MINNESOTA
PUBLIC UTILITIES COMMISSION

Staff Briefing Papers

Meeting Date	**December 11, 2025**		**Agenda Item 2****
Company	Northern States Power Company d/b/a Xcel Energy		
Docket No.	G-002/M-25-259		
	In the Matter of Xcel Energy's Petition Requesting Reaffirmation of Affiliate Interest Arrangement Accounting Treatment		
Issues	Should the Commission approve Xcel Energy's request for reaffirmation of affiliate interest arrangement accounting treatment?		
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✓ **Relevant Documents**	**Date**
Xcel Energy – Initial Filing	June 16, 2025
Minnesota Office of Attorney General – Comments	August 15, 2025
Xcel Energy – Reply Comments	August 25, 2025
Minnesota Department of Commerce – Response Comments	October 16, 2025

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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I. Background

On May 16, 2025, the Minnesota Public Utilities Commission (Commission) approved Xcel Energy's Natural Gas Innovation Plan, Docket Nos. G-002/M-23-518 and G999/CI-21-566, consisting of several pilot projects. One of the pilots that the Commission approved with modifications was the construction of a 5MW hydrogen electrolyzer, which would blend hydrogen with natural gas to fuel an auxiliary boiler that generates steam for an industrial customer. The electrolyzer would be powered by on-site solar panels at Sherco, with the primary aims of testing green hydrogen electrolyzer technology on hard-to-decarbonize industrial sectors, and to learn how to optimally operate electrolyzers under various conditions, and to reduce emissions from the existing steam generation process.

On June 16, 2025, Northern States Power Company, doing business as Xcel Energy (Xcel Energy or the Company) filed a Petition requesting reaffirmation of its Affiliate Interest Arrangement in compliance with Ordering Paragraph No. 8.A of the Natural Gas Innovation Plan (NGIA) Order issued May 16, 2025, in Docket Nos. G-002/M-23-518 and G999/CI-21-566 (NGIA Order). Ordering Paragraph No. 8.A states, "Xcel must file an affiliate interest arrangement in a new docket." In this initial filing, the Company explained the accounting treatment of its current affiliate interest arrangement and detailed how the proposed accounting treatment of its NGIA Sherco hydrogen pilot is consistent with this arrangement, which has existed for over 30 years.

On August 15, 2025, the Minnesota Office of Attorney General – Residential Utilities Division (OAG) filed Comments objecting to the negative check-off periods in Docket No. 23-518 and Notice of Extended Comment Period in Docket No. 25-259 and arguing that Xcel shareholders should bear all risks of any stranded capital costs, plant addition costs, and hydrogen electrolyzer relocation costs.

On August 25, 2025, Xcel filed Reply Comments, arguing that the hydrogen electrolyzer pilot project does not provide a benefit to the affiliate interest.

On October 16, 2025, the Minnesota Department of Commerce, Division of Energy Resources (Department) filed a Letter reviewing the OAG's concerns and agreeing with the OAG that legitimate concerns exist regarding the affiliate interest arrangement and the risk of any stranded assets.

II. Discussion

A. Summary

Xcel's Petition requested the Commission to reaffirm its existing Affiliate Interest Arrangement with no changes. The OAG and Department argue that revisions are necessary to protect ratepayers from exposure to the risk of the hydrogen electrolyzer becoming a stranded asset. They also argue that ratepayers should not be at risk for any related costs if, in the case that the electrolyzer becomes a stranded asset, the asset is redirected or transported to a new customer and/or location. Xcel maintains that the risk of a stranded asset is low, and that viable

alternative deployments are available. Staff notes that this question raises significant issues.

