, Black & Veatch developed the conceptual underpinnings and key design elements that are most prevalent in the approved GPIMs to help inform our evaluation of a preferred approach to designing a GPIM and to establish a specific recommendation for Gaz Métro.

We then conducted a high level review of Gaz Métro’s current gas supply portfolio and its future gas supply plans within the context of the natural gas markets in North America to determine if the use of performance incentives would enable Gaz Métro to achieve a higher level of performance in its weighted average cost of gas and/or in the costs of its gas commodity, gas transportation, and gas storage (load balancing) components during future time periods.

1.2 RESEARCH APPROACH AND METHODOLOGY

Black & Veatch employed various methodologies to conduct its industry research on GPIMs. First, Black & Veatch relied on our regulatory experience and commercial familiarity with the GPIMs currently in operation. Secondly, we conducted an industry-wide search using SNL Energy, an institutional news aggregator, and other proprietary databases to develop a more complete list of GPIMs.

Black & Veatch then confirmed the existence of the GPIM in the particular utility’s currently effective tariff. If there was not sufficient information available in the utility’s tariff, Black & Veatch performed a further search on the state or provincial regulatory commission’s website for recent purchase gas adjustment (“PGA”) docket information and filings. After compiling all publicly available data into a consolidated matrix, Black & Veatch reached out to the targeted utilities to gather additional background information, as needed. Figure 1 below summarizes the approach and methodology followed by Black & Veatch to complete the required industry research.

Figure 1 Black & Veatch's GPIM Research Approach and Methodology



A complete listing of Black & Veatch's industry research of GPIMs in North America is presented in Appendices A and B to this Report.

1.3 FINDINGS AND RECOMMENDATIONS

Black & Veatch's findings and recommendations are based on the primary research we conducted in North America to determine which states and provinces have GPIM programs approved for gas utilities. Our findings and conclusions are presented below:

- There are sixteen (16) states in the U.S. and three (3) provinces in Canada¹ that currently have GPIM programs approved for gas utilities.
- Full GPIM programs in North America have well defined risks and rewards that provide gas utilities with proper incentives to reduce ratepayer gas costs.
 - *Full* GPIM programs typically will include gas commodity costs, off-system sales, and interstate pipeline/storage capacity release revenues.
 - *Partial* GPIM programs exclude gas commodity costs, and include only off-system sales and interstate pipeline/storage capacity release revenues.
 - The risk/reward balance must work for both the customer and the gas utility, where cost savings and/or cost overruns are partially shared between the utility and customer.
- A utility's gas supply portfolio flexibility is a key driver to the achievement of gas commodity savings, capacity release revenues or off-system sales.
 - Larger gas utilities with ample gas pipeline capacity and access to gas storage will have a greater level of operational flexibility to create opportunities to lower gas costs, or to generate incremental shared revenues.

¹ Including Gaz Métro's current GPIM in Quebec.

- Gas commodity benchmarks are established as objective standards and are based on published or reported indexes, not on a pre-determined fixed price.
 - Gas utilities develop gas commodity benchmarks based on historical purchase patterns at various published price indices. If Henry Hub gas prices were to rise or fall in a given year, the benchmark price will closely track its movement.
- Annual benefits achieved by gas utilities are not always made publically available.
 - These performance reports are sometimes treated confidentially by regulators due to sensitive gas price information and are not accessible to the general public.
 - Black & Veatch made efforts to research the benefits achieved in each GPIM plan, however, some benefit amounts achieved by gas utilities remain unknown due to their confidential treatment by regulators.
- The use of Asset Management Agreements (“AMAs”) by some gas utilities can limit the transparency of gas cost savings, and incremental revenues from off-system sales or capacity release.
 - AMAs are typically structured between the gas utility and gas marketer, where the gas marketer manages the entire gas supply and capacity portfolio for the gas utility. These agreements normally have to be approved by the regulator, with the understanding that providing additional flexibility to the gas utility would allow the gas marketer under the AMA to maximize optimization revenues.
 - AMAs typically offer a larger percentage of optimization revenues beyond a negotiated threshold; however, there are a limited number of ways to reconcile the revenues achieved with the specific asset(s) that generate the value.
- The reoccurring theme among all regulatory discussions over the design of GPIMs is the appropriate balance between risk and reward for the utility and its ratepayers.
- Gaz Métro’s gas supply portfolio has recently completed its shift of gas commodity purchases and pipeline capacity from Empress to Dawn. This recently completed change would limit the ability to establish a stable historical benchmark and the ability to measure savings created under a GPIM based on the guidelines of the Régie de l’énergie (the “Régie”).² Additional changes to Gaz Métro’s gas supply portfolio are expected after December 2020, when further changes to the 85 TJ of long-haul firm capacity by TransCanada from Empress to Eastern Canada will occur.

Based on Black & Veatch’s review of the approved GPIMs in North America, our understanding of the Régie’s principal GPIM guidelines, the structure and utilization of Gaz Métro’s current gas supply portfolio, and the current gas market conditions faced by Gaz Métro, Black & Veatch makes the following recommendations to Gaz Métro related to its available GPIM options:

- Gaz Métro should not implement a full GPIM at this time.
- Gaz Metro should continue with the current method of optimizing its capacity-related financial transactions as defined and approved by the Régie.

² See Decision D-2013-091, dated June 30, 2013 (in R-3809-2012 – Phase 1).

- Gaz Métro should not consider the implementation of a full GPIM until it experiences a consistent and stable gas supply and capacity portfolio over at least three (3) consecutive years. If and when that occurs, a full GPIM might be reconsidered if Gaz Métro and the Régie can agree upon a mutually acceptable set of principles to guide the design of the mechanism and a level of regulatory oversight that can provide Gaz Métro with the necessary managerial discretion to plan and procure its gas supply and capacity portfolio so that greater benefits can be realized by the utility and its customers compared to the then current situation.

Finally, Black & Veatch supports Gaz Métro's interest in including in its current partial GPIM two additional types of transactions related to gas supply optimization that would benefit Gaz Métro customers. Gaz Métro proposes to include savings based on the avoided costs related to the use of secondary market transportation capacity instead of using its existing transportation capacity. As an example, the secondary capacity market will allow Gaz Métro to use lower cost capacity instead of the existing overrun transportation services on Union Gas Limited ("Union").

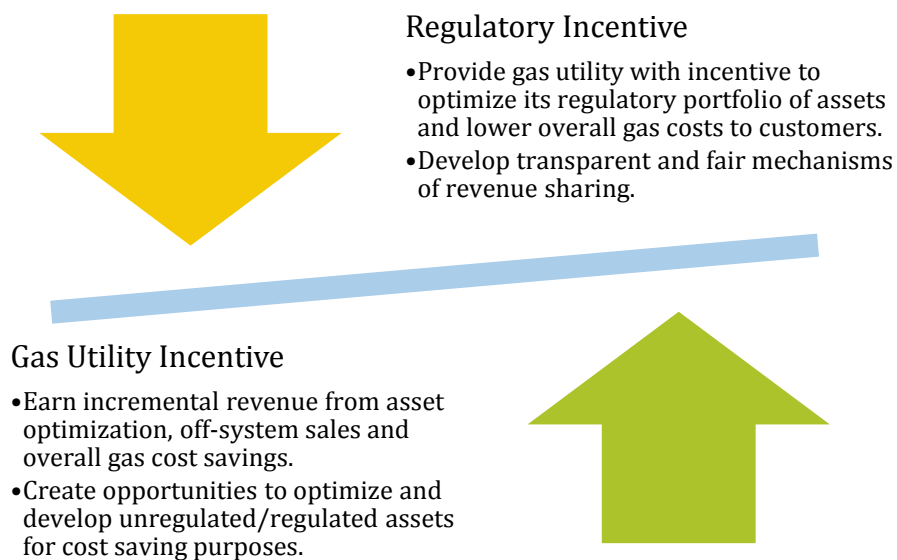
In a similar way, the second proposed type of transaction will provide additional savings based on the lower secondary market cost of short-haul transportation from TransCanada and Union. Gaz Métro believes that the use of the secondary market capacity will provide avoided cost savings over the existing transportation capacity on the TransCanada and Union systems.

2 The Basic Structure of GPIMs

2.1 PURPOSE OF GPIMs

A properly designed GPIM must balance risk and reward for the gas utility and its customers. Regulated assets that are designed to meet the gas utility's peak day requirements are underutilized at times, by definition. The optimization of these assets can generate revenues that flow back to customers and ultimately lower their overall cost of gas. A GPIM allows a portion of those revenues to be retained by the gas utility which motivates optimization on the underutilization of assets while maintaining reliability for peak day needs. Figure 2 below depicts the purpose of a GPIM and the balance of the incentives desired by the regulator and gas utility.

Figure 2 Purpose of a GPIM



2.2 FULL AND PARTIAL GPIMs

In addition to identifying the key design characteristics among the GPIMs that were identified and researched, Black & Veatch observed that the GPIMs that were reviewed could be grouped into two distinct categories of mechanism types, as indicated below:

1. A “full” GPIM refers to an incentive mechanism that includes all components of a gas utility's supply and capacity portfolio.
2. A “partial” GPIM refers to an incentive mechanism that excludes the gas commodity cost component of the gas utility's portfolio.

