

Northern States Power Company
a Minnesota corporation

South Dakota
Jurisdiction

Cash Working Capital

Lead Lag Study

Northern States Power Company
Electric Utility - Lead Lag Study
Cash Working Capital
12 Months Ended December 31, 2012 or 2013

Description	2013 South Dakota Jurisdiction Days	
Revenue Lag Days		
Computer Billing	41.01	December 2013 Data
Manual Billing	41.01	
Late Payment	0.00	
Connect and Trouble Charges	41.01	
Rentals	(31.90)	December 2012 Data
Interchange Revenues	38.25	December 2012 Data
Sales for Resale	37.67	December 2012 Data
Production Associated Revenues	37.67	
Midwest Independent System Operators ("MISO")	14.00	December 2012 Data
Point to Point - Non-Firm	37.67	
Services and Facilities	37.67	
Ancillary Service Revenues	37.67	
Distribution Associated Revenues	41.01	
Other	41.01	
Joint Operating Agreement - Revenue fr/to PSCO	37.67	
Payment Lead Days		
Coal and Rail Transport	18.84	December 2012 Data
Gas for Generation	37.99	December 2012 Data
Oil	20.08	December 2012 Data
Nuclear and End of Life	0.00	December 2012 Data
Nuclear Disposal	76.00	December 2012 Data
Purchased Power	33.47	December 2012 Data
Interchange	38.25	December 2012 Data
Labor and Related Costs		
Regular Payroll	11.70	December 2012 Data
Incentive Compensation	256.50	December 2012 Data
Pension and Benefits	32.86	December 2012 Data
All Other Operating Expenses	41.41	December 2012 Data
Property Taxes	355.77	December 2012 Data
Employer's Payroll Taxes	34.65	December 2012 Data
Gross Earnings (Franchise Fees) Taxes		
Electric	53.95	December 2012 Data
Gas	55.16	December 2012 Data
Federal Income Taxes	38.75	December 2012 Data
State Income Taxes	31.00	December 2012 Data
State Sales Taxes on Customer Billings-Minnesota	35.32	December 2012 Data
State Sales Taxes on Customer Billings-North Dakota	45.05	December 2012 Data
State Sales Taxes on Customer Billings-South Dakota	43.60	December 2012 Data
Number of Days in the Year	366	

Lead Lag Study

A lead lag study is a widely used and acceptable method for developing the Cash Working Capital ("CWC") component of rate base in connection with the determination of revenue requirements in public utility rate case proceedings.

The underlying objective of a Lead Lag Study is to measure the average length of time between the utility's provision of service and subsequent payment by customers ("Revenue Lag"), and the incurrence of costs necessary for the provision of utility service and subsequent payment by the utility ("Payment Lead"). A Lead Lag Study does not produce the calculated CWC allowance. The result of the Lead Lag Study provides the revenue lag days and various payment lead days that are used in the Cost of Service Study model to calculate the CWC provision. Total CWC is the sum of the net working capital required or provided for each includible element of cost of service.

The expense factors are calculated with this formula:

$$\text{Test Year Expense Amount X } \frac{\text{Composite Revenue Lag minus Applicable Payment Lead}}{365 \text{ Days}}$$

The CWC factor is applied to the appropriate test year expense amount. A positive result indicates a CWC requirement. A negative result indicates, on average, cash is received from customers before Northern States Power Company ("NSP") must pay for the applicable expense. A negative CWC result represents a non-investor source of capital. The CWC results of each appropriate expense are added together. This total CWC requirement (positive or negative) is included in rate base. A positive CWC requirement is added to rate base, a negative CWC requirement is deducted from rate base.

To complete a lead lag study, a twelve-month time period is used. Revenue receipts and payment disbursements are analyzed. All NSP jurisdictions include cash expenses. The cash expenses are placed in categories such as gas purchased for resale, labor, property and payroll taxes, and operating and maintenance ("O&M") expenses. Some jurisdictions that NSP operates in include some non-cash expense categories in the calculation of CWC such as Depreciation, Nuclear Fuel Amortization, Deferred Income Taxes, and Interest Expense.

Lead Lag Study - Intercompany Agreements

Revenues from NSP (Wi) - Electric Interchange Agreement

NSP(Mn)) Company operates its Power Supply facilities as an integrated electric system. Energy and Power are provided under a FERC-approved Interchange Agreement between NSP(Mn)) Company and NSP(Wi) Company. Under the existing arrangement, approximately sixteen percent (16%) of the power generated by NSP(Mn)) is transmitted to NSP(Wi), and approximately eighty four percent (84%) of the power generated by NSP(Wi) is transmitted to NSP(Mn)). Such amounts are reflected in the NSP(Mn)) Company statement of net operating income as both operating revenue [power sales to NSP(Wi)] and production expense [power purchases from NSP(Wi)].

Under Article X of the Agreement, the party selling power is to be compensated by the purchaser for full fixed costs, including a return on investment, plus the variable costs of production and transmission. Charges for demand and energy are billed monthly. As soon as practical after each month-end, a statement setting forth the detail of current charges is prepared and submitted for payment. The Interchange Agreement requires that payment shall be made within ten days of the statement. Affirmation by the accountant responsible for administrating the NSP(Mn)) side of the Interchange Agreement, based on the time required to accumulate interchange transactions data, prepare and issue the monthly statement and process payment requests, the nominal payment date is the 23rd of the month. In actuality, a single inter-company settlement payment netting amounts due to/ due from both companies is made at that time. Accordingly, the same average number of days computed for the revenue lag applicable to power sales to NSP(Wi) will also apply to that portion of Purchased Power Expense relating to receipts from NSP(Wi).

Such calculation is as follows:

$$\frac{365 \text{ days}}{12 \text{ months} \times 2} + 23 \text{ days} = 38.21 \text{ days}$$

Revenues from NSP(Wi) - Gas

NSP(Mn)) has a Gas Coordinating Agreement with NSP(Wi) for supervisory control and data acquisition ("SCADA") services provided to assist NSP(Wi) manage its Wisconsin and Michigan gas distribution systems. Under the contract, billings are made as soon as practical after month-end, with payment due by the twentieth of the following month. The average revenue lag of 35.21 days was computed by adding the twenty-day payment term to the fixed 15.21 service lag.