B. Xcel's Petition

1. History of the Industrial Customer Steam Arrangement

In 1993, Liberty Paper, Inc. (LPI, industrial customer), an industrial customer, constructed a paper recycling plant near Xcel's Sherburne County Generating Plant (Sherco) to produce linerboard paper for the end use of making corrugated cardboard boxes.[1] Xcel's Sherco plant supplies steam to the industrial customer for its production of recycled paper products. In 1993 LPI and the Company signed a steam supply arrangement, which the Commission subsequently approved in 1995. The Commission signed an updated steam supply arrangement. Under the updated arrangement (and the original arrangement), Xcel is responsible to supply steam to LPI via a dedicated Steam Supply System, inclusive of all labor, maintenance, operating, and ownership costs. LPI is also obligated to purchase electric service for its recycling operation.

Xcel received approval from the Commission in both arrangements to supply steam to the industrial customer as a nonregulated venture. Under the arrangements, Company shareholders, not ratepayers, make the required investment and bear all related risks of the affiliated arrangement. Ratepayers have no financial exposure, as expressed by the segregated accounting treatment of the non-regulated venture, as recorded in nonutility operating accounts.

2. NGIA Sherco Hydrogen Pilot

The purpose of Xcel's Sherco Hydrogen Pilot, a project of the Company's NGIA plan filed in December 2023, is to learn how to optimize electrolyzer operations in the production of green hydrogen solely using clean energy.[2] Green hydrogen is blended, up to a 10% mix, with natural gas to supply fuel for the auxiliary steam boiler. The auxiliary boiler supplies steam for coal unit start-up, heating for the Sherco building, and the industrial customer. Xcel sells the steam to the industrial customer via its non-regulated Steam Supply System.

Thus, the non-regulated venture with the industrial customer is distinct from Xcel's regulated operations, including Xcel's natural gas local distribution company (LDC), the auxiliary boiler, Sherco units 1 and 3, retail electric service, retail gas service, and the NGIA hydrogen pilot. The non-regulated affiliate venture includes all infrastructure and operating costs incurred in serving the industrial customer steam through the non-regulated Steam Supply System.

3. No Changes Required of Affiliate Interest Arrangement

Xcel argued that no changes to the Affiliated Interest Arrangement are required because ratepayers do not pay for any costs or risks associated with the Steam Supply System and the

[1] Xcel Energy Petition at 2-3.

[2] Xcel Energy Petition at 3-4.

supply of steam to the industrial customer.[3] Any capital costs of the non-regulated operation are segregated from Xcel's rate base; operating and maintenance costs are posted in nonutility operating accounts.

All fuel costs for the auxiliary steam boiler, regardless of the type of fuel, are allocated each month based on consumption by end-user, such as the various regulated and non-regulated operations described in the previous section above. Steam sales for regulated operations flow through the Purchased Gas Adjustment (PGA) and steam sales for the non-regulated operation are posted in account FERC 417.1. Historically, the segregated accounting treatment of steam sales ensures that neither electric nor gas ratepayers are responsible for any fuel costs of the non-regulated Steam Supply System, regardless of the type of fuel, including coal, natural gas, fuel oil, and hydrogen.

Xcel's last gas rate case[4] includes all revenues and costs of the auxiliary boiler operation, a natural gas sales forecast for the auxiliary boiler in the test year, consistent with its treatment for other natural gas customers.

However, NGIA ratepayers will now be responsible for the pilot costs to generate the green hydrogen, which is mixed with natural gas to fuel the boiler. Xcel's regulated utility will continue to be compensated for the expense of serving its non-regulated steam supply operation for the benefit of the industrial customer, just as it has done in the past, at the cost of natural gas: "Hydrogen will be priced at the cost equivalent to natural gas as compensation to the regulated natural gas utility for any hydrogen fuel used to support the Steam Supply System."[5] Therefore, in the current structure of the pilot, NGIA ratepayers will be paying for some portion of the fuel without full compensation from the industrial customer. In the interest of transparency, the Company stated that it is willing to detail in its annual affiliate compliance filing all fuel-related cost information by fuel source in service of the non-regulated affiliate. (Decision Option 11)

C. OAG Comments

1. Stranded Asset Risk

The OAG responded with concern that the industrial customer could discontinue buying steam from Xcel before Xcel has fully recovered the pilot's cost, thus creating the risk of a stranded asset with the costs borne by ratepayers.[6] In the proceedings of Xcel's NGIA filing, in Docket No. 23-518, the Department and several intervenors raised concerns that ratepayers would be at risk of bearing the cost of the stranded asset if the non-regulated customer ceased taking steam service since the industrial customer has not committed to a long-term steam service contract matching the service life of the electrolyzer.