2.3 KEY DESIGN CHARACTERISTICS OF GPIMs

GPIMs have several key design characteristics that help achieve the balance between risk and reward within the particular market to which each mechanism applies. Through the research conducted by Black & Veatch, we found that there are a number of similarities among the various types of GPIMs. These key design characteristics include:

- **Review Period for Cost Reconciliation** - What is the preferred frequency of GPIM-related regulatory filings to review the periodic performance of the mechanism?
- **Tolerance Band for Costs/Savings** - How much can commodity gas costs rise or fall before revenue and cost sharing occur?
- **Gas Commodity Benchmark** – How is the appropriate benchmark determined for purposes of evaluating the actual gas commodity costs incurred by the gas utility?
- **Revenue Sharing Mechanism** - What is the appropriate sharing percentage for the achieved savings or costs? How should different types of sales or optimization transactions be treated?
- **Annual Benefits Achieved** - Is there a fixed cap on benefits or is it a percentage of total gas commodity costs?

Table 1 below provides a listing of the various GPIM design characteristics found in nearly all of the approved GPIMs identified by Black & Veatch.

Table 1 GPIM Design Characteristics

KEY DESIGN CHARACTERISTIC	DEFINITION	EXAMPLE(S)
Review Period	The time between filings with the regulatory agency to reconcile costs/savings	<ul style="list-style-type: none"> ▪ Annual ▪ Quarterly/ Seasonal (Winter/ Summer) ▪ Monthly
Tolerance Band	A range of percentages of costs that customers are responsible for. If costs are outside the tolerance band, sharing mechanisms would determine what amounts the utility and its customers receive	Total Costs: <ul style="list-style-type: none"> ▪ 99%-102% ▪ 99.75%-101.25% ▪ 97.4%-102%
Benchmark and Sharing Mechanism	Defined sharing percentages between the utility and its customers for cost savings related to gas commodity, and revenues from Off-System Sales (OSS), and Capacity Release (CR) as part of its gas supply portfolio	<ul style="list-style-type: none"> ▪ Commodity: 50%/50% sharing over 102% of benchmark. 20%/80% (utility/customer) sharing under 99% of benchmark (savings); ▪ Off-System Sales (OSS): 25%/75% CR: 30%/70% (utility/customer)
Gas Commodity Benchmark	A defined methodology to calculate the utility's gas commodity costs based on historical gas purchases locations at published price indices	Volume weighted average of spot/FOM market indices at 2-3 traditional upstream points
Annual Benefits Achieved	Annual benefits the utility was able to recognize and return to shareholders. Often contains a cap on annual benefits achieved.	<ul style="list-style-type: none"> ▪ Range of annual benefits: \$0 - \$15 million ▪ Capped at lower of fixed dollar amount or percentage of actual gas commodity costs

2.4 ILLUSTRATIVE EXAMPLES OF GPIMs

Through Black & Veatch's comprehensive research, several GPIMs were selected to illustrate examples of the structure of the other GPIMs currently in operation in the North American natural gas market.

2.4.1 Canadian GPIMs

FortisBC, a British Columbia gas utility, has a comprehensive, full GPIM plan with several components and incentives. FortisBC serves nearly one million customers with approximately 114 Bcf in residential, commercial and industrial ("RCI") sales, and approximately 77 Bcf in transport volumes. While FortisBC is much larger than Gaz Métro based on the total number of customers served, the two utilities are comparable in total throughput volumes. Gaz Métro has nearly 200,000 customers and total sales and transport volumes of approximately 200 Bcf.

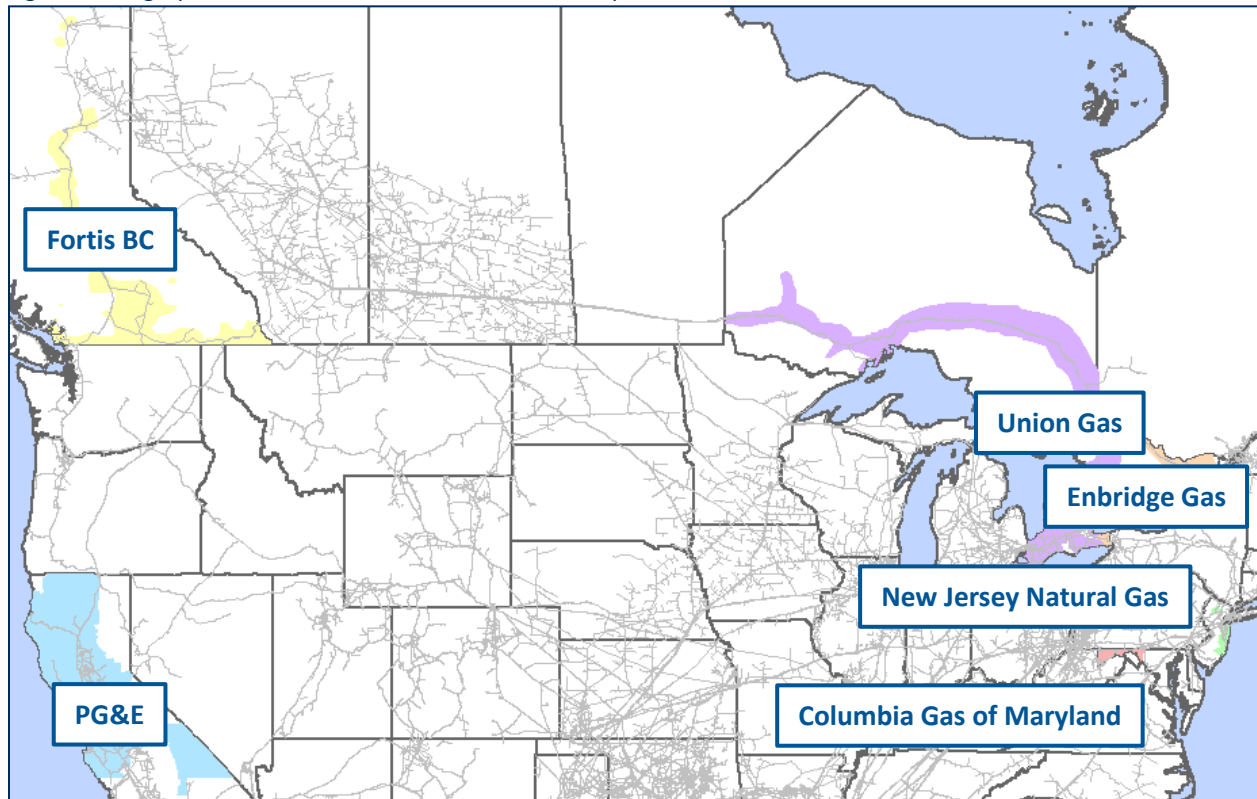
Union Gas Limited, an Ontario gas utility, has a partial GPIM that has been in effect since 2005. Union serves over 1.4 million customers with approximately 521 Bcf in RCI sales, and approximately 695 Bcf in transport volumes. Union's partial GPIM is structured around its extensive gas storage and transportation assets located at or near Dawn. The mechanism incents Union to optimize transactions related to its upstream transportation capacity, short-term storage, and gas balancing services.

Enbridge Gas Distribution, an Ontario gas utility, has a partial GPIM that has been in effect since 2005. Enbridge serves over 2.1 million customers in the greater Toronto area and in other less populated parts of Ontario. It has approximately 269 Bcf in RCI sales and 153 Bcf in transport volumes. Enbridge's partial GPIM is based upon the optimization of its transportation and storage assets and contracted capacity.

2.4.2 U.S. GPIMs

PG&E, a California combination utility, has over four times the number of customers as FortisBC with 4.4 million customers, approximately 184 Bcf of RCI sales, and 326 Bcf of transport. PG&E also has a comprehensive, full GPIM plan utilizing a tolerance band that shares cost savings and overruns between the utility and its customers, with a cap stated as a percentage of the total value of the utility's gas supply portfolio. Figure 3 below shows the geographic location of each utility's service territory

Figure 3 Geographic Locations of Illustrative GPIM Examples



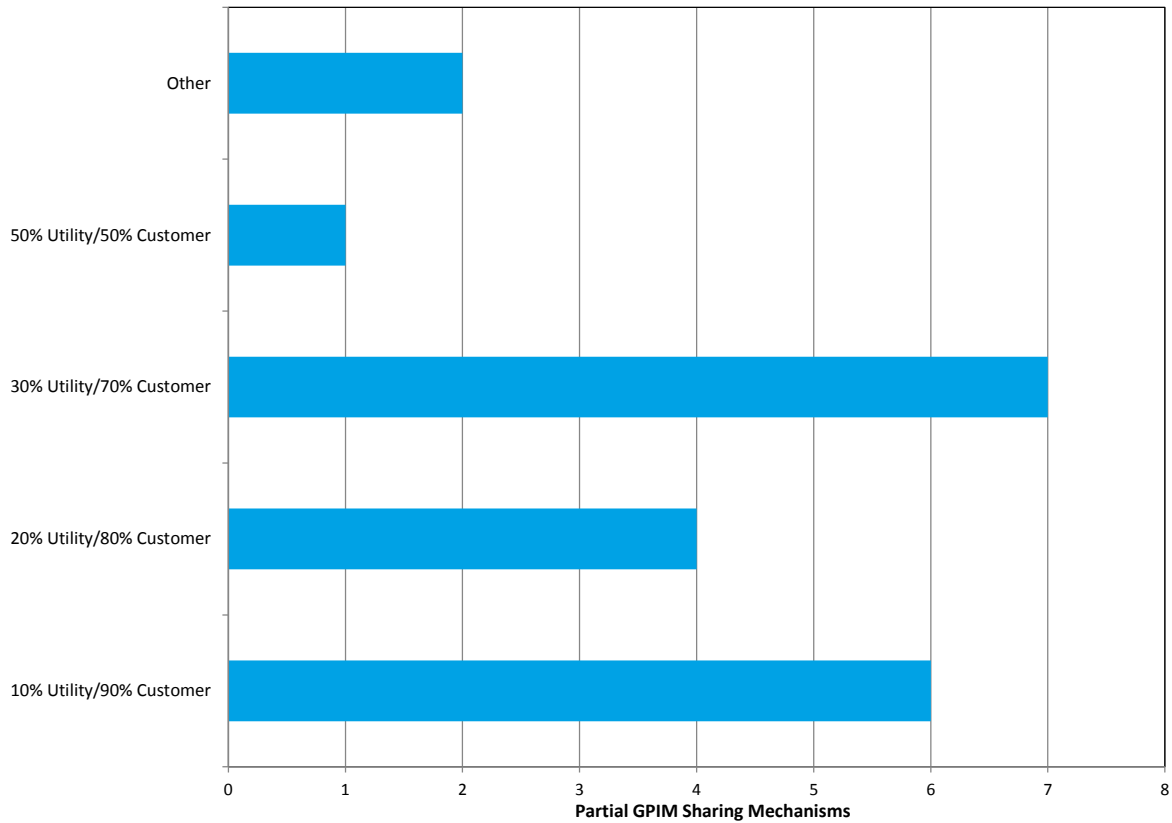
A much smaller utility, Columbia Gas of Maryland (part of NiSource Inc.), has approximately 135,000 customers with 11 Bcf of RCI sales and 25 Bcf of transport. Columbia Gas of Maryland also utilizes a full GPIM and a sharing mechanism that includes cost savings and overages, but there is no cap on the incentive.

