

**BEFORE THE  
PUBLIC SERVICE COMMISSION OF WISCONSIN**

Joint Application of American Transmission )  
Company LLC and Northern States Power )  
Company - Wisconsin, as Electric Public )  
Utilities, For Authority to Construct and )  
Operate a New 345 kV Transmission Line )  
from the La Crosse area, in La Crosse County, )  
to the greater Madison area in Dane County, )  
Wisconsin. )

Docket No. 05-CE-142

**DIRECT TESTIMONY OF JAMES HODGSON**

**IN SUPPORT OF THE JOINT APPLICATION**

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1 **INTRODUCTION**

2 **Q. Please state your name, employer, title and business address.**

3 A. My name is James Hodgson, and I am employed as a Business Development Strategist by  
4 ATC Management Inc., the corporate manager of American Transmission Company LLC  
5 (collectively "ATC"). My office is located at W234 N2000 Ridgeview Parkway Ct.  
6 Waukesha, Wisconsin 53188-1022.

7 **Q. What are your responsibilities with ATC?**

8 A. My primary responsibilities at ATC include developing and using corporate pro-forma  
9 financial models, performing strategic financial analysis, and providing ad-hoc financial  
10 analysis services to ATC personnel.

11 **Q. Please describe your background, including your educational and professional  
12 experience as it relates to this direct testimony.**

13 A. I have a Bachelor's degree in Economics from Grinnell College (1990), a Master's  
14 degree in Finance from the University of Iowa (1992), and a Chartered Financial Analyst  
15 charter (2003). I also have 22 years of experience in utility economic and financial  
16 analysis. I have been with ATC for more than 13 years in the Financial Planning  
17 Department.

18 **Q. For whom are you testifying?**

19 A. I am providing testimony on behalf of ATC in support of the Joint Application for a  
20 Certificate of Public Convenience and Necessity and Wisconsin Department of Natural  
21 Resources Utility Permit ("Joint Application").

1 **Q. What have your responsibilities been in relation to the Badge Coulee 345 kV**  
2 **Transmission Line Project (“Badger Coulee Project” or “Project”)?**

3 A. As discussed in Mr. Burmester’s direct testimony, ATC’s planning department originally  
4 evaluated the Project and various alternatives, including the Spring Green 345 kV, 345  
5 kV to Iowa, Combination 345 kV, 765 kV, and Low Voltage alternatives, by comparing  
6 the calculated benefits of each alternative against each alternative’s estimated overall cost  
7 to rate payers, which is calculated as the net present value revenue requirement  
8 (“PVRR”). This original planning analysis was conducted using the Midcontinent  
9 Independent System Operator, Inc.’s (“MISO”) Transmission Expansion Plan (“MTEP”)  
10 09 data for all of the alternatives. Subsequently, the planning department conducted a  
11 sensitivity analysis of the Project using MTEP 11 data, and then later conducted an  
12 analysis of the Project, Cardinal Bluffs, and the Combination 345 kV alternatives using  
13 MTEP 13 data. For each planning analysis, I calculated the net PVRR of the Project and  
14 alternatives that were being studied and provided that information to the planners for use  
15 in their analyses.

16 **Q. What is net PVRR and how was it used in the various planning analyses?**

17 A. The net PVRR is a calculation of an alternative’s overall cost to ratepayers. In general,  
18 when a project is built, ratepayers have to pay for it through increased transmission  
19 charges. These transmission charges come in many forms and are governed by the  
20 Federal Energy Regulatory Commission’s (“FERC”) approved tariffs. For example,  
21 some charges - like the annual Schedule 9 Network Service transmission charge - are

1 billed by ATC directly to its customers, while other charges are billed by MISO on a  
2 MISO-wide basis.

3 To understand how net PVRR is calculated, one must first understand what the  
4 annual revenue requirement itself represents. The annual revenue requirement of a  
5 project is defined as the change in the total annual transmission charges to be billed to the  
6 ratepayer group that is the focus of the analysis under all applicable tariffs due to the  
7 addition of the project. The net PVRR for each alternative represents the cumulative  
8 expected change in the transmission charges to the ratepayer group for each alternative  
9 over the alternative's expected life, discounted to account for the time value of money.