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[3] *Id.* at 5-6.

[4] See Docket No. G002/GR-23-413.

[5] Xcel Energy Petition at 6.

[6] OAG Comments at 2-4.

The Commission, in recognition of these concerns, conditioned approval of Xcel's Sherco 5 MW pilot on the following actions: (1) Xcel filing an explanation detailing the steps it has taken and will take to mitigate the risk of a stranded asset for its hydrogen electrolyzer pilot, and how it would manage cost recovery if the industrial customer withdraws before full recovery of the asset's cost (Ordering Paragraph 6); and (2) Xcel filing an affiliated interest arrangement in a new docket (Ordering Paragraph 8.A).[7]

The OAG summarized Xcel's response, as shown not in the record of the Instant docket, but in the related Docket No. 23-518 to the first Commission-required action (1) in the above paragraph. Xcel did not expect a significant stranded asset risk from the pilot. After the Commission decides the Instant docket, it will hear and decide this issue in the related Docket Nos. G-002/M-23-518 and G-999/CI-21-566. To mitigate the risk, Xcel listed three potential alternative uses of the hydrogen electrolyzer if the industrial customer withdrew from steam service.

The first alternative use of the auxiliary steam boiler, and therefore the electrolyzer, is to heat Sherco's operations buildings. The OAG noted, however, that Xcel provided no further details, and that there already exists sufficient steam capacity to heat the buildings, making the newly-released steam capacity unnecessary. Furthermore, Xcel provided no record on the use of these buildings after Sherco's coal units are fully retired.

Xcel's second alternative use of the assets is to support other industrial uses of the steam service near Sherco. The OAG noted that Xcel provided general information about economic development efforts in the area, and that potential connection and service costs were not estimated. The OAG also feared Xcel would charge ratepayers for these additional costs.

Xcel's last alternative use of the assets is to geographically relocate them to another location. However, the OAG again noted the absence of estimated costs to decommission the electrolyzer from the Sherco site, and to transport and reconnect it.

The OAG concluded its argument with the principle that if the pilot benefits Xcel shareholders via its unregulated affiliate, then they should bear the risk of a potential stranded asset, and the risk of any potential costs necessary to avoid the risk of a stranded asset.

2. Need to Modify Xcel's Affiliated Interest Arrangement

The OAG noted that Xcel simply refiled in the Instant docket the Affiliated Interest Arrangement, including all original flaws, risks and limitations, showing itself to be unresponsive to the risks discussed above.[8] Moreover, the OAG suggested that Xcel chose the Sherco site for the pilot because its unregulated affiliate could continue to benefit as the boiler could continue to supply steam service to the industrial customer. Nonetheless, the OAG believed this to be

[7] *Id.* at 3.

[8] OAG Comments at 6-9.

possible with the right safeguards.

The OAG, therefore, put forth in four parts a recommendation that the Commission modify Xcel's Affiliated Interest Arrangement by requiring the Company to install safeguards to protect rate payers from stranded asset risk, and the risk of costs arising from any alternative uses of the electrolyzer.

First, the Commission should modify the affiliated interest arrangement to protect ratepayers from the risk of the hydrogen electrolyzer becoming a stranded asset or from the risks of repurposing the asset. In particular, should the industrial customer stop taking steam service from Xcel's unregulated affiliate before the end of the electrolyzer's useful life and no alternative use is found for the electrolyzer, Xcel should not be permitted to recover any undepreciated capital costs or return for the electrolyzer from NGIA ratepayers.

Second, the OAG recommended that the Commission order Xcel shareholders to cover any related costs if these risks become real. In particular, should the industrial customer stop taking steam service, but if Xcel finds another off-taker for the hydrogen, Xcel shareholders must bear all costs needed to provide hydrogen to the new customer(s). The Commission may also wish to clarify that Xcel may not charge ratepayers for any necessary modifications to the auxiliary boiler or steam piping in this event.

