

1 RE: THE TARIFF SHEETS FILED BY)  
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3 COLORADO WITH ADVICE LETTER )  
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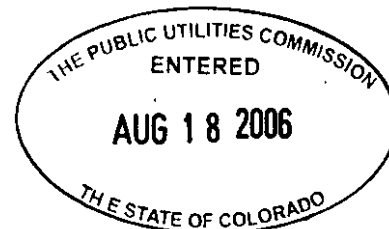
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6 DIRECT TESTIMONY AND EXHIBITS OF  
7 DANIEL B. FRIEDLANDER  
8

9 WHY DO YOU FEEL THAT THE RATE INCREASE HURTS BOTH XCEL AND  
10 RATEPAYERS?

11 In answering this question we must first acknowledge that we live in a  
12 capitalist society and economy. In this environment companies who provide the  
13 best service for the least cost prevail.

14 I was educated in economics at the University of Chicago by Milton Friedman  
15 and other proponents of free enterprise. After getting my advanced degree I  
16 taught economics for five years. My first business job was with IBM in the 1970s.  
17 I soon learned that IBM, while the undisputed computer leader at that time, was  
18 attempting to maintain profit and growth by restricting innovation. I left IBM in  
19 1978 and spent the next 26 years developing new markets and growing  
20 companies that thrived in the rough and tumble free enterprise environment of  
21 competition and innovation. See my attached resume for more details.

22 This brings me back to the rate increase. It's true that electricity is government  
23 regulated. But regulation is a hybrid model with government regulation to  
24 protect the interests of the ratepayers and private ownership to allow  
25 corporations to compete based on the highest level of service and efficiency.  
26 Another way of looking at this is that regulation protects the public while free  
27 enterprise efficiency is achieved by rewarding the regulated company for  
28 innovation and risk.



1 My fundamental objection to the rate increases is that it reduces Xcel's risk of  
2 building Comanche 3. As a result it incents Xcel to advocate decisions that it  
3 would not entertain if it faced normal business risk.

4 What are some of the risks Xcel would face if they were not protected from risk  
5 by government regulation and the proposed rate increase?

- 6 • The plant might take longer than projected to build
- 7 • Legal or other issues might delay or stop the construction of the plant
- 8 • There might be significant cost overruns in building the plant
- 9 • The cost of coal might increase dramatically
- 10 • There might be insufficient demand for the electricity the plant produces
- 11 • During the life of the plant emissions of carbon might be taxed
- 12 • During the life of the plant controls might be implemented requiring  
13 reduced carbon emissions

14 In a free enterprise world Xcel as a corporation would bear these risks. It's  
15 precisely these risks that incite Xcel to come up with the least cost plan. Indeed,  
16 the reward to Xcel for taking these risks is the government regulated rate of  
17 return.

18 **WHAT ARE THE POSSIBLE CONSEQUENCES OF RATEPAYERS**  
19 **RELIEVING XCEL OF NORMAL BUSINESS RISKS ASSOCIATED WITH THE**  
20 **CONSTRUCTION OF COMMANCHE 3?**

21 *Reduced incentive to complete.* In normal capitalist practices a company has the  
22 incentive to complete a capital investment in the shortest period of time. The use  
23 of CWIP to finance the carrying cost of the plant undermines this.

1 Cost to complete. With no firm cost cap on the construction cost, with the use of  
2 CWIP to finance the carrying cost and a guaranteed return on its capital  
3 expenditures, Xcel faces no consequences should its cost spin out of control. In  
4 fact, the current system rewards Xcel with a greater rate of return if it  
5 overspends.

6 *Factors that would delay or stop the plant.* By shifting the cost of financing to the  
7 ratepayers CWIP artificially protects Xcel from the consequences of many factors  
8 that would delay or stop the plant. Should this happen the ratepayers, not Xcel,  
9 would bear the cost. For example, the underwriting of risk by the public allows  
10 Xcel to forge ahead with construction while major legal issues are unresolved.

11 *Future carbon tax and carbon mitigation.* In the settlement agreement Xcel  
12 agreed for purposes of future planning to assume there is there will be cost of  
13 carbon emissions. But Xcel and the PUC did not consider that the crisis nature  
14 of global warming might cause the government to not only tax carbon emissions  
15 of future plants but also the emissions of existing plants or plants under  
16 construction... This could mean that all the cost assumptions of the least cost  
17 plan would be drastically changed and pulverized coal, being the most carbon  
18 dioxide intensive, would almost certainly become uneconomical.