10 **Q. What are the purposes of your direct testimony?**

11 A. The purposes of my direct testimony are to: (1) describe how I calculated the estimated  
12 net PVRR for the Project and each alternative in the various planning analysis; and (2)  
13 discuss the impact of MISO's Multi-Value Project ("MVP") cost allocation process on  
14 ATC's customers.

15 **Q. Are you sponsoring any exhibits or referring to any data request responses in your  
16 testimony?**

17 A. No.

18 **Q. Why is calculating each alternative's net PVRR important?**

19 A. Calculating the net PVRR for each of the alternatives is a critical component of the  
20 planning analysis for two reasons. First, having the net PVRR for each alternative allows  
21 the Applicants (and ultimately the Commission) to more accurately compare the costs of  
22 the various alternatives to ATC's and NSPW's ratepayers. Because the net PVRR

1 represents the present value of the change in transmission charges to ATC and Northern  
2 States Power Company, a Wisconsin corporation's ("NSPW") customers as a result of  
3 the addition of each alternative, it represents each alternative's true cost to the studied  
4 ratepayers. Second, the net PVRR for each alternative can also be compared directly  
5 against each alternative's economic benefit. The planning analysis calculated the  
6 economic benefits of the alternatives by looking at the energy cost savings to the studied  
7 ratepayers. To compare the benefits for each alternative to the alternative's costs, the  
8 costs need to be in the form of ratepayer impacts, which is what net PVRR represents.

9 **Q. Why can't the Applicants use the total construction cost of the alternatives to**  
10 **compare them?**

11 A. The amount that ratepayers ultimately pay for a project is not necessarily the same as the  
12 total construction cost for that project. There are a number of reasons for this. For  
13 example, the Applicants are allowed to earn a rate of return on the capital they spend,  
14 which must be included to obtain the true ratepayer cost. In addition, in this case five of  
15 the alternatives would qualify as MVP projects, meaning the alternative's costs would be  
16 shared among the entire MISO region and not just paid for by ATC's and NSPW's  
17 ratepayers. For example, although the Badger Coulee Project would cost between \$540  
18 million and \$580 million to construct, it would actually only cost ATC's and NSPW's  
19 ratepayers about \$5 million on a net PVRR basis because the majority of the costs would  
20 be paid for through MISO cost-sharing.

21 **Q. Which of the studied alternatives did the Applicants assume would be able to obtain**  
22 **MVP cost-sharing?**

1 A. The Applicants assumed that the Badger Coulee, Spring Green 345 kV, 345 kV to Iowa,  
2 Combination 345 kV, and 765 kV alternatives would all be eligible for MVP cost-  
3 sharing, if constructed, and the Low Voltage alternative would not be subject to cost-  
4 sharing.

5 **PVRR ANALYSIS OF THE PROJECT AND ALTERNATIVES**

6 **Q. Please generally describe how you conducted the net PVRR analysis for alternatives**  
7 **contained in the original planning analysis in Appendix D of the Joint Application**  
8 **and in the MTEP 11 and MTEP 13 updates to that analysis.**

9 A. Because some of the alternatives qualify as MISO MVP projects, if put into service these  
10 alternatives would trigger MISO-wide cost sharing. As such, I had to calculate the PVRR  
11 differently for non-MVP and MVP alternatives.

12 For the non-MVP alternative, I first calculated the change in ATC's annual  
13 revenue requirement associated with the studied alternative. More specifically, I  
14 calculated the alternative's estimated change to ATC's annual revenue requirement for  
15 the years 2012 - 2058 under Attachment O of the MISO Transmission and Energy Market  
16 Tariff ("TEMT"). I then calculated the estimated change in the total annual transmission  
17 charges related to the alternative for all of ATC's customers and then separately for  
18 ATC's Wisconsin customers. Finally, I discounted this annual net cost to calculate the  
19 net PVRR for the alternative for the respective customer group.

20 For MVP alternatives - like the Badger Coulee Project - I had to take additional  
21 steps. As with the non-MVP alternative, I started out by calculating each alternative's  
22 estimated change to ATC's annual revenue requirement for the years 2012 - 2058 under

1 Attachment O of the MISO TEMT. I then calculated the allocation of a portion of ATC's  
2 total revenue requirement across the MISO system based on ATC's investment in the  
3 alternative pursuant to Attachment MM, which governs MVP cost allocation. I deducted  
4 the Attachment MM MISO-wide allocation from the incremental revenue requirement,  
5 and this resulted in the net total incremental annual Schedule 9 Network Service  
6 transmission charge to ATC's network customers.