Third, the OAG recommended that the Commission order Xcel shareholders to cover any costs related to transport and relocation of the electrolyzer. In particular, Xcel's shareholders must bear all costs necessary to decommission, relocate, and reconnect the electrolyzer, including any costs to connect hydrogen produced by the electrolyzer to a new customer and any costs necessary to upgrade the electrical transmission or distribution system in a new location to serve the electrolyzer's large load.

Last, if the Commission does not choose the first and/or second recommendations, the OAG recommended that the Commission order that Xcel may not seek to recover any of these costs from the residential or small commercial classes, which is in line with its previous cost-allocation determination for the pilot.

In conclusion, the OAG argued that since Xcel shareholders benefited from the unregulated affiliate arrangement with the industrial customer at Sherco and would continue to benefit from the new arrangement with the addition of the hydrogen electrolyzer, they should continue to bear all risks from the modified affiliated interest arrangement, just as they have in the past.

3. Fuel related cost by fuel source in compliance filing

The OAG noted that Xcel is willing to report all fuel related information by fuel source as separate line items in its annual affiliate compliance filing to provide more transparency into

hydrogen costs.[9] The OAG appreciated this willingness and recommended the Commission adopt this action as an order. **(Decision Option 11)**

4. OAG Summary and Recommendations

The OAG concluded that the Commission should modify the Company's affiliated interest arrangement to clarify that Xcel shareholders will continue to bear risks rising from the current steam contract but also bear any risks arising from using the hydrogen electrolyzer to serve Xcel's unregulated operations.[10] The OAG therefore made the following recommendations for the Commission's consideration:

(1) Xcel's shareholders will bear all risks of any stranded capital costs and return should the Sherco 5MW facility become no longer used and useful;

(2) Xcel's shareholders will bear all costs of any plant additions or other costs necessary to provide hydrogen to another off-taker; and,

(3) Xcel's shareholders will bear all costs necessary to decommission, transport, and reconnect the electrolyzer if it becomes necessary to do so before the end of the electrolyzer's useful life.

(Decision Option 5)

In the alternative, and at a minimum, the Commission should order that Xcel may not seek recovery of any of the three costs listed above from residential and small commercial customers to be consistent with the Commission ordered cost allocation for the pilot in Xcel's NGIA plan. (Decision Option 6)

Last, the Commission should order Xcel to provide all fuel related cost information by fuel source as separate line items in Xcel's annual affiliate compliance filing. (Decision Option X)

D. Xcel Reply Comments

1. No benefit to the affiliate interest

In its defense, Xcel stated that the Sherco hydrogen pilot does not benefit the affiliate interest.[11] The Commission already determined in the Company's NGIA case, Docket No. 23-518, that the affiliate receives the same steam service as before. Although the hydrogen pilot will blend up to 10 percent hydrogen with natural gas, the steam quality and quantity received by the industrial customer will remain the same product the industrial customer has always received.

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[9] OAG Comments at 9-10.

[10] *Id.* at 10.

[11] Xcel Reply Comments at 4-5.

The addition of hydrogen fuel cannot be a benefit since the hydrogen will be priced at a cost equivalent to natural gas, meaning that the substitution of hydrogen for natural gas will not affect the price the industrial customer pays.

To the contrary, the true benefit of the hydrogen pilot is the learnings the Company seeks to gain in the areas of optimization of electrolyzer operations to produce green hydrogen.

2. No basis to prohibit cost recovery

Xcel argued that since the affiliate will not receive a benefit from the pilot, the OAG's claim that the Company's shareholders would also benefit through the non-regulated affiliate's profitable operations is false.[12] Moreover, since no benefit accrues to the affiliate, the affiliate cannot absorb the risks of a potential stranded asset or the additional costs to avoid a stranded asset.

