# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

# IN THE MATTER OF THE APPLICATION OF MONTANA-DAKOTA UTILITIES CO., A DIVISION OF MDU RESOURCES GROUP, INC. FOR AUTHORITY TO INCREASE ITS ELECTRIC RATES

### STAFF MEMORANDUM SUPPORTING SETTLEMENT STIPULATION

### DOCKET EL15-024

Commission Staff (Staff) submits this Memorandum in support of the Settlement Stipulation (Stipulation) of May 20, 2016, between Staff and Montana-Dakota Utilities Co. (MDU or Company) in the above-captioned matter.

# BACKGROUND

MDU last filed an electric rate case, Docket F-3576, in December 1985. The rates as a result of that docket were effective June 1, 1986. The only other rate case filing by MDU since this date was made pursuant to a Commission order to reflect the effects of the Tax Reform Act of 1986. The rates set from this action went into effect July 1, 1988.

On June 30, 2015, the Company filed an application with the South Dakota Public Utilities Commission (Commission) requesting approval to increase rates for electric service to its customers in its South Dakota retail service territory by approximately \$2.7 million annually or approximately 19.2%. A typical residential electric customer using 854 kwh on an average monthly basis would see an increase of \$16.91 per month or 19.2%.

The primary drivers for the increase in rates discussed in MDU's application are new regulations issued by the Environmental Protection Agency, growth across the interconnected system, the expiration of favorable transmission agreements with Western Area Power Administration (WAPA) along with WAPA and Basin Electric choosing to join the Southwest Power Pool instead of the Midcontinent Independent System Operator, and the previous expiration of a long-term baseload Power Purchase Agreement with Basin Electric and subsequent efforts to replace that energy and capacity. MDU's proposed increase was based on an historical test year ended December 31, 2014, adjusted for what MDU believed to be known and measurable changes, a 10.00% return on common equity, and a 7.588% overall rate of return on rate base.

The Commission officially noticed MDU's filing on July 2, 2015, and set an intervention deadline of September 11, 2015. No interventions were filed. On July 22, 2015, the Commission issued an Order Assessing a Filing Fee and Suspending Operation of Proposed Rates.

On November 23, 2015, MDU filed a Notice of Intent to Implement Interim Electric Service Rates effective on and after January 1, 2016.

Settlement discussions between Staff and MDU commenced on February 18, 2016. After several discussions, the Parties arrived at a mutually acceptable resolution of the issues presented in MDU's filing.

The Parties reached a comprehensive agreement on MDU's overall revenue deficiency and other issues presented in this case including, but not limited to, class revenue responsibilities, rate design, and tariff concerns.

### **OVERVIEW OF SETTLEMENT**

Staff based its revenue requirement determination on its comprehensive analysis of MDU's filing and information obtained during discovery. Staff accepted some Company adjustments, made corrections where necessary, modified other adjustments, and rejected those that do not qualify as known and reasonably measurable. Lastly, Staff introduced new adjustments not reflected in MDU's filed case.

Company and Staff positions were discussed thoroughly at the settlement conferences. As a result, some positions were modified and others were accepted where consensus was found. Ultimately, the Parties agreed on a comprehensive resolution of all issues. Staff believes the settlement is based on sound regulatory principles and avoids additional costly and unnecessary litigation.

The Parties agree MDU's revenue deficiency to be recovered through base rates is \$628,530. The revenue requirement and supporting calculations described in this Memorandum and attachments depict Staff's positions regarding all components of MDU's South Dakota jurisdictional revenue requirement.

The settlement also establishes an Infrastructure Rider to recover the costs associated with the Thunder Spirit Wind facility, a Transmission Cost Recovery Rider, and credits the Production Tax Credits to customers through the Fuel and Purchased Power Adjustment. When the effects of these changes are combined with the base rate increase, the total impact to customers is estimated at \$1,376,183, justifying an approximate 9.9% in retail revenues.

Staff believes this settlement will provide MDU with a level of annual revenues relative to its cost of service that is fair, just, and reasonable. These settlement rates allow MDU a reasonable opportunity to earn a return that is adequate to enable it to continue providing safe, adequate, and reliable service to its South Dakota retail electric customers.