The final illustrative example is New Jersey Natural Gas Company with approximately 500,000 customers, 48 Bcf in RCI sales and 18 Bcf in transport. This utility utilizes a partial GPIM that excludes the commodity portion of the utility's gas supply portfolio and focuses on incentives.

2.4.3 Sharing Mechanisms in Partial GPIMs

As shown in Figure 4 below, there is a range of sharing mechanisms reflected in partial GPIMs that offer to balance the risk and reward within the particular gas market that encourages the utility to optimize its portfolio of assets and to reduce overall costs to the customer. While the utilities operate under different market conditions and regulatory regimes, the types of sharing mechanisms center around the 20% Utility/80% Customer and 30% Utility/70% Customer sharing percentages.

Figure 4 The Range and Frequency of Sharing Mechanism Percentages (Partial GPIMs)



A complete listing of Black & Veatch’s industry research of GPIMs in North America is presented in Appendices A and B to this Report. Appendix A is a summary of full GPIMs and Appendix B is a summary of partial GPIMs.

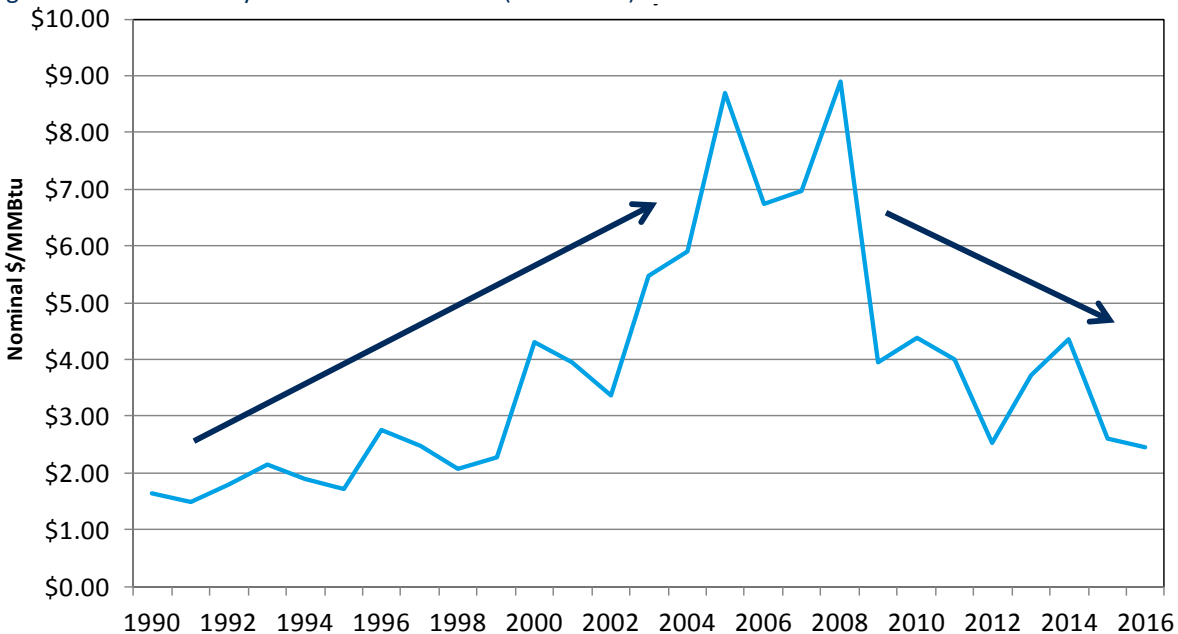
3 Gas Industry Trends and GPIMs

3.1 CHARACTERISTICS OF TODAY’S NORTH AMERICAN GAS MARKET

3.1.1 Gas Supply and Capacity Dynamics

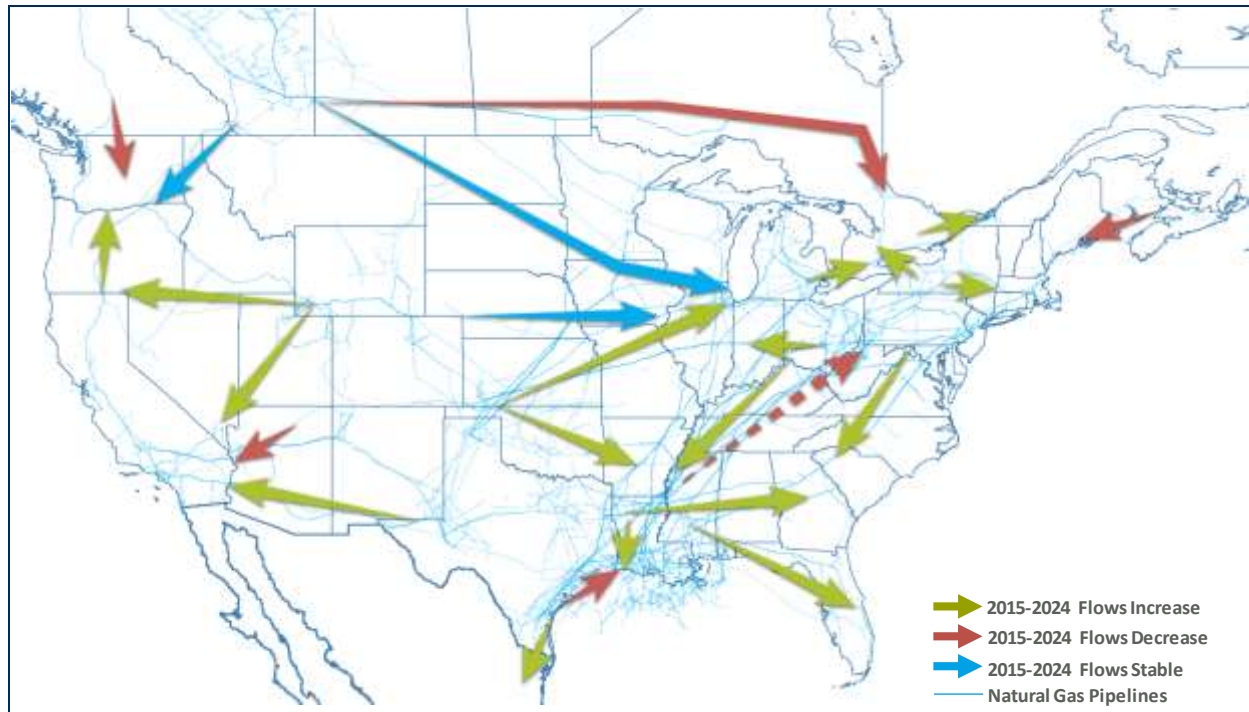
The emergence of low cost shale gas production marks a pivotal shift in the North American gas market, providing new supply alternatives to traditional customers. The continued development of the Marcellus and Utica Shale has led to a fundamental change in gas supply procurement and the use of gas pipeline and storage contracts from traditional sources like the Western Canadian Sedimentary Basin (“WCSB”) and the offshore Gulf of Mexico. As shale gas producers have become more efficient with horizontal pad drilling and multi-stage fracking techniques, gas production has steadily grown since 2009 while lowering natural gas prices as shown in Figure 5 below.

Figure 5 Historical Henry Hub Natural Gas Price (1990-2016)



The emergence of new supplies has provided gas utilities and regulators with an incentive to re-examine gas procurement strategies as new infrastructure is built and new pricing hubs develop. Traditional market and supply area distinctions have been blurred, as pipelines alter flow patterns to accommodate new supplies. As it relates to Gaz Métro, the emergence of Dawn as a liquid gas supply hub has altered the gas utility’s supply planning and procurement approach and greatly diminished its need to source back to the WCSB. Many shippers may prefer short-haul over long-haul transportation services as a way to reduce their overall costs. Figure 6 below highlights the projected shifts in gas pipeline flow patterns in North America over the next decade.

Figure 6 Projected Gas Pipeline Flow Pattern Shifts (2015-2024)



In addition, a majority of gas utilities now rely upon Asset Management Agreements (“AMAs”), where third-party arrangements relieve the gas utility from directly managing the optimization of its gas supply and capacity portfolio. As most gas supply portfolios are required to meet design day requirements, there would typically be ample opportunity for the asset manager to create additional value through capacity release and asset optimization. As the overhang in gas supply continues, asset managers have seen steady reductions in standalone optimization values. Only through the optimization of several combined gas supply portfolios can asset managers generate sizeable revenues. The impact of gas market changes on GPIMs is discussed in the following section.