3. Sole requirement to mitigate risks of the hydrogen project

Xcel disagreed with the OAG's assertion that Company shareholders must bear all risks of its unregulated venture's use of the electrolyzer, or of its disposition and transfer if the industrial customer stops taking steam service before the end of its useful life.[13] In its defense, Xcel cited Ordering Paragraph 6 of the NGIA Order:

> Within 30 days, Xcel must file an explanation detailing the steps it has taken and will take to mitigate the risk of a stranded asset for its Sherco 5MW pilot, and how it would propose to manage cost recovery for this asset if the industrial customer were to withdraw before Xcel had fully recovered the asset's costs.

Ordering Paragraph 6 requires Xcel to provide strategies to mitigate the risk of a stranded hydrogen pilot asset; it does not require the Company to absorb all risk.

In its compliance filing with Ordering Paragraph 6, and as described above, Xcel presented four strategies to mitigate the risk of the hydrogen pilot becoming a stranded asset. These strategies included 1) continuing to provide fuel to the auxiliary boiler to produce steam for the existing industrial customer; 2) providing fuel to the auxiliary boiler to produce steam for Sherco buildings; 3) providing fuel to the auxiliary boiler to produce steam for future industrial customers in the Sherco area; and 4) relocating the electrolyzer for use at other Company locations.

In reply to the OAG's question about whether Sherco's buildings will be needed after retirement of the coal units, Xcel stated that the buildings will be used to house synchronous condensers, which are temperature-sensitive and used to regulate power from wind and solar.

The OAG also questioned regarding option number 3 why Xcel was not specifically identifying

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[12] *Id.* at 5.

[13] *Id.* at 6-7.

new industrial customers but relying on a vague future master plan. Xcel stated that since the Sherburne County Power Plant Development Master Plan identifies 1,800 acres for industrial and smaller-scale industrial uses, there exists significant opportunity to seek additional hydrogen offtake opportunities, if the need arises.

4. Seeking cost recovery from residential and small commercial customers

The OAG recommended, at the least, to prohibit hydrogen electrolyzer cost recovery from the residential and small commercial classes under the assumption that these classes would not benefit from the pilot.[14] Xcel agreed with this recommendation as long as the pilot is not deployed for residential or small commercial customers but cautioned that the scope of benefits is not yet well-understood at the beginning stage of the pilot. Xcel cautioned that prohibiting cost recovery at this early stage in development would be premature. This concern was already decided in Ordering Paragraph 8.B of the May 16, 2025 proceeding for Docket Nos. G-002/M-23-518 and G999/CI-21-566.

Instead, Xcel recommended that the Commission hold off on this determination without the knowledge of the pilot's full extent of uses and benefits over its 20-year life.

5. Facility construction start

The OAG recommended the Commission to not allow construction to start on the pilot until the affiliated interest arrangement issues raised in this docket have been resolved.

On August 21, 2025, the Commission issued a Notice of Reply Comment in Docket No. G-002/M-23-518, in response to the OAG's objection to the negative checkoff period for the Company's compliance filing required by Ordering Paragraph 6 of the NGIA Order. One of the topics open for comment was:

- Should the Commission allow Xcel to proceed with its Sherco 5MW hydrogen pilot ahead of its final decision in Docket No. G-002/M-25-259?

Xcel already responded on this topic in the related Docket Nos. G-002/M-23-518 and G999/CI-21-566.[15] The Federal government's revised deadlines for obtaining Inflation Reduction Act (IRA) Production Tax Credits (PTC) for this pilot require construction to begin by January 1, 2028. To meet this deadline and thus qualify to receive the tax benefits, and to complete necessary advanced preparatory work before the start of construction, the Company believed it is important to start as soon as possible.

E. Department Letter concurring with the OAG

The Department supported the OAG's recommendation that the Commission does not allow Xcel to start construction on the electrolyzer until the issue of the affiliated interest

[14] Xcel Reply Comments at 8.