19 To conclude, the PUC should balance its guaranteed rate of return to Xcel with  
20 ensuring that Xcel faces normal economic risk. The way to do this is to reject  
21 Xcel's request for the rate increase.

22 **DOES IT MAKE SENSE FOR RATEPAYERS TO PAY UPFRONT PRIOR TO**  
23 **COMPLETION OF COMMANCHE 3?**

1 This issue brings us back to the issue of risk. Like a normal capitalist  
2 company Xcel should own the risk of expanding capacity. By turning to the  
3 ratepayers to pay the upfront costs Xcel is relieved of the responsibility of  
4 performing efficiently.

5 **SHOULD XCEL'S LOW BOND RATING BE USED AS A REASON FOR**  
6 **PUBLIC FINANCING?**

7 This is a touchy issue. Xcel has argued that their BBB- bond rating makes it  
8 hard for them to borrow at competitive rates. It is not the responsibility of the  
9 PUC or the citizens of Colorado to protect Xcel from the business practices that  
10 have caused their bond rating to plummet. If ratepayers effectively subsidize  
11 Xcel by assuring responsibility for financing Commanche 3 Xcel is once again  
12 relieved of having to function as a competitive company.

13 **DOES THE RATE INCREASE PREPARE XCEL FOR FUTURE ENERGY**  
14 **DEVELOPMENTS?**

15 What Xcel is asking for is protection from market forces. This isolation makes  
16 them vulnerable to major market forces that may disrupt their business model in  
17 the future. The two most obvious market forces are the decentralization of  
18 energy production and distribution and the externalization of the social cost of  
19 environmental degradation, particularly global warming. By building a pulverized  
20 coal plant that will not come online till 2009 at the earliest the PUC is  
21 inadvertently weakening Xcel's ability to respond to future market forces.

22 **IS PROPOSING A PULVERIZED COAL PLANT A MORAL ISSUE?**

1        If the PUC believes that global warming is a threat to our future it is a moral  
2 imperative to take action to stop its growth. Even if the PUC is not fully  
3 convinced how fast global warming will happen and what the precise  
4 consequences will be it is moral to err on the side of caution.

5        **IS THERE ENOUGH EVIDENCE THAT CARBON DIOXIDE FROM BURNING**  
6        **COAL CAUSES GLOBAL WARMING?**

7        Until the last few years the link between carbon dioxide and global warming  
8 was disputed. During this period one could argue that it was moral to propose  
9 coal plants. But this has changed. The overwhelming scientific consensus is  
10 that global warming is caused by carbon dioxide. And coal fired power plants are  
11 the largest sources and by far the greatest polluters per unit of energy produced.  
12 Since the accumulation of carbon dioxide in the atmosphere is cumulative the  
13 projected 50 year life of Commanche 3 will most likely become an increasing  
14 liability to both Xcel and their ratepayers.

15        **HOW SHOULD THE NEW INFORMATION ON GLOBAL WARMING AFFECT**  
16        **THE COMMANCHE 3 PLANT?**

17        Given that initial planning for Commanche 3 probably occurred during the  
18 period when the link between coal burning plants and global warming was still  
19 disputed what should the PUC do? My answer is simple. While painfully  
20 economically, the PUC should recognize the new information about the  
21 magnitude of the global warming threat and direct Xcel to come up with an  
22 alternative plan that is compatible with a safe future.

1 **IS COMMANCHE 3 THE LEAST COST WAY TO PROVIDE FOR FUTURE**  
2 **ENERGY NEEDS?**

3 This is debatable. Certainly the approved least cost plan contained  
4 assumptions that made pulverized coal attractive and diminished the cost  
5 effectiveness of renewable alternatives. These assumptions included:  
6 *The cost of coal will remain constant in real terms.* This has already been proven  
7 questionable with the recent increases in coal prices.  
8 *Wind has a low efficiency.* If my memory serves me right the LCP assumed that  
9 the efficiency of wind was 10%. I believe Xcel is already using higher figures.  
10 *No consideration for solar.* This assumption ignores the major improvements  
11 that are being made in solar.