3.1.2 Impact of Gas Market Changes on GPIMs

The first GPIMs were approved in 1993 for the three major gas utilities serving California.³ By 2003, there were seventeen (17) states in the U.S. in which “full” GPIMs were approved for gas utilities, as depicted in Figure 7 below.

³ PG&E, Southern California Gas Company and San Diego Gas and Electric Company (both part of Sempra Energy).

Rapidly evolving market changes, as discussed above, have ultimately led some gas utilities and regulators to conclude that with lower gas prices and less price volatility, there are fewer opportunities and a diminished level of savings to be realized for utility shareholders and customers under a “full” GPIM. As gas portfolios evolve over the next few years, even with diminished savings associated with capacity release and off-system sales, there is a continuing interest in the operation of “partial” GPIMs in an effort to maximize the financial benefits from such transactions.

Other gas market conditions have also lessened the interest in “full” GPIMs in recent times. The shift in the North American natural gas demand and supply balance has reduced some of the interest. The abundance of low cost supplies available from emerging shale gas basins has reduced the overall cost of gas to consumers, and the largest potential share of cost savings. Additional pipeline capacity from the supply basin to market hubs has allowed LDCs and gas marketers to buy at various city-gates or hubs with just short-haul transportation.

Smaller gas supply and capacity portfolios of gas utilities caused by end-use customers procuring their own gas supplies from gas marketers have reduced the opportunity for meaningful financial rewards for gas utilities and savings opportunities for customers. The abundance of gas storage capacity has also minimized a historically valuable optimization asset. Continued efficiency gains in residential and commercial sectors have offset customer growth and gradually reduce design day gas supply portfolio requirements. Under these market conditions, a greater reliance on AMAs and its ability to combine numerous gas supply portfolios provides for an optimization revenue stream that would not be possible under a “full” or “partial” GPIM.

3.2 EXPERIENCED BENEFITS OF GPIMs

As a fundamental concept, a well-conceived GPIM plan provides a means to encourage higher levels of gas supply portfolio performance, without unduly jeopardizing service, by providing utility management with an opportunity to appropriately balance risk and reward between customers and the utility. At the same time, GPIMs are also designed to protect gas customers from excess purchased gas costs in uncertain gas markets. Ultimately, a desirable outcome of a GPIM plan will be a closer alignment of a utility’s customer and shareholder interests.

A well-designed and balanced GPIM could also reduce the level of regulatory oversight of the utility’s gas supply planning and procurement activities. It allows for periodic reviews and evaluations to benchmark the utility’s performance against the portfolios of other gas utilities. In addition, a simple and transparent GPIM can provide a good foundation to help build trust among the utility, regulators, and other stakeholder groups. This would also allow for easy auditing and review among the gas utility’s stakeholders. Finally, “partial” GPIMs often have relatively straightforward sharing mechanisms that make their operation transparent for both the regulator and utility.

Based on our findings, many gas utilities have experienced (especially in past years) meaningful financial benefits from GPIMs, which ultimately also reduce overall ratepayer costs. Some examples of successful GPIMs are presented below:

- *British Columbia*: FortisBC (*Full GPIM*) has achieved annual benefits in excess of \$1million since 2013.
- *California*: PG&E and SoCalGas (*Full GPIMs*) have both experienced annual benefits in excess of \$5 million in the recent past. Indicating customers have benefited in excess of \$20 million annually.
- *Kentucky*: The gas utilities' *Full GPIMs* have been in place for over a decade and generate benefits for the utility and savings for customers.
- *Maryland*: BG&E and Washington Gas (*Full GPIMs*) have earned significant financial benefits from their incentive mechanisms in 2014 and 2015.
- *Ontario*: Union Gas Limited and Enbridge Gas Distribution (*Partial GPIMs*) generated nearly \$1 million in annual benefits each in 2014 which represents nearly \$9 million in savings for customers.
- *New Jersey*: Through *Partial GPIMs*, New Jersey Natural Gas Company earned approximately \$15 million in benefits in 2015 and South Jersey Gas Company received \$2.2 million in benefits the same year.
- *Pennsylvania*: Participation in a *Partial GPIM* program has enabled Pennsylvania gas utilities to maximize the use of utility's assets and share in the benefit.

3.3 REGULATORY ISSUES RELATED TO GPIMs

The nature of a utility's gas procurement process and the process of recovering such costs in rates requires ongoing regulatory oversight of this important part of the gas utility business. The rates derived under Purchased Gas Adjustment ("PGA") mechanisms (or similarly named and structured mechanisms to facilitate gas cost recovery) are adjusted either on a monthly, quarterly, or annual basis. The revenues collected through the PGA must be reconciled (most often on an annual basis) and trued-up with the utility's actual purchased gas costs. Due to the growing complexity of a utility's gas supply and capacity transactions, it requires a regulator to periodically undertake an audit of such transactions. With the advent of end-use transportation service, the regulator must ensure that the utility's costs of gas calculations are correct so that the customers' choice of gas supplier is based upon an unbiased comparison of gas prices available in the marketplace.

Certain concerns have been raised over the years by some regulators and other parties related to claimed deficiencies in the gas utility's GPIM, including:

- Fails to achieve all of the desired design objectives.
- Superior performance by the utility may not be fostered by the nature and level of the incentives (i.e., the risk/reward ratio is unbalanced).
- Provides weak or distorted incentives for some types of gas procurement activities and actions.
- The sizes of utility rewards are out of line with the customer benefits.
- Exposes the utility and customers to some risk of awards or penalties that may at times be excessive or unwarranted.
- Can provide for gaming opportunities on the part of the utility.
- Alleged mismanagement of assets to the detriment of customers.

- Inability to audit all details of the utility’s gas commodity and capacity transactions.

A reoccurring theme in many GPIM-related regulatory proceedings is the balance between risk and reward for the utility and its ratepayers. Table 2 below provides examples of the issues raised in various regulatory jurisdictions related to GPIMs.

Table 2 Examples of GPIM Issues Raised in Regulatory Proceedings

REGULATORY JURISDICTION	GPIM ISSUE
Canada	
British Columbia	Detailed review and re-specification in 2013 of the GPIM benchmark and related design elements for FortisBC, including multiple technical workshops for interested parties.
Ontario	Multiple proceedings during 2011-2013 to investigate the treatment of gas storage assets for regulated and unregulated customers and the sharing of benefits for Union Gas Limited and Enbridge Gas Distribution.
United States	
California	In late 2002, the California Public Utilities Commission opened an investigation into the gas market activities of the gas utilities in the state and their impact on the gas price spikes experienced at the California Border from March 2000 through May 2001. It was prompted by a previous regulatory review of the utilities’ experimental GPIMs and the concerns raised by some parties of what caused of the extreme border price spikes of natural gas in 2000 and 2001.
Illinois	A 10-year long legal dispute involving Nicor Gas’ GPIM which was initiated as a result of a “whistleblower” fax containing allegations about the operation of the utility’s GPIM as it related to its storage operations and gas inventory levels. The Illinois Commerce Commission terminated the mechanism and ordered the utility to refund \$72 million to its customers in 2012.
Kentucky	A 2013 proceeding related to a request by Columbia Gas of Kentucky to extend its GPIM until March 31, 2017. The request was denied by the Kentucky Public Service Commission and it ordered the utility to perform a review of the GPIMs of the other Kentucky gas utilities, as well as any other mechanisms or information available concerning best practices with regard to GPIMs.
Maryland	A regulatory investigation in 2008-2009 into Washington Gas Light Company’s asset management practices, the incentive ratio for its off-system sales program, its accounting practices pertaining to storage gas and the cost recovery of its natural gas purchases. A major focus of the investigation was the utility’s change from a third-party asset manager to self-management of its gas capacity resources.
Oregon	An investigation initiated in 2014 by the Oregon Public Utilities Commission related to NW Natural’s interstate storage and optimization sharing methods and activities. The Citizens Utility Board argues that the utility’s optimization activities represent basic LDC activities that do not require the financial incentives awarded under the current framework. As a result, this party proposes that 100% of the net revenues from storage activities should be credited to the utility’s regulated customers.

4 Implications for Gaz Métro

4.1 GPIM GUIDELINES ESTABLISHED BY THE RÉGIE

The interest by the Régie in incentive mechanisms for utilities has a long history, starting over sixteen years ago in a regulatory proceeding introducing incentive mechanisms as a means to promote the improvement of performance of a gas utility such as Gaz Métro and the satisfaction of consumers' needs.⁵ In a subsequent regulatory decision, the Régie initiated a process to establish an incentive mechanism for Gaz Métro.⁶ In the various regulatory decisions that followed, the Régie articulated the objectives it sought to achieve under an incentive mechanism⁷, including:

- **The creation of value**

The Régie defines value creation from a long-term perspective as an increase in income, optimization of operating costs, optimization of asset management, improving the efficiency of energy consumption, and an increase in efforts to reduce more polluting forms of energy.

- **Fair and equitable sharing**

The Régie relates fair and equitable sharing to profits and losses, while ensuring the maintaining of service quality and network security as well as a reduction in the impact of and improved energy efficiency for customers.

- **A cooperative approach**

The Régie expects that the utility and its stakeholders will work together to find satisfactory solutions to address the issues or concerns that may arise during the life of the particular incentive mechanism.

