Northern States Power Company, a Minnesota Corporation
Electric Utility - South Dakota
Test Year Ending December 31, 2011
Fuel Clause Rider - Fuel Adjustment Factor Calculation

Docket No. EL12-
Exhibit No. _____(SVH-1)
Schedule 6
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		SERVICE CATEGORY						
		Residential	C&I Non-Dmd	C&I Demand			Outdoor Lighting	RETAIL
	STEP 1: CLASS RATIOS							
1.	Hourly Marginal Energy Costs x Hourly Loads*	$21,929,672	$2,992,547	$36,200,750			$344,757	$61,467,726
2.	MWh Energy at Generator	745,390	101,830	1,271,000			16,131	2,134,351
3.	Load-Weighted Marginal Energy Cost /MWh =(1)/(2)	$29.420	$29.388	$28.482			$21.373	$28.799
4.	**Class Ratio (Class Unit Cost / Retail Unit Cost)**	**1.0216**	**1.0204**	**0.9890**			**0.7421**	**1.0000**
	STEP 2: C&I DEMAND TOD RATIOS							
				Non-TOD	**On-Peak**	**Off-Peak**		
5.	Ratio of On-Peak to Off-Peak System Weighted Marginal Energy Costs				1.577			
6.	C&I Demand Class Time-of-Day Percentages from 8760 loads				0.4238	0.5762		
7.	C&I Demand TOD On-Peak Ratio = 1 / (0.4238 + (0.5762 / 1.577)) **				**1.2671**			
8.	C&I Demand TOD Off-Peak Ratio = 1 / ((1.577 x 0.4238) + 0.5762)) **					**0.8035**		
9.	C&I Demand Non-TOD On-Peak Weighting			0.4461				
10.	C&I Demand Non-TOD Off-Peak Weighting			0.5539				
11.	C&I Demand Non-TOD Ratio = (0.4461 x 1.2671) + (0.5539 x 0.8035)			**1.0103**				
	STEP 3: FUEL ADJUSTMENT FACTOR							
12.	FAF = Step 1, or for C&I Demand, Step 1 x Step 2	**1.0216**	**1.0204**	**0.9992**	**1.2532**	**0.7947**	**0.7421**	
		(4)	*(4)*	*(4) x (11)*	*(4) x (7)*	*(4) x (8)*	*(4)*	

* E8760 Allocator = Sum of Hourly System Marginal Costs times Hourly Class Loads

** Based on C&I Demand Weighted Average = (42.38% class on-peak x on-peak charge) + (57.62% class off-peak x off-peak charge)