12 It should be noted all these assumptions have one characteristic. They make  
13 coal look low risk and renewable energy either costly or unviable. Moreover,  
14 they make coal look like the least cost approach when in fact it may not be

15 **WILL BUILDING A PULVERIZED POWER PLANT BE GOOD**  
16 **ECONOMICALLY FOR COLORADO?**

17 Colorado has magnificent economic resources that can make it a leader in  
18 Clean Energy, the next wave of energy development. We have a concentration  
19 of expertise (NREL, NCAR, etc), natural resources (wind and solar) and energy  
20 companies. What we lack is a local market.

21 Xcel' desire to build a coal plant based on yesterday's technology inhibits the  
22 growth of our nascent Clean Energy industry. Meanwhile, California and other

1 states are forging ahead with initiative including early stage financing, tax breaks  
2 and plans to build 1,000,000 solar homes.

3 As a custodian of the public interest the PUC can help Colorado secure a  
4 larger part of this growing market by directing Xcel to come up with a Clean  
5 Energy alternative to a pulverized coal plant.

6 RESPECTFULLY SUBMITTED THIS 17ST DAY OF AUGUST, 2006 .

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SIGNED:



DANIEL B. FRIEDLANDER

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I hereby certify that on this 17<sup>st</sup> day of August 2006, the original and seven copies of the foregoing **Testimony of Daniel B. Friedlander** were served via mail to:

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And copies were served by e-mail on all Parties on this service list:

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9

## PROFESSIONAL SUMMARY

10  
11 Business leader with over 30 years experience starting and growing early stage software  
12 companies. Founder, President or key executive in five successful startups. Helped take two  
13 startups public and sold three. Pioneered introduction of new technology into emerging market.  
14 Skilled in strategic planning and business development. Expert in early stage capital and  
15 management team formation. Experienced in general management, sales and marketing.  
16 Understands how to transform a startup from an early stage engineering organization into a  
17 business.

18  
19  
20 *Key Accomplishments and Responsibilities*

21  
22 2004-2006 Retired

- 23  
24
- Expert in renewable energy business alternatives
  - Co-founder, Quantum Energy Corporation
- 25  
26

27 2001-2004 President, TimeSpring Software

- 28  
29
- Co-founder of company introducing continuous recording technology
  - Recruited professional management team
  - Raised \$15 million in venture capital financing
  - Introduced first products to market
- 30  
31  
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34 1998-2001 Partner, IN\_fusion

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36
- Sold Retrieve, a file system company, for \$18 million to Computer Associates (2000)
  - Spun off Radiant, a storage management company, from AT&T (2001)
  - Restructured CaminoSoft, a storage startup, (2000-2001)
  - Ran Market Fusion, an executive business alliances forum (1996-2000)
- 37  
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41 1993-1998 President, InVu Information

- 42  
43
- Founded and sold InVu, a decision support software company, to Oracle (1996)
  - As President of PC DOCS, a \$60 million NASDAQ document management company, restructured company (1997)
  - Assisted Quorum Ventures, a Toronto VC, in selling PC DOCs (1998)
- 44  
45  
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1 • Consulted for Microsoft, IBM, Oracle and others on market development and market  
2 strategy

3  
4 1991-1993 Vice President of Sales and Marketing, Avail Systems

- 5  
6 • Co-founder of startup developing storage management software  
7 • Raised \$12 million in financing from Hambrecht and Quist and Aweida Ventures.  
8 • Sold Avail to Wang for \$32 million (1995)

9  
10 1989-1991 Vice President of Sales, Palindrome Software

- 11  
12 • Co-founder of startup developing automated backup software  
13 • Raised \$18 million in financing from by NEA, Frontenac and Marquette Ventures  
14 • Sold Palindrome to Seagate for \$69 million (1993)

15  
16 1996-1989 Vice President of Sales, Novell Corporation

- 17  
18 • Grow sales from \$73 million to \$283 million in two years  
19 • Built sales organization from 99 to 224  
20 • Lead strategic transition from hardware to software

21  
22 1982-1986 Regional Sales Manager, 3Com Corporation

- 23  
24 • Grow sales from zero to \$23 million.

25  
26 1980-1982 Vice President of Sales and Marketing, Microtype

- 27  
28 • Co-founder of startup developing a modular PC.

29  
30 1978-1980 Sales Manager, Datapoint Corporation

- 31  
32 • Introduced first commercial local area networks

33  
34 1973-1978 Marketing Representative, IBM

35  
36 1969-1973 Professor of Economics, Moraine College

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38 **EDUCATION**

- 39  
40 • M.A. Economics, University of Chicago 1968  
41 • B.A. History, University of Wisconsin 1966

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43  
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