- **Flexibility and simplicity**

The Régie defines flexibility and simplicity as being reflected in a comprehensive incentive mechanism (rather than a mechanism dealing with specific elements of the cost of service), which reduces the need for micro-management by the Régie or the intervenors and leaves the gas utility with the responsibility for choosing ways to improve performance; some flexibility with respect to tariffs; the establishment of an ongoing process of consultation between stakeholders to ensure the harmonious application and effective monitoring of the agreed upon incentive mechanism.

- **The sustainability of the process**

The Régie defines sustainability of the process as the establishment of a continuous process of sharing as well as by the establishment of a process to renew the incentive mechanism before it expires.

- **Compliance with the public interest**

The Régie intends to achieve compliance with the public interest through the inclusion of the concept of sustainable development by addressing certain social and environmental concerns such as the protection of people and low-income families, the reduction of net environmental

⁵ See Decision D-2000-183, dated October 5, 2000.

⁶ See Decision D-2002-177, dated August 21, 2002.

⁷ These objectives are general in nature and are equally applicable to performance incentives related to the distribution and gas supply portions of a gas utility's business.

impacts related to the emission of greenhouse gases - and the improvement of energy efficiency, and maintaining service quality.⁸

In November 2012, Gaz Métro filed an application with the Régie to optimize its transportation and load balancing supply tools in the form of a partial GPIM proposal.⁹ Gaz Métro's filing contemplated that a new GPIM would be in place for its 2013-2014 fiscal year. Under its GPIM proposal, Gaz Métro sought regulatory approval to implement its GPIM for a five-year period starting on October 1, 2013.

In its Decision on Gaz Métro's proposal, the Régie concluded that the 2017 rate year would be more appropriate as the first year of implementation of a GPIM for Gaz Métro since the migration of its gas supplies at Dawn should be almost completed.¹⁰ As a result, Gaz Métro's GPIM proposal was not accepted at that time by the Régie.

As part of that same proceeding, the Régie reached some conclusions on the preferred structure of GPIMs and issued some specific directives to Gaz Métro for consideration in its future development of a GPIM, including:

■ **Inclusion of the commodity cost of gas in the GPIM**

The Régie directs Gaz Métro to include the commodity cost of gas in any future GPIM.

■ **Inclusion of the costs of gas supply planning and demand forecasting activities in the GPIM**

The Régie directs Gaz Métro to include the costs of its gas supply department and the costs related to demand forecasting activities in any future GPIM.

■ **Inclusion of LNG costs and certain revenues in the GPIM**

The Régie directs Gaz Métro to include the costs of its LNG plant and the revenues from the sale of LNG which compensates for any increases in the variable costs of operation in any future GPIM.

■ **Inclusion of an adjustment mechanism as part of the GPIM to account for the impact of any variation in the level of interruptible sales**

The Régie directs Gaz Métro to include an adjustment mechanism in any future GPIM that would neutralize the effect of volume variation from interruptible sales causing an increase or decrease in the level of the reward to Gaz Métro without creating or diminishing value under its GPIM.

■ **Implementation of the GPIM using a “mobile test year” of less than three (3) years**

The Régie directs Gaz Métro to utilize in any future GPIM a “mobile test year” consisting of an average of the two actual years closest to the “assessed” year.

⁸ See Decision D-2010-116, dated August 25, 2010, page 12. Also see Decision 2007-47, Appendix, pages 8-9.

⁹ Proposed Performance Indicator for the Optimization of Transportation and Load-Balancing Supply Tools, Descriptive Document (R-3809-2012, Phase 1), November 16, 2012.

¹⁰ See Decision D-2013-091, dated June 30, 2013 (in R-3809-2012 – Phase 1).

- **Adoption of a limit on the potential benefits (rewards) to Gaz Métro under the GPIM equal to twice the amount of the potential losses (penalties)**

The Régie directs Gaz Métro to participate in penalties of up to 50% of its participation in benefits under any future GPIM.

In addition, the Régie issued a number of other directives related to the particulars of Gaz Métro's proposed GPIM, including certain computational preferences, use of a "realization index" and restrictions on the types of gas supply contracts and optimization transactions eligible for inclusion in the GPIM reward computations.

4.2 BLACK & VEATCH'S FRAMEWORK FOR GPIM DEVELOPMENT AND IMPLEMENTATION

In its most recent GPIM proposal submitted to the Régie, Gaz Métro provided the following list of GPIM guidelines that Black & Veatch believes embodies some of the same objectives provided by the Régie that relate to the general structure of incentive mechanisms:

- Be transparent;
- Promote the creation of value;
- Measure adequately the creation of value;
- Share fairly and reasonably the created value between Gaz Métro and its customers; and
- Achieve the reduction of regulatory burdens.¹¹

Black & Veatch concurs with these guidelines and believes they are a necessary prerequisite to designing a GPIM that will truly incent the management of Gaz Métro to undertake gas supply planning and procurement activities that will promote greater performance to the benefit of the gas utility and its customers.

Black & Veatch also believes that the following threshold considerations should be evaluated in making the decision to implement a *full GPIM* for Gaz Métro:

- **Inclusion of the commodity cost of gas in the GPIM**

It would be extremely difficult to establish an objective, external, and market-based measure of performance if the commodity cost of gas was excluded from a full GPIM.

- **The GPIM should use an objective standard (the "benchmark price") to measure performance**

The benchmark should reasonably reflect the components of Gaz Métro's gas supply portfolio that are subject to the GPIM without making it overly complex to calculate and verify. The benchmark also should represent a proper "market standard", as previously mentioned, for measuring the performance of Gaz Métro's gas supply portfolio.

Gaz Métro's use of a "reference year" to measure the actual performance of its gas transportation and storage resources is a retrospective rather than forward-looking view of its

¹¹ Proposed Performance Indicator for the Optimization of Transportation and Load-Balancing Supply Tools, Descriptive Document (R-3809-2012, Phase 1), November 16, 2012, page 5.

performance. Under this situation, Gaz Métro would effectively be measuring the price performance of its gas supply portfolio against itself.

■ **Symmetrical recognition of both risks and rewards in the operation of the GPIM**

When Gaz Métro can manage its gas supply resources to achieve a level of gas costs below the level reflected in the established benchmark price, the derived benefit is shared between its customers and shareholders. Conversely, when purchased gas costs rise above the benchmark, Gaz Métro's customers and shareholders are required to absorb the costs above the benchmark level.

■ **The GPIM should be designed so that Gaz Métro is afforded a fair opportunity to achieve its overall goals**

The GPIM should provide Gaz Métro's customers with reliable gas service and lower gas prices than would be available without the GPIM. Gaz Métro should be able to earn rewards for its shareholders commensurate with its increased efforts and higher business risks.

Finally, it should be noted that Black & Veatch views certain of the directives issued by the Régie in its June 2013 Decision as being overly restrictive within the context of establishing a full GPIM for a gas utility such as Gaz Métro. Very simply, if a regulator is going to permit a gas utility to implement a full GPIM, the utility must have the full ability to plan and manage its entire gas supply and capacity portfolio to be able to respond to a dynamic gas marketplace in a manner that can maximize the price performance of the portfolio. There must be a strong level of trust between the regulator and gas utility so that the utility's management team can be confident in the decisions it makes in an effort to achieve greater performance relative to the benchmarks established by the regulator. At the same time, the regulator must trust the utility to "do the right thing" motivated by the potential risks and rewards that could accrue to the utility based on the outcomes of management's gas supply portfolio decisions.

4.3 GPIM OPTIONS CONSIDERED

Black & Veatch considered the following options for establishing a new full GPIM for Gaz Métro.

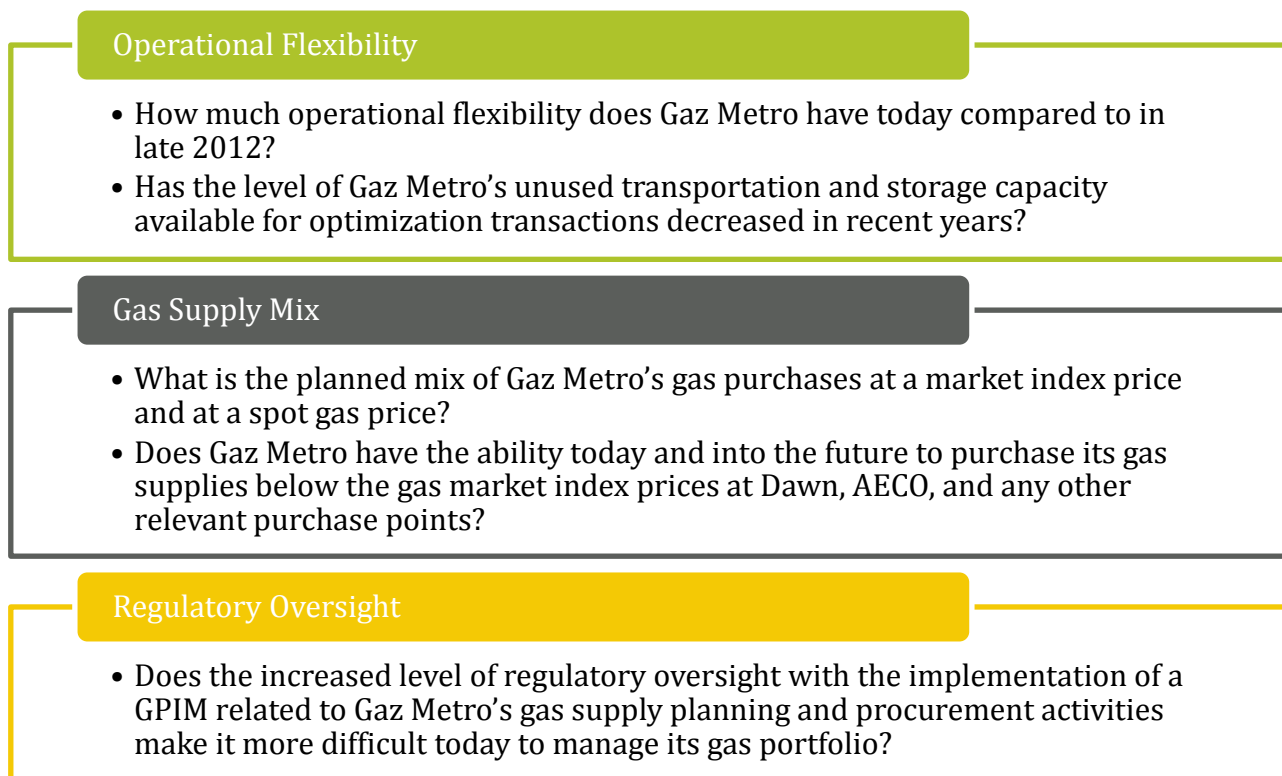
1. Design a full GPIM that satisfies each of the Régie's directives presented in Decision D-2013-091.
2. Design a full GPIM that uses as a foundation the GPIM proposed by Gaz Métro in November 2012.
3. Design a full GPIM that relies upon a structure and design elements that are different from those reflected in the GPIM proposed by Gaz Métro in November 2012 that recognize the threshold considerations discussed in the previous section and the current gas market conditions and business practices.
4. Propose to the Régie that a full GPIM for Gaz Métro should not be implemented at this time and that Gaz Métro should continue with the operation of its partial GPIM (with some minor modifications to Gaz Métro's current mechanism).