# **STAFF OVERVIEW OF BASE RATE SETTLEMENT**

Staff's determination of the settlement base rate revenue requirement begins with total Company test year costs for the twelve months ended December 31, 2014, and allocates those total Company amounts to the South Dakota retail electric jurisdiction. Staff then adjusted the December 31, 2014, test year results for known and measurable post-test year changes. Staff Exhibit\_\_\_\_(PJS-1), Schedule 3 illustrates Staff's determination of MDU's *pro forma* operating income under present rates. Staff Exhibit\_\_\_\_(PJS-2), Schedule 2 illustrates Staff's calculation of MDU's South Dakota retail electric rate base, and Staff Exhibit\_\_\_\_(PJS-1), Schedule 2 and Staff Exhibit\_\_\_\_(PJS-2), Schedule 1 summarize the

positions. Staff Exhibit\_\_\_\_(PJS-1), Schedule 1 summarizes Staff's determination of MDU's revenue deficiency and total revenue requirement.

The increase summary by rate schedule is shown on Staff Exhibit\_\_\_\_(EJP-2), Schedule 1. Staff Exhibit\_\_\_\_(EJP-2), Schedules 2-1 through 2-7 reflect the settlement rates for each rate schedule. The comparison between present and settlement rates and resulting bill impacts for the Residential Service rate schedule is shown on Exhibit\_\_\_\_(EJP-2), Schedule 3.

Unless otherwise noted, all of the changes discussed below are changes from the Company's filed position.

### **REVENUE REQUIREMENT**

### Rate Base

Average Rate Base – The Company proposed a test year average rate base based on a two-point average of December 31, 2013 and December 31, 2014 balances. The settlement revises this to an average of the 13 month-end account balances, December 31, 2013 through December 31, 2014. This resulted in a decrease in rate base of approximately \$285,000.

**Plant Additions** – MDU proposed an adjustment to plant in service to reflect the difference in the pro forma average plant in service balance as of December 31, 2015, and the test year average plant in service. This adjustment essentially reflected the annualization of 2014 plant additions that went into service during the test year and one half of the plant additions expected to be in-service by December 31, 2015.

Staff reviewed both the plant additions that went into service during the test year and post-test year. The Company's adjustment included numerous projects with varying levels of expenditures. One large plant addition that went into service during the test year that Staff would like to note was the Heskett III combustion turbine. Heskett III is a natural gas-fired, 88 MW, simple cycle combustion turbine located in North Dakota and integrated with the Company's existing Heskett station operation. The decision to construct Heskett III was based on the analysis conducted in the 2011 Integrated Resource Plan (IRP), which identified this resource as part of its least cost plan. Based on a review of this IRP, related research, and responses to Staff's discovery questions, Staff concluded that this investment was reasonable. The actual capital costs were lower than the estimated amounts in the 2011 IRP by roughly \$77/KW or \$6.76 million.

The settlement revises this adjustment to: 1) Exclude revenue producing plant additions from the test year annualization and 2) Include only the actual costs of non-revenue producing post-test year plant additions that were completed and placed in service by December 31, 2015. The settlement includes the total actual non-revenue producing post-test year plant additions in contrast to MDU's proposal of one half of all 2015 plant additions. The adjustment also includes the associated impact on accumulated deferred income taxes. The net effect of this adjustment increases rate base by approximately \$3,821,000.

Large Generation Projects – The Company proposed an adjustment to plant in service to reflect four large generation projects projected to be in-service in 2015: 1) Big Stone Air Quality Control System (AQCS) Project, 2) Mercury and Toxic Standards (MATS) compliance at Lewis & Clark, 3) Lewis & Clark Reciprocating Internal Combustion Engine (RICE) Units, and 4) Thunder Spirit Wind Farm. Each of these projects is discussed individually below.

*Big Stone AQCS Project* – Staff's consultant, Kavita Maini, previously evaluated the decision to install the environmental retrofits at Big Stone and determined it was the least cost option compared to other alternatives<sup>1</sup>. MDU's adjustment was based on the estimated costs of the project. The settlement revises this adjustment to reflect the actual costs of the project. The adjustment also reflects the impact on accumulated depreciation and accumulated deferred income taxes, including the revised Big Stone depreciation accrual rates discussed above under Revisions to Existing Depreciation Accrual Rates. This adjustment reduces rate base by approximately \$10,000.