7 I then calculated the estimated change in the total annual transmission charges  
8 related to each alternative for all of ATC's customers and then separately for ATC's  
9 Wisconsin customers. To complete this step, I added each MVP alternative's net impact  
10 on the respective ATC customer group's Schedule 9 Network Service transmission  
11 charges to the MVP charges that will be charged to ATC's transmission customers by  
12 MISO because of the alternative. Finally, I discounted this annual net cost to calculate the  
13 net PVRR for each MVP alternative for the respective customer group.

14 **Q. Please take us through each step of your analysis in detail.**

15 A. I conducted the net PVRR analysis over the assumed 40 year depreciation life of the  
16 assets using the following steps:

- 17 1. I calculated the incremental annual revenue requirement for each option under the rate  
18 formulas set forth in ATC's Attachment O to the MISO TEMT. Under ATC's  
19 Attachment O, the pre-certification expenditures are expensed and the capitalized  
20 expenditures during construction do not accrue Allowance for Funds Used During  
21 Construction ("AFUDC"), but they are included in rate base; in contrast, as Mr. Hoesly  
22 explains, NSPW uses AFUDC for these expenditures. I also included ongoing expenses



1 for environmental impact fees and incremental operations and maintenance costs in the  
2 incremental annual revenue requirement. Because it will be co-owned by ATC and  
3 NSPW, for the Badger Coulee Project the ATC incremental revenue requirement  
4 calculation includes only the portion of the Project that is to be owned by ATC. For non-  
5 MVP alternatives the incremental revenue requirement calculated here is the net change  
6 in the ATC Schedule 9 Network Service transmission charges to ATC's network  
7 customers.

8 2. For each MVP alternative, I then calculated the annual allocation of the total annual  
9 revenue requirement pursuant to Attachment MM. This MVP allocation under  
10 Attachment MM differs from the incremental annual revenue requirement in step 1  
11 because it is based on a share of ATC's total revenue requirement, not just the revenue  
12 requirement increase related to the Project. The MVP-allocated amount would be billed  
13 by MISO under Schedule 26A to the transmission customers across the MISO system.  
14 Again for the Badger Coulee Project alternative, the Attachment MM allocation is based  
15 upon only the portion of the Project that is to be owned by ATC.

16 3. I then calculated the net change in the ATC Schedule 9 Network Service transmission  
17 charges related to each MVP alternative by subtracting the Attachment MM allocation of  
18 the revenue requirement calculated in step 2 from the alternative's incremental revenue  
19 requirement calculated in step 1 prior to calculating the transmission charges.

20 4. For each MVP alternative, I then calculated the estimated amount that ATC customers  
21 would have to pay as part of the MISO-wide billing for the alternative under MISO  
22 Schedule 26A. In this calculation, I multiplied the portion of ATC's total annual revenue

1 requirement (calculated under Attachment MM in step 2) by the estimated ATC zone's  
2 share of Schedule 26A charges (as provided by MISO). For the Badger Coulee Project,  
3 the ATC zone's share of the Schedule 26A MVP charges that would be billed by MISO  
4 was based on the Attachment MM allocations of both ATC and NSPW and therefore  
5 represent the full Project cost. I did this because ATC's customers will have to pay a  
6 share of both the ATC and the NSPW portions of the Project through the MISO-wide  
7 MVP transmission charges.

8 5. I then added the net change in ATC's Schedule 9 charges calculated in step 3 above to  
9 the estimated ATC zone's Schedule 26A MVP charges calculated in step 4 (if any) to  
10 calculate the total annual net impact on the ATC zone's transmission charges. This total  
11 represents the annual "cost" to the ATC customers.

12 6. Finally, I calculated the PVRR over the study period for each alternative. I used a  
13 nominal discount rate of 6.7% as the rate best representing the long term time value of  
14 money to the electric customers. For the Badger Coulee Project in our analysis using  
15 MTEP 11 and MTEP 13, I took the net annual revenue requirement for ATC's customers  
16 and then added the net annual revenue requirement for NSPW's customers to obtain the  
17 combined net annual revenue requirement for the combined customer group which I then  
18 discounted to find the net PVRR for the Project.