To properly consider each of these options, Black & Veatch determined if the gas market conditions that existed when the Régie issued its Decision in June of 2013 have materially changed in the three

years since the Decision was issued (and in the almost four years since Gaz Métro proposed a GPIM to the Régie in November 2012) and if some or all of the directives issued by the Régie are no longer applicable (or should be reevaluated) in the current and expected future gas market environment within which Gaz Métro operates.

To undertake this type of gas market comparison, Black & Veatch conducted a high level review of Gaz Metro’s gas supply planning and procurement activities over the last 5 years using the framework presented in Figure 9 below.

Figure 9 Framework to Review Gaz Métro Supply and Procurement Activities



4.4 GAZ MÉTRO’S RECENTLY COMPLETED CHANGE IN ITS GAS SUPPLY PORTFOLIO AND PROCUREMENT ACTIVITIES

There are several known challenges that may limit the overall viability and effectiveness of a GPIM for Gaz Métro, especially one designed as a “full” GPIM. Gaz Métro’s gas supply portfolio has just completed the shift to Dawn supplies, which will limit the ability to accurately establish a 2-3 year gas benchmark and measure real savings created under a full GPIM. In order to develop an optimal sharing mechanism, Gaz Métro may need to consider mechanisms that appropriately balance risks and rewards in return for a meaningful share of any achieved cost savings.

The recently completed shift of Gaz Métro’s gas purchases from Empress to Dawn will limit the use of historical gas purchase patterns to develop a stable historical gas commodity benchmark. Since 2002, the percentage of capacity originating from Empress has steadily fallen from 70.7% to an expected level of 8.4% by the winter of 2018, with all capacity expected to originate at Dawn by 2021. Additionally, Gaz Métro’s reduction in gas storage capacity and deliverability, and limits on

multiple year gas supply contract, will likely limit Gaz Métro's gas supply and capacity optimization opportunities and operational flexibilities that are needed to create additional value for its customers. The gradual reduction in storage capacity with Union Gas Limited since 2006 does limit Gaz Métro's ability to physically hedge winter gas supplies, while also increasing winter spot gas purchases at Dawn. A limited secondary capacity market in Eastern Canada also is reducing the level of optimization revenues achievable by Gaz Métro.

Implementation of a full GPIM for Gaz Metro will have to address its current and future gas supply planning and procurement activities across a number of dimensions, including:

- Gaz Métro's mix of long-term gas supplies and spot gas purchases;
- The costs and contract terms of Gaz Métro's upstream transportation and storage services;
- Gaz Métro's mix of gas supplies purchased at Dawn and Empress ("AECO"), and how this mix will change over time;
- The degree of contract flexibility in Gaz Métro's gas supply, transportation, and storage service contracts under different gas demand scenarios;
- The expected utilization and expansion of Gaz Métro's liquefaction, storage, and regasification ("LSR") plant in Eastern Montreal;
- The impact of the expected growth in gas demand in Quebec on Gaz Métro's gas supply purchasing strategy;
 - The changing level of interruptible gas service provided by Gaz Métro to its end-use customers; and
 - The changing mix of merchant (bundled sales service) and transportation services provided to Gaz Métro's customers, and its impact on its gas supply purchasing strategy.

In many cases, Gaz Métro simply does not have an adequate degree of control of the gas supply and capacity resources identified above to be able to manage them as closely as required under a full GPIM without subjecting the utility and its customers to the risk of unfavorable financial outcomes.

5 Findings and Recommendations

Based on Black & Veatch's review of the approved GPIMs in North America, our understanding of the Régie's principal GPIM guidelines, the structure and utilization of Gaz Métro's current gas supply portfolio, and the current gas market conditions faced by Gaz Métro, Black & Veatch reaches the following findings and makes the following recommendations regarding the options available to Gaz Métro to establish a new full GPIM:

5.1 FINDINGS

GPIM Option 1 (*design a full GPIM that satisfies each of the Régie's directives presented in Decision D-2013-091*) - Black & Veatch concludes that designing a full GPIM of this structure that satisfies the Régie's past directives is not feasible in today's gas market. Over the 3-year period since the Régie issued its GPIM Decision referenced above, the gas market faced by Gaz Métro has materially changed as evidenced by the following conditions:

- Gaz Métro's recently completed shift of gas supply purchases from Empress (AECO) to Dawn, and the greater emphasis of short-haul transportation to serve winter gas needs.
- Declining storage capacity at Dawn would further increase spot purchases at Dawn, and reduce Gaz Métro ability to physical hedging winter gas needs.
- Evolving gas market dynamics bringing incremental gas supplies to Dawn from Marcellus/Utica pipeline projects would alter the development of a consistent historical benchmark over a 2-3 year period.
- Gaz Métro should not consider the implementation of a full GPIM until it experiences a consistent and stable gas supply and capacity portfolio over at least three (3) consecutive years. If and when that occurs, a full GPIM might be reconsidered if Gaz Métro and the Régie can agree upon a mutually acceptable set of principles to guide the design of the mechanism and a level of regulatory oversight that can provide Gaz Métro with the necessary managerial discretion to plan and procure its gas supply and capacity portfolio so that greater benefits can be realized by the utility and its customers compared to the then current situation.

GPIM Option 2 (*design a full GPIM that uses as a foundation the GPIM proposed by Gaz Métro in November 2012*) - Black & Veatch concludes that designing a full GPIM as proposed by Gaz Metro in November 2012 also is not feasible considering the significant changes that have occurred in the gas market since that time, the regulatory constraints placed on Gaz Metro's current gas supply planning and procurement activities by the Régie, and the comprehensive structure of a GPIM that was preferred by the Régie. The resulting gas supply purchasing and related costs under a full GPIM need to be measured by an objective historical price benchmark and not to itself based on the gas utility's actual portfolio performance from a previous year.

GPIM Option 3 (*design a full GPIM that is reflective of the threshold considerations when designing a full GPIM and the current gas market conditions and business practices*) - Black & Veatch concludes that a newly structured full GPIM is not feasible for the same reasons presented above in discussing Options 1 and 2.

GPIM Option 4 (*propose to the Régie that a full GPIM for Gaz Métro should not be implemented at this time and that Gaz Métro should continue with the operation of its partial GPIM - with some minor modifications to Gaz Métro's current mechanism*) - Based on the evaluations and conclusions for Options 1-3 presented above, Black & Veatch concludes that Gaz Métro should adopt Option 4, which is to propose to the Régie that a full GPIM not be implemented by Gaz Métro at this time.¹²

5.2 RECOMMENDATIONS

Black & Veatch recommends that Gaz Métro continue with the current method of optimizing its capacity-related transactions as defined and approved by the Régie, which will also be reflective of the current gas supply and capacity market conditions and the current trends of the gas utility industry with respect to GPIMs.

It is our understanding that the Régie currently allows Gaz Métro to retain a portion of any revenues generated under financial transactions. These transactions would include short haul assignments, optimization of storage capacity, and exchanges of gas between multiple delivery points.

Revenues from operational transactions like capacity release during the winter for capacity exceeding the design day demand or long-haul capacity releases year round are not subject to revenue sharing. While these transactions are structured somewhat narrowly compared to some of the other “partial” GPIMs evaluated in this project, Black & Veatch still views Gaz Métro’s mechanism as a “partial” GPIM within the broader gas industry context that was discussed earlier.

Finally, Black & Veatch supports Gaz Métro’s interest in including in its current partial GPIM two additional types of transactions related to gas supply optimization that would benefit Gaz Métro customers. Gaz Métro proposes to include savings based on the avoided costs related to the use of secondary market transportation capacity instead of using its existing transportation capacity. As an example, the secondary capacity market will allow Gaz Métro to use lower cost capacity instead of the existing overrun transportation services on Union.