*Lewis & Clark MATS* – The Lewis & Clark Station located in Montana is a 52 MW coal fired plant that needed to be compliant with the Environmental Protection Agency's (EPA's) MATS Rule. The costs to comply were initially estimated at approximately \$27 million for the fabric filter baghouse and other modifications. An evaluation of the Company's 2013 IRP indicated that the MATS retrofit was part of the least cost resource plan compared to other alternatives. Subsequent to this analysis, the Company was able to identify a less costly solution at \$16.2 million<sup>2</sup>. Thus, the MATS retrofit was found to be a least cost investment compared to other alternatives. MDU's adjustment was based on the estimated cost of the project. The settlement revises this adjustment to reflect the actual costs of the project and includes the associated impact on accumulated depreciation and accumulated deferred income taxes. This adjustment reduces rate base by approximately \$12,000.

*Lewis & Clark RICE Units* – The Lewis & Clark RICE project, located in Montana, is an 18.6 MW naturalgas fired reciprocating engine project comprised of two 9.3 MW Wartsilla 20V34SG generating units. This investment was made based on analysis and findings from the 2013 IRP. MDU proposed to recover costs higher than what was assumed in the IRP. The settlement reflects the impact of a lower plant in service amount<sup>3</sup> as well as the associated impact on accumulated depreciation and accumulated deferred income taxes reducing rate base by approximately \$1,260,000.

*Thunder Spirit Wind Farm* – The Thunder Spirit Wind facility revenue requirement will be recovered through a rider, as discussed in more detail below under "Staff Overview of Infrastructure Rider Settlement". This reduces rate base by approximately \$10,135,000.

The net effect of the large generation project adjustments reduces rate base by approximately \$11,417,000.

[End Confidential]

<sup>&</sup>lt;sup>1</sup> Refer to Docket EL14-082 – In the Matter of the Petition of Otter Tail Power Company to Establish an Environmental Quality Cost Recovery Tariff

<sup>&</sup>lt;sup>2</sup> See Alan L. Welte's direct testimony for more detail.

<sup>&</sup>lt;sup>3</sup> [Begin Confidential]

\*\*\*PUBLIC VERSION\*\*\*

**Revisions to Existing Depreciation Accrual Rates** – MDU proposed changes to its existing accrual rates based on a consultant's analysis of the Company's historical retirement experience to estimate average remaining life accrual rates for its electric plant in service at December 31, 2014. The settlement amends the proposed schedule of accrual rates in several respects. First, the final retirement date used to determine the estimated remaining life of the Big Stone power plant was extended from 2027 to 2046 to match the retirement date now used by the plant's co-owners in light of the recently-installed environmental enhancements at the plant. Second, the estimated average service lives reflected in the Company's proposed rates for wind generation facilities (Diamond Willow, Cedar Hills Wind Farm, and Thunder Spirit Wind) were lengthened from 20 years to 25 years. Third, the settlement reduces the 7.19% proposed rate for Meters to 5.0% to conform to the life and salvage assumptions reflected in MDU's analysis of the economic feasibility of its conversion to Automated Meter Reading (AMR) technology. Finally, adopting the rates MDU has agreed to in a settlement of its rate filing in the state of Montana, the South Dakota settlement reduces its proposed accrual rates for Transmission & Distribution Plant Poles and Fixtures, Distribution Plant Overhead and Underground Conductors, Line Transformers and Services<sup>4</sup>. The effect of all of these accrual rate reductions is realized as part of the Depreciation Reserve Plant Additions and Depreciation Reserve Large Plant Additions adjustments, as well as the Infrastructure Rider, which are discussed below.

**Depreciation Reserve Plant Additions** – MDU proposed an adjustment to depreciation reserve to reflect changes based on plant additions and proposed changes to existing depreciation accrual rates. The settlement revises this adjustment based on the settlement pro forma plant and the accrual rates discussed above, and reflects the average first year accumulated depreciation for post-test year plant additions and accumulated depreciation associated with the test year plant annualization. The adjustment increases rate base by approximately \$1,119,000.

**Other Working Capital** – The settlement reflects a more recent 13-month ending December 31, 2015 average for materials and supplies, fuel stores, prepaid insurance, customer advances for construction, and customer deposits. This adjustment also includes an offsetting accumulated deferred income tax adjustment for customer advances for construction and customer deposits. The net effect of these changes increases rate base by approximately \$115,000.