19 **Q. Who calculated the net annual revenue requirements for NSPW's ratepayers that**  
20 **you used in the combined analysis?**

21 A. The net annual revenue requirements for NSPW's ratepayers was calculated by Karl  
22 Hoesly.

1 **Q. Why did you use a discount rate of 6.7% in your calculation of the PVRR?**

2 A. The rate of 6.7% is a long term estimate of the interest rate set by the FERC to  
3 compensate utility customers in refund situations (the “FERC Interest Rate”). The FERC  
4 uses the prime interest rate as the FERC Interest Rate to justly compensate customers for  
5 their time value of money and therefore it seemed a reasonable basis for this analysis.  
6 The prime interest rate runs approximately 300 basis points (or 3%) above the federal  
7 funds rate. I used a long term estimate of the prime rate for this analysis.

8 **Q. What are the current prime and FERC interest rates? And if these are different**  
9 **from the 6.7% rate that you used in your PVRR calculation why did you use a**  
10 **different rate?**

11 A. The current prime rate (and FERC Interest Rate) is 3.25%. I did not use the current rate  
12 as this is a long term project and the current rate reflects the historically low interest rates  
13 currently in the market. My analysis considered more than 40 years of annual revenue  
14 requirements and it is reasonable to assume that the rates seen over this period will be  
15 more representative of the historical averages.

16 **Q. How did you estimate the long term prime rate that you used as the discount rate in**  
17 **the calculation of the PVRR?**

18 A. I estimated the long term prime rate by adding 300 basis points onto the average returns  
19 on U.S. Treasuries (1926 – 2008), which is 3.7%, resulting in an estimated long term  
20 prime rate of 6.7%.

21 **Q. Do you have any independent support that would indicate that this is a reasonable**  
22 **estimate of the prime rate?**

1 A. Yes. The most recent long-range estimates of interest rates published in the Blue Chip  
2 Financial Forecast dated June 1, 2014 indicate that the consensus estimate of the leading  
3 economists is that the average prime rate for 2021 – 2025 (the longest time frame they  
4 estimate) will be 6.7%.

5 **Q. Please describe how the Badger Coulee Project being a MISO MVP project impacts**  
6 **the cost of the Project to ATC’s customers.**

7 A. MISO uses the formula in Attachment MM to allocate a portion of the transmission  
8 owner’s revenue requirement to be billed across the MISO system in rate Schedule 26A  
9 based on the transmission owners investment in a MVP project. ATC’s annual  
10 incremental revenue requirement and Attachment MM allocation are presented in Table  
11 G3 of Addendum G in Appendix D of the Joint Application. The Attachment MM  
12 allocation of ATC’s total revenue requirement is actually greater than ATC’s incremental  
13 revenue requirement for the Project in virtually every year. As such, the Badger Coulee  
14 Project will cause an overall reduction in the network transmission charges paid by  
15 ATC’s customers in most years and in many years this reduction in network transmission  
16 charges is greater than the increase in MISO MVP charges billed to ATC’s customers as  
17 a result of the Project, thereby largely mitigating the cost of the Badger Coulee project to  
18 the ATC customers. This impact is before accounting for any of the economic benefits  
19 detailed in the various planning analyses.

20 **Q. Why is the MVP cost sharing portion of ATC’s total revenue requirement actually**  
21 **greater than ATC’s incremental revenue requirement for the Project in virtually**  
22 **every year?**

1 A. The incremental revenue requirement in step 1 above is the net increase in total revenue  
2 that ATC will need to recover from customers to compensate ATC for the additional  
3 costs directly associated with the addition of the alternative. These costs include  
4 increases in O&M, taxes, and capital costs. Attachment MM, on the other hand,  
5 proportionately allocates a share of ATC's total revenue requirement (not just the  
6 incremental portion related to the alternative) to the Schedule 26A MVP rates, which are  
7 paid for by transmission customers throughout MISO. In other words, a portion of the  
8 total operating costs of ATC (including the fixed costs, central office costs and overhead  
9 costs as properly recoverable in ATC's tariff) are allocated to the Schedule 26A MVP  
10 rates.

11 **CONCLUSION**

12 **Q. Does this complete your direct testimony?**

13 A. Yes, it does.