In a similar way, the second proposed type of transaction will provide additional savings based on the lower secondary market cost of short-haul transportation from TransCanada and Union Gas Limited (“Union”). Gaz Métro believes that the use of the secondary market capacity will provide avoided cost savings over the existing transportation capacity on the TransCanada and Union system.

Both of these types of transactions are regularly undertaken by other gas utilities in North America that have partial GPIMs in operation. They serve to support the utilities’ utilization of unused transportation capacity available at certain times of the year to enhance the optimization of their capacity portfolios, which provides meaningful benefits to their customers and shareholders that would not otherwise be available without a GPIM.

¹² For purposes of this conclusion, Black & Veatch defines GPIM as being a “full” GPIM because we view Gaz Métro’s current regulatory treatment of optimization transactions (operational and financial) as a form of “partial” GPIM.

Black & Veatch Statement

This report was prepared for Gaz Métro Limited Partnership (“Client”) by Black & Veatch Management Consulting, LLC (“Black & Veatch”) and is based in part on information not within the control of Black & Veatch. As such, Black & Veatch has not made an analysis, verified, or rendered an independent judgment of the validity of the information provided by others, and, therefore, Black & Veatch does not guarantee the accuracy thereof.

In conducting our analysis, Black & Veatch has made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. The methodologies we utilize in performing the analysis and making these projections follow generally accepted industry practices. While we believe that such assumptions and methodologies as summarized in this report are reasonable and appropriate for the purpose for which they are used; depending upon conditions, events, and circumstances that actually occur but are unknown at this time, actual results may materially differ from those projected.

Readers of this report are advised that any projected or forecast price levels and price impacts, reflects the reasonable judgment of Black & Veatch at the time of the preparation of such information and is based on a number of factors and circumstances beyond our control. Accordingly, Black & Veatch makes no assurances that the projections or forecasts will be consistent with actual results or performance. To better reflect more current trends and reduce the chance of forecast error, we recommend that periodic updates of the forecasts contained in this report be conducted so more recent historical trends can be recognized and taken into account.

Neither this report, nor any information contained herein or otherwise supplied by Black & Veatch in connection with the services, shall be released or used in connection with any proxy, proxy statement, and proxy soliciting material, prospectus, Securities Registration Statement, or similar document without the written consent of Black & Veatch.

Use of this report, or any information contained therein, shall constitute the user’s waiver and release of Black & Veatch from and against all claims and liability, including, but not limited to, any liability for special, incidental, indirect or consequential damages, in connection with such use. In addition, use of this report or any information contained therein shall constitute an agreement by the user to defend and indemnify Black & Veatch from and against any claims and liability, including, but not limited to, liability for special, incidental, indirect or consequential damages, in connection with such use. To the fullest extent permitted by law, such waiver and release, and indemnification shall apply notwithstanding the negligence, strict liability, fault, or breach of warranty or contract of Black & Veatch. The benefit of such releases, waivers or limitations of liability shall extend to B&V’s related companies, and subcontractors, and the directors, officers, partners, employees, and agents of all released or indemnified parties. USE OF THIS REPORT SHALL CONSTITUTE AGREEMENT BY THE USER THAT ITS RIGHTS, IF ANY, IN RELATION TO THIS REPORT SHALL NOT EXCEED, OR BE IN ADDITION TO, THE RIGHTS OF THE CLIENT.

Appendix A: Full GPIMs in North America

JURISDICTION	UTILITY	START YEAR	TOLERANCE BAND	BENCHMARKS AND SHARING MECHANISM (UTILITY %/CUSTOMER %)	GAS COMMODITY BENCHMARK SPECIFICATION	REVIEW PERIOD
<i>Canada</i>						
British Columbia	FortisBC	2011	None	<p>Gas Supply Mitigation Incentive Plan (GSMIP) - Commodity, Transportation, CR: Benchmarked Mitigation revenues (capacity factor adjusted) / Total Benchmark * 100% = Market Performance Factor (MPF); MPF falls between tiers generates a different Benchmarked Activity Incentive Percentage (BAIP)</p> <p>MPF between 100 and 131%, = 2.45% + 0.05% * (MPF - 100)</p> <p>MPF between 131 and 136%, BAIP = 4%</p> <p>MPF of 136 and greater, BAIP = 4% + 0.04% * (MPF - 136)</p> <p>Non Benchmarked Activities = 4% * mitigation revenue</p> <p>New Activity Incentive = 12% * new activity mitigation (determined by Commission)</p> <p>*Fixed adjustment of \$165,000 applies to incentive payment</p> <p>**Benchmarked mitigation + non benchmarked mitigation + net activity incentive - \$165,000 = incentive payment</p>	<p>Deemed Purchase Price: Platts Gas Daily Common High price at the relevant hub where surplus gas is available which is normally Station 2 or NOVA Inventory Transfer. Platts Common High is the Platts Midpoint plus 50% of the Absolute Range.</p> <p>Deemed Sell Price for Benchmark: Platts Gas Daily Common Low</p>	<p>12 Months Ending March; and 12 Months Ending December</p>

JURISDICTION	UTILITY	START YEAR	TOLERANCE BAND	BENCHMARKS AND SHARING MECHANISM (UTILITY %/CUSTOMER %)	GAS COMMODITY BENCHMARK SPECIFICATION	REVIEW PERIOD
United States						
California	Pacific Gas and Electric (PG&E)	1997	99% - 102%	Gas Supply Portfolio: 50/50 sharing over 102% of benchmark (costs); 20/80 sharing under 99% of benchmark (savings); Ratepayers responsible for variances within tolerance band Portfolio costs include commodity, transportation, and storage. CR and OSS are credited to portfolio costs while only 80% of hedging gains/losses are credited to portfolio costs. *Reward is capped at 1.5% of actual gas commodity costs	Volume weighted average of published natural gas price indices at PGE's purchase points	Monthly Reports, Annual Cost Adjustment
California	Southern California Gas Company	1995	99% - 102%	Gas Supply Portfolio: 50/50 sharing over 102% of benchmark (costs); 25/75 sharing between 99% and 95% of benchmark (savings); 10/90 sharing under 95% of benchmark (savings); Ratepayers responsible for variances within tolerance band Portfolio costs include commodity, transportation, and storage. CR and OSS are credited to portfolio costs while only 80% of hedging gains/losses are credited to portfolio costs. *Reward is capped at 1.5% of actual gas commodity costs	Combination of monthly gas price indices published by Natural Gas Intelligence, Inside FERC Gas Market Report, NYMEX Futures	Monthly Reports, Annual Cost Adjustment

JURISDICTION	UTILITY	START YEAR	TOLERANCE BAND	BENCHMARKS AND SHARING MECHANISM (UTILITY %/CUSTOMER %)	GAS COMMODITY BENCHMARK SPECIFICATION	REVIEW PERIOD
California	San Diego Gas and Electric (SDG&E)	2009	99% -102%	Gas Supply Portfolio: 50/50 sharing over 102% of benchmark (costs); 25/75 sharing under 99% of benchmark (savings); Ratepayers responsible for variances within tolerance band Portfolio costs include commodity, transportation, and storage. CR and OSS are credited to portfolio costs while only 80% of hedging gains/losses are credited to portfolio costs. *Reward is capped at lower of \$6 million or 1.5% of actual gas commodity costs	Volume weighted average of spot market indices in U.S. Southwest/Rocky Mountain basins and market price index for delivering to CA border	Monthly Reports, Annual Cost Adjustment
Indiana	Northern Indiana Public Service Company (NIPSCO)	1999	None	Commodity: 50/50 of differences between actual gas costs and a benchmark price Capacity Release (CR): 15/85	Delivery point and index point specific, subject to audit each year (typically mix of FOM for baseload and spot indexes for daily purchases)	Monthly Filing, Quarterly Filing CR: Filed Annually
Iowa	MidAmerican	1995	99.75% - 101.25%	Commodity: 50/50 above or below benchmark; capped at \$0.5 million Off-System Sales (OSS): 50/50 CR: 30/70 *capped at \$500,000	A reference price which reflects commodity cost indices, storage, and transportation tariffs approved by the Federal Energy Regulatory Commission, and capacity contracts entered into by the company	Annual Adjustment
Kentucky	Atmos Energy	1998	None	Commodity, Transportation, OSS: 30/70 of cost variances up to 2%, 50/50 of variances above 2%	Baseload: Average of inside FERC - Gas Market Report FOM and NYMEX closing price at specific basin points; Daily: Average of Gas Daily and NYMEX at specific points	PGA Filing: Quarterly; PBR Activity: Annual