[15] Xcel Docket Nos.G002/M-23-518 & G999/CI-21-566, September 9, 2025 Reply Comments at 3.

arrangement is decided.[16]

The Department raised a few particular issues surrounding the electrolyzer and its relationship to its non-regulated affiliate.[17] First, the Department expressed concern that ratepayers would become responsible for connecting new steam customers to the boiler and therefore requested that the Company clarify how it would book these costs.

Second, regarding Xcel's alternative of heating Sherco buildings with the steam boiler, the Department questioned which buildings would remain in use, and what level of steam service would be required.[18] The Department also asked if this level of steam service would provide a sufficient amount of data for its pilot to produce useful results. Therefore, the Department asked the Company what level of steam service would be able to provide sufficient learnings from the pilot.

Third, on the topic of relocating the electrolyzer, the Department believed this strategy of mitigating the risk of a stranded asset would expose ratepayers to risks and costs related to the relocation.[19] Ratepayers certainly should not be at risk of paying for relocation costs when Xcel voluntarily chose an inherently risky location that depended on just one steam service customer, the loss of which could greatly impact the pilot project.

Fourth, the Department asserted that Xcel would attempt to recover its costs from ratepayers if the electrolyzer becomes a stranded asset.[20] By proposing a pilot project that depends on just one customer, Xcel is putting ratepayers at risk for the total project, perhaps resulting is a total loss absorbed by ratepayers.

In closing, the Department initially supported the electrolyzer pilot, conditional on the Commission's reassessment of the affiliated interest arrangement to address risk exposure to ratepayers in this Instant docket.[21] The Department therefore, agreeing with the OAG's recommendations 1 through 3, made the following recommendations, including a modified OAG recommendation 2:

1. The Department requests that Xcel clarify how it would treat the costs of connecting new steam customers to the boiler.

2. The Department requests the Company explain what energy usage it expects from the Sherco 3 facilities and if that level of usage would be able to produce sufficient learnings for the pilot project.

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16 Department of Commerce Letter at 1.

17 *Id.* at 4.

18 *Id.*

19 *Id.*

20 *Id.* at 5.

21 Department of Commerce Letter at 5.

3. The Department supports the OAG's recommendations 1 through 3 from the OAG's Objection filing, but edited so that the second recommendation states:

   (2) Xcel's shareholders will bear all costs of any plant additions or other costs necessary to provide hydrogen to another off-taker or those costs be factored into the cost of service for the new customer, such that ratepayers incur no additional costs;

4. If the Commission does not adopt these recommendations, the Department also supports requiring that the Company not be allowed to recover the costs for the pilot from residential and small commercial customers class to be consistent with the Commission's NGIA Order.

III. Staff Comments

Staff notes that this docket illuminates several facets of important and meaningful issues deserving of Commission consideration. These various issues address questions of intent and purpose, funding and cost allocation, production capacity, transfer pricing, the industrial customer's position, and marginal costs of steam production.

A technical point, and one of cost/benefit analysis, arose in discussions about the nature of Xcel's learnings from the hydrogen pilot. The possibility of the industrial customer terminating the steam supply contract early raised the risk of the electrolyzer becoming a stranded asset much earlier than its 20-year useful life. While learnings would presumably continue after the industrial customer's departure, the non-regulated business would lose revenue. It is uncertain as which business—regulated or unregulated—would pick up the loss. Since the electrolyzer is an NGIA project, it would seem reasonable that NGIA would recover the remaining cost.

Related to the question of learnings, it may be useful to know what amount of steam service is required for the learnings goal. Additional information may bring clarity: 1) What is the steam auxiliary boiler's total capacity? 2) How much steam capacity does the learnings objective require? 3) How much steam capacity does the industrial customer consume? 4) Based on answers to the above questions, is steam capacity in a shortage or surplus? Also, is the hydrogen pilot technically feasible with no steam customers?

Staff understands that the auxiliary boiler's cost must be allocated in some way. It would be useful to know how much the industrial customer's payments would contribute towards the auxiliary boiler's operation cost, and towards the depreciation of the hydrogen electrolyzer. Additionally, an open question among parties is whether the opportunity to connect to the non-regulated customer was a major motive for Xcel's choice of location for the pilot.