**Unamortized Gain/Loss on Debt** – From time to time, when it is cost-effective to do so, MDU refinances certain issues of outstanding long-term debt. Normally, there is either a gain or a loss recorded on the re-acquired debt, which is amortized over the remaining life of the debt. The gain or loss can be reflected in the weighted cost of debt calculation or as a separate amortization expense or credit in operating expenses. Under either accounting treatment, however, there is triggered a deferred income tax expense or credit. MDU proposed adjustments to its deferred tax expense and to the deferred tax reserve to reflect the income tax consequences of the amortization of the loss on reacquired debt. Staff accepted MDU's adjustments in this regard.

<sup>&</sup>lt;sup>4</sup> The depreciation rates are shown on Exhibit D of the Settlement Stipulation.

Acquisition Adjustment – MDU rate case docket F-3576 established an amortization of the Coyote Station acquisition adjustment. The amortization of this acquisition adjustment ended in 2014. Thus, MDU has proposed to exclude the amortization expense and any net plant associated with this acquisition adjustment from the test year. Staff accepts this adjustment.

**Amortization of Retired Power Plants** – MDU rate case docket F-3576 also established an amortization of projected decommissioning costs of several retired power plants. This came with a tracking mechanism stipulated by the parties to capture any over- or under-recovery between projected and actual cost in a future rate case filing. MDU proposes this adjustment to true-up the over-recovery between projected costs and actual costs over a ten year amortization period, with the unamortized amount a credit to rate base. In its proposal, MDU removes \$6,650 of the \$46,437 over-recovery, as this represents an estimate of decommissioning work still to be done at the Glendive power plant. Staff's adjustment 1) rejects the removal based on an estimate of future costs and 2) uses the average unamortized amount as a credit to rate base. This adjustment increases rate base by approximately \$9,000.

**Amortization of Unrecovered Plant** – In docket EL09-025<sup>5</sup>, MDU was allowed deferral of the costs associated with its abandoned efforts to acquire generation resources in the Gascoyne, Milton R. Young III, and Big Stone II projects until disposition of its next general rate case. Thus, MDU proposes in this filing to amortize these deferred costs over ten years with the unamortized amount added to rate base. Staff accepts the proposed amortization expense, but rejects the inclusion of the unamortized amount in rate base. This approach was taken in order for the outcome to be balanced between shareholders and ratepayers. MDU investigated the various projects on the basis that it would benefit customers and shareholders. Since the benefits would have been shared, so should the risk. Thus, no form of carrying charge has been applied to these costs from the date of approval of deferred accounting in EL09-025 (February 11, 2010) through the effective date of this increase (January 1, 2016), nor will be applied through the completion of the amortization period. This adjustment decreases rate base by approximately \$503,000.

Amortization of Decommissioning of Power Plants – MDU proposed this adjustment to recover expected future costs for decommissioning of its existing generation fleet upon retirement. Although actual amounts are not known at this time, it is Staff's opinion this is appropriate to insure these decommissioning costs are matched with the customers who are seeing the benefit from the existing fleet of generation. MDU proposed these estimated costs be amortized over the remaining lives of the plant, with the average accumulated amortization upon one year of interim rates going into effect as an offset to rate base. The settlement reflects the following changes:

- 1. Removed all contingencies from the decommissioning estimates;
- 2. Revised remaining life for Big Stone and Miles City to agree with depreciation study;
- 3. Revised remaining life for Thunder Spirit Wind to correspond with the change made to depreciation; and

<sup>&</sup>lt;sup>5</sup> EL09-025 – In the Matter of the Application by Montana-Dakota Utilities Co. for Authority for Deferred Accounting

4. Revised offset to rate base to the average accumulated amortization upon one year of final rates going into effect.

These modifications decrease rate base by approximately \$11,000.

**Rate Case Expense** – The Company proposed to amortize projected rate case costs of \$498,070 over a five year period, plus a three-year average of ongoing regulatory commission expense and include the average unamortized amount in rate base. This settlement reflects a five year amortization of \$174,627 in rate case expense, plus a five-year average of ongoing regulatory commission expense, as well as the inclusion of the average unamortized amount in rate base. The effect of this adjustment decreases rate base by approximately \$235,000.

**ADIT Normalization** – MDU made a deferred tax reserve adjustment for the amortization of the change to full tax normalization. Staff accepted this adjustment.

**Remove Non-SD Plant** – During settlement discussions, MDU identified two projects that should have been assigned 100% to North Dakota. Staff removed these projects from rate base and the settlement reflects this adjustment, reducing rate base by approximately \$30,000.