JURISDICTION	UTILITY	START YEAR	TOLERANCE BAND	BENCHMARKS AND SHARING MECHANISM (UTILITY %/CUSTOMER %)	GAS COMMODITY BENCHMARK SPECIFICATION	REVIEW PERIOD
Kentucky	Columbia Gas of Kentucky (NiSource)	2005	None	Commodity, Transportation, OSS: 30/70 of cost variances up to 2%, 50/50 of variances above 2%	Monthly index: FERC Gas Market; Weekly index: Natural Gas Week; Daily index: Platts Gas Daily	PGA Filing: quarterly; Incentive: Annually
Kentucky	Louisville Gas and Electric (PPL)	1997	None	Commodity, Transportation, OSS: 25/75 up to 4.5% variance; 50/50 of variances above 4.5%	FERC FOM midpoint prices on Columbia Gulf Mainline, Columbia Gas App, and TGP 500L depending on purchased volumes	PGA filed Quarterly
Maryland	Baltimore Gas & Electric (BG&E)	2000	None	Commodity: 50/50 above or below benchmark level (the difference between the total actual commodity cost of gas purchased and the City Gate Index cost) are shared with customers, OSS: 0/100 for gross margin up to \$1 million, 20/80 over \$1 million; 50/50 for any gross margins when utility assets are not used for the transaction CR: 0/100 up to \$500,000; 10/90 after \$500,000,	Average of price quoted in <i>Inside FERC's Gas Market Report</i> and the closing price on the NYMEX for the last 3 days of trading (Bid Week), plus the variable transportation costs from the supply basin to the city gate. Market Gas Commodity Price includes flowing gas, pipeline storage gas, and on-system LNG.	Monthly Commodity Adjustment; Annual Sharing Adjustment
Maryland	Columbia Gas of Maryland (NiSource)	2000	None	Commodity: 50/50 above and below the benchmark, April - Oct (all spot gas purchases) and Nov - March (spot gas purchases flowing on the FOM); CR: 10/90 under \$100,000 in net margins per year; 20/80 over \$100,000 in net margins per year, OSS: 20/80 of net margins for planned sales; 50/50 of net margins for incremental sales	Average of the closing gas prices reported for the last 3 days of trading on the NYMEX for the upcoming contract month adjusted by the differential between the average of indices representing prices paid at the Henry Hub and the average of indices representing prices paid at the specific delivery points where Columbia purchases gas supplies.	Quarterly

JURISDICTION	UTILITY	START YEAR	TOLERANCE BAND	BENCHMARKS AND SHARING MECHANISM (UTILITY %/CUSTOMER %)	GAS COMMODITY BENCHMARK SPECIFICATION	REVIEW PERIOD
Maryland	Washington Gas	2000	None	Asset Optimization Margins: 0/100 of first \$2.6 million, 25/75 for next \$3.3 million, 50/50 for all above \$5.9 million	Not Applicable - Asset Management Program (Self-Directed)	Annual Adjustment
Missouri	Laclede Gas	2005	None	Commodity: 10/90 of savings relative to benchmark up to \$3 million OSS, CR: 15/85 of first \$2 million, 20/80 of next \$2 million, 25/75 of next \$2 million, 30/70 of anything above \$6 million	Weighted average of iFERC FOM: CEGT (22%), NGPL MidCont (8%), NGPL STX (5%), PEPL (10%), CEGT West (24%), Trunkline LA (+%), Southern Star (12%), and MS River Transmission West (13%)	Quarterly
Oregon	Cascade Natural Gas (MDU Resources)	2008	None	Commodity: 10/90	Estimated WACOG equals forecasted purchases plus a percentage of distribution LUGF (not to exceed 2%) at adjusted contract prices adjusted for Canadian pipeline published fuel use	Monthly entries, amortized over 12 months
Oregon	Northwest Natural Gas	2000	None	Commodity: Choice of sharing ratio (20/80 or 10/90) Interstate Storage Service: 80/20 OSS and CR: 33/67	Estimated WACOG equals forecasted purchases plus a percentage of distribution LUGF (not to exceed 2%) at adjusted contract prices adjusted for Canadian pipeline published fuel use	Monthly entries, amortized over 12 months
Tennessee	Atmos Energy	2011	97.4% - 102%	Commodity: 50/50 sharing outside benchmark CR: 10/90 *Annual \$1.25 million cap on overall utility incentive savings and costs	Monthly: simple average of iFERC and NYMEX for that particular month; Swing: Gas Daily; indices are adjusted for transportation costs to city gate	Annual

JURISDICTION	UTILITY	START YEAR	TOLERANCE BAND	BENCHMARKS AND SHARING MECHANISM (UTILITY %/CUSTOMER %)	GAS COMMODITY BENCHMARK SPECIFICATION	REVIEW PERIOD
Tennessee	Chattanooga Gas (AGL Resources)	2002	None	Avoids prudence audit if commodity cost falls under 101% of benchmark; 50/50 of margins from non-regulated customers using company assets (including OSS)	Spot: iFERC "Price of Spot Gas Delivered to Pipelines" at application "Pricing Point"; Swing Purchases: Gas Daily equal to midpoint under "Daily Price Survey"; Long Term: Spot price index + rolling 3 year avg premium for long term supply reliability; City Gate: indexes adjusted for avoided transportation costs	Annual
Tennessee	Piedmont Natural Gas	2006	None	Commodity: 25/75 of variance from predetermined benchmark (Except gas purchases associated with TETCO Rate Schedule SCT - company allowed to recover all expenses) Benchmark based on a monthly computed price index OSS and Capacity Management: 25/75 *total company gain or loss capped at \$1.6 million	Volume weighted average of spot market indices at key relevant supply basins and market price index for delivering to city-gate	Annual
Wisconsin	Wisconsin Electric Power (WE Energies)	2009	None	Gas Costs below benchmark are returned to customers; if 2% above benchmark PSC may initiate a prudence investigation in order for utility to recover costs.	Confidential	Quarterly
Wisconsin	Wisconsin Gas (WE Energies)	2009	None	Gas Costs below benchmark are returned to customers; if 2% above benchmark PSC may initiate a prudence investigation in order for utility to recover costs.	Confidential	Quarterly

Appendix B: Partial GPIMs in North America

JURISDICTION	UTILITY	START YEAR	TOLERANCE BAND	BENCHMARKS AND SHARING MECHANISM (UTILITY %/CUSTOMER %)	GAS COMMODITY BENCHMARK SPECIFICATION	REVIEW PERIOD
Canada						
Quebec	Gaz Métro	2014	None	Capacity Release (CR): 10/90 only for summer capacity release, geographic gas supply exchange and storage loans	Not Applicable	Annual
Ontario	Union Gas Limited	2005	None	Upstream Transportation Optimization: 10/90 Short-Term Storage and Other Balancing Services: 10/90	Not Applicable	Annual
Ontario	Enbridge Gas Distribution	2005	None	Storage and Transportation Optimization ⁽¹⁾ : 10/90 ⁽¹⁾ Optimization revenues (storage + transportation) must exceed \$12 million in net revenues for sharing to occur, under \$12 million in net revenues the sharing is 0/100	Not Applicable	Annual
United States						
Delaware	Delmarva Power (Pepco Holdings)	2015	None	IT services: 20/80 OSS and CR: 20/80 after first \$3 million	Not Applicable	Monthly and Annual
Iowa	Interstate Power and Light (IP&L)	2005	None	OSS: 50/50 CR: 30/70	Not Applicable	Annual
Kansas	Atmos Energy	2014	None	CR: 50/50 Southern Star Pipeline Demand Charges: 22/78	Not Applicable	Annual

JURISDICTION	UTILITY	START YEAR	TOLERANCE BAND	BENCHMARKS AND SHARING MECHANISM (UTILITY %/CUSTOMER %)	GAS COMMODITY BENCHMARK SPECIFICATION	REVIEW PERIOD
Massachusetts	Berkshire Gas Company (AVANGRID)	2013	None	CR, OSS: 10/90	Not Applicable	Semi-Annual
Massachusetts	Boston Gas (National Grid)	2013	None	CR, OSS: 10/90	Not Applicable	Semi-Annual
Massachusetts	Columbia Gas of Massachusetts (NiSource)	2015	None	The utility also utilizes an AMA which is included in the incentive mechanism	Not Applicable	Semi-Annual
Missouri	Missouri Gas Energy (The Laclede Group)	2010	None	OSS and CR: 15/85 of first \$1.2 million, 20/80 for next \$1.2 million, 25/75 for next \$1.2 million and 30/70 of anything above \$3.6 million	Not Applicable	Quarterly
New Jersey	New Jersey Natural Gas	2002	None	OSS and CR: 15/85 Storage: 20/80 relative to predetermined benchmark	Not Applicable	Annual
New Jersey	South Jersey Gas	2003	None	OSS, CR, Interruptible Sales and Transport: 15/85	Not Applicable	Annual
Pennsylvania	Columbia Gas of Pennsylvania (NiSource)	2002	None	OSS and CR: 25/75 (the utility also utilizes an AMA which is included in the incentive mechanism)	Not Applicable	Quarterly
Pennsylvania	Equitable Gas (Peoples Natural Gas)	2013	None	OSS, CR: 25/75	Not Applicable	Quarterly
Pennsylvania	Peoples Natural Gas	2013	None	OSS, CR: 25/75	Not Applicable	Quarterly
Pennsylvania	PECO Energy Gas	2008	None	OSS: 25/75	Not Applicable	Quarterly
Pennsylvania	Philadelphia Gas Works (PGW)	2008	None	OSS and CR: 25/75 Storage AMA: 25/75	Not Applicable	Quarterly
Utah	Questar Gas	1997	None	CR: 10/90	Not Applicable	Semi-Annual

JURISDICTION	UTILITY	START YEAR	TOLERANCE BAND	BENCHMARKS AND SHARING MECHANISM (UTILITY %/CUSTOMER %)	GAS COMMODITY BENCHMARK SPECIFICATION	REVIEW PERIOD
Virginia	Washington Gas Light	2011	None	AMA Revenue Sharing 25/75 after \$3.2 million to \$6.5 million, 50/50 after \$6.5 million	Not Applicable	PGA: Quarterly ACA: Annual
Virginia	Columbia Gas of Virginia (NiSource)	2007	None	OSS and CR: if margin ≤ \$1.5 million, then \$1.5 million goes to customers; if margin is between \$1.5 million and \$2.8 million, then 100% of margin goes to customers; if margin is greater than \$2.8 million and less than \$3.7 million, then \$2.8 million goes to customers; if margin ≥ \$3.7 million, then margin is shared 25/75 (the utility also utilizes an AMA which is included in the incentive mechanism)	Not Applicable	PGA: Quarterly ACA: Annual