Related to the question of cost is that of transfer pricing policy for the pilot. Transfer pricing is a useful tool for allocating costs and revenues between the corporate parent and/or subsidiaries for the purposes of tax efficiency, economic reporting, and various managerial goals. It is important for the entity to understand its purpose in selecting a transfer pricing policy. The

Commission may wish to explore the purpose of the pilot as it relates to the industrial customer and the allocation of costs between the regulated and unregulated businesses. Staff understands that the purpose of this NGIA project is gain learnings on the application of green hydrogen technology to industrial customers. The existence of the pre-existing industrial customer appears to be a secondary factor with an opportunity to offset some NGIA pilot costs.

Staff also notes that the industrial customer purchases steam for its operations, apparently with no regard for the production process and source of fuel for this production. Its interest is in securing a source of steam, and its current arrangement with Xcel allows for substitution of natural gas and fuel oil. While hydrogen may be added as another fuel source in future contracts, staff concludes that the marginally higher cost of hydrogen fuel for the auxiliary boiler is driven by the NGIA pilot and not the industrial customer. Staff agrees that it would be reasonable for Xcel to continue to charge the customer the natural gas cost equivalent for hydrogen because the customer is ancillary to the NGIA pilot project.

IV. Decision Options

1. Approve Xcel's Petition requesting reaffirmation of affiliate Interest Arrangement Accounting Treatment. (Xcel)

<u>Cost Recovery for alternative strategies if the industrial customer withdraws early from its arrangement with Xcel</u>

2. Xcel's shareholders shall bear all risks of any stranded capital costs and return should the Sherco 5MW facility become no longer used and useful. (OAG, Department)

3. Xcel's shareholders shall bear all costs of any plant additions or other costs necessary to provide hydrogen to another off-taker. (OAG, Department)

Or

3A. Xcel's shareholders shall bear all costs of any plant additions or other costs necessary to provide hydrogen to another off-taker, or those costs shall be factored into the cost of service for the new customer, such that ratepayers incur no additional costs. (Department Alternative)

4. Xcel's shareholders shall bear all costs necessary to decommission, transport, and reconnect the electrolyzer if it becomes necessary to do so before the end of the electrolyzer's useful life. (OAG, Department)

<u>Residential and Small Commercial Cost Recovery</u>

[If the Commission does not adopt Decision Options 2, 3, or 4, then it may consider Decision Option 5 or 6]

5. Xcel shall not seek recovery of any of the following costs from residential and small commercial customers, consistent with the Commission ordered cost allocation for the pilot in Xcel's NGIA plan: (OAG if 2, 3, and 4 are not selected)
   A. Any stranded capital costs and return should the Sherco 5MW facility become no longer used and useful.
   B. Costs of any plant additions or other costs necessary to provide hydrogen to another off-taker.
   C. Costs necessary to decommission, transport, and reconnect the electrolyzer if it becomes necessary to do so before the end of the electrolyzer's useful life.

6. Xcel shall not seek recovery of any of the costs for the pilot from residential and small commercial customers, consistent with the Commission ordered cost allocation for the pilot in Xcel's NGIA plan. (Department)

Or

7. Xcel may seek hydrogen electrolyzer cost recovery from residential and/or small commercial customers only if the pilot is deployed for residential or small commercial customers. (Xcel)

Or

8. Xcel may seek hydrogen electrolyzer cost recovery from residential and/or small commercial customers until the Commission approves a finding that the hydrogen electrolyzer will not be deployed for residential and/or small commercial customers. (Xcel)

<u>Compliance</u>

9. Xcel shall make a compliance filing within 30 days of the order clarifying how it would treat the costs of connecting new steam customers to the boiler. (Department)

10. Xcel shall make a compliance filing within 30 days of the order explaining what energy usage it expects from the Sherco 3 buildings and if that level of usage would be able to produce sufficient learnings for the pilot project. (Department)

11. Order Xcel to include all fuel related cost information by fuel source as separate line items," in its annual affiliate compliance filing. *(*Department*)*