**Aviation Rate Base** – Staff proposed an adjustment to the Aviation Rate Base included in the test year. This settlement is consistent with the treatment in Docket NG12-008 and removes 50% of Aviation Rate Base related to use of the corporate aircraft. The effect of this adjustment decreases rate base by approximately \$29,000.

**Cash Working Capital** – MDU's proposed rate base did not include an allowance for cash working capital nor was the Company able to provide Staff with an updated lead-lag analysis. This lead-lag analysis should examine the timing of the Company's receipt of service revenues from customers in relation to the Company's payment of expenses to vendors and employees. Staff carefully examined MDU's prior cash working capital adjustments and corresponding revenue lag and expense lead day determinations and calculated cash working capital and tax collections available adjustments with the following modifications to prior inputs:

- 1. Included a separate expense lead for vacation pay;
- 2. Included a separate expense lead for incentive compensation and bonuses;
- 3. Included a separate expense lead for injuries and damages;
- 4. Used the standard turnover rate calculation for vacation, injuries and damages, and uncollectible accounts expense;
- 5. Included a separate weight for Montana and North Dakota ad valorem tax payments;
- 6. Included an extra lead day for FICA expense representing the delay between payday and when dollars are remitted;
- Revised expense lead days for federal unemployment tax, state unemployment tax, state gross receipts tax, and federal income tax to properly reflect federal and state statue and keep consistent with lead days used for other utilities;
- 8. Revised the revenue lag days to reflect an extra day of processing time for the Company;

- 9. Calculated a separate rate base deduction for tax collections which the Company receives in advance of turning the related payments over to the taxing authorities; and
- 10. Revised expenses per day to incorporate into the lead-lag analysis the impacts of Staff's recommended adjustments to pro forma operating expenses.

These adjustments increase rate base by approximately \$52,000.

### **Operating Income**

**Revenue at Current Rates** – The Company proposed to adjust test year revenues by weather normalizing consumption for rates 54 and 56, restating rates 54 and 56 weather normalized consumption and per books consumption for all other rate codes at current rates, eliminating the unbilled revenue, and including a pro forma fuel and purchased power rate of \$0.02500. This settlement rejects the weather normalization of rates 54 and 56, restates per books consumption at current rates for all rate codes, eliminates the unbilled revenue and includes a pro forma fuel and purchased power rate of \$0.02524. The effect of this adjustment increases revenues by approximately \$113,000.

**Sales for Resale Revenue** – MDU proposed an adjustment to revenues to eliminate sales for resale, as MDU proposed to credit 85 percent of wholesale sales margins through the fuel and purchased power adjustment mechanism. The settlement accepts this adjustment to remove the wholesale sales margin from the revenue requirement. The treatment of the wholesale sales margins in the fuel and purchased power adjustment is discussed under Staff Overview of Settlement Regarding Riders.

Other Operating Revenues – The Company proposed to adjust the test year by removing revenues related to the Joint Use Facilities agreement with Basin Electric Power Cooperative, taking a three year average of KVAR Penalty Revenues, and adjusting Late Payment Revenue based on a three year average ratio of late payment revenues to sales revenue applied to the pro forma revenue as calculated by the company. This settlement reflects a removal of all late payment revenues, accepts the company's Joint Use Facilities removal adjustment, includes a five year average of KVAR Penalty Revenue, and removes revenues related to Power Interchange Service. Staff removed all of the late payment revenues on the basis that the cash working capital adjustment does not account for late payments, only on time payments. Therefore, it is appropriate for MDU to retain the late-payment fees collected in the test year and to not include them in the revenue requirement. This is consistent with treatment in prior MDU rate cases. It is appropriate to remove all Joint Use Facilities and Power Interchange Service revenues, since the contracts with Basin Electric ended in May of 2015 and these revenues will not be continued in the future. Staff picked a five year average for the KVAR Penalty Revenue given the volatility of the account, and a five year average provides a large enough data set to allow any high or low points to be included and averaged out over five years. The effect of this adjustment decreases revenues by approximately \$57,000.

**Fuel and Purchased Power Adjustment** – MDU proposed an adjustment to fuel and purchased power costs to reflect: 1) the estimated change in fuel and purchased power costs associated with estimated volumes re-dispatched to reflect several changes to MDU's generation fleet resulting in reduced MISO purchases and the expiration of the capacity contract supplanted by the Heskett III Combustion Turbine; 2) inclusion of costs for reagents used in emission control equipment to meet environmental emission control requirements; 3) recovery of costs of delivering natural gas to the Heskett III combustion turbine; and 4) the sales of Renewable Energy Credits (RECs) as a credit to customers.

The settlement reflects 1) fuel and purchased power costs associated with test year volumes<sup>6</sup> and the expiration of the capacity contract; 2) inclusion of reagent costs as proposed; 3) recovery of costs of delivering natural gas to Heskett III as proposed; 4) sales of RECs as a credit to customers as proposed; and 5) recovery of MISO market administration costs. The result of this adjustment will set the Base fuel amounts at 2.524 ¢/kWh and increases the costs of Fuel and Purchased Power by approximately \$74,000.

**Labor** – MDU's filed case proposed adjustments to include the Company's three-year average level of incentive compensation payouts and recognize the 2015 union and non-union wage increases of 4.00% and 3.50%, respectively. Staff's adjustments removes all executive incentive compensation awards, removes one-third of the non-executive incentive compensation awards to eliminate rate recovery for incentives paid for achieving financial goals, and reflects the weighted average union wage increase of 3.79%. Also, staff has reviewed salary studies which indicate MDU's pay increases are in line with industry averages. These changes decrease operating expense by approximately \$66,000.

**Benefits Expense** – MDU proposed an increase to benefits expense to reflect a projected 2015 budget. Staff's adjustment decreases the pro forma amount to the actual 2015 expense. It should also be noted the Company's defined benefit pension plan was closed to new entrants in January 2006. Additionally, both the non-union (2009) and union (2011) plans have been frozen to significantly reduce future liability and the volatile funding swings which were occurring. There was no change to the pension benefits employees earned as of December 31, 2009 (non-union) and December 31, 2011 (union), but participants' age 65 retirement benefits will remain frozen. Staff's adjustment decreases operating expense by approximately \$60,000.

**Incremental Labor and Benefits** – MDU proposed this adjustment to reflect the projected labor and benefits costs of employees added post-test year. Part of this adjustment was for the increased Power Production Department staffing due to increasing environmental regulations and assisting in day to day operations of the department. Staff adjusted this amount to account for actual salaries and to remove one-third of incentive compensation. This adjustment, as proposed, also included projected additions to the Glendive Turbine and Diamond Willow and Cedar Hills wind facilities; however, these amounts have been removed, as the employees were not yet added at the time of settlement discussions. Staff's adjustments decrease operating expense by approximately \$27,000.

**Heskett Station Unit III – Combustion Turbine O&M** – The Heskett III combustion turbine was placed in service during the test year in August 2014. MDU proposed an adjustment to reflect the expected annualized cost of operations for this unit, including labor, benefits, subcontract labor, materials, office supplies, permits and filings fees, and safety and other employee training. The settlement revises this adjustment to reflect the actual salary as of the end of 2015 for the additional electrician that was hired, benefits based on a labor loading factor excluding one-third of incentive compensation and the average 2.5% employer 401-K match, and other expenses based on the annualized 2015 actual expenses for the

<sup>&</sup>lt;sup>6</sup> To reflect additional costs associated with larger test year kWh volumes than MDU's estimated pro forma volumes, additional average MISO market prices were added to purchased power costs.

Heskett III combustion turbine. The net effect of this adjustment decreases operating expense by approximately \$3,000.

**Lewis & Clark Station – RICE Unit & MATS O&M** – The Company proposed an adjustment to reflect the additional expenses expected at the Lewis & Clark Station site due to the RICE unit and MATS requirements, including labor, benefits, subcontract labor, materials, office supplies, and other employee training. The settlement accepts the majority of the adjustment, but revises the labor estimate to reflect the actual salaries for three new employees who have been hired and benefits based on a labor loading factor excluding one-third of incentive compensation and the average 2.5% employer 401-K match. The net effect of this adjustment decreases operating expense by approximately \$1,000.

**Thunder Spirit Wind Generation O&M** – MDU proposed an adjustment to reflect the annual costs of the Thunder Spirit Wind facility. As discussed above under Rate Base, the Thunder Spirit Wind facility revenue requirement will be recovered through a rider. Therefore, this adjustment was removed, reducing operating expense by approximately \$142,000.

**Facility Charge** – The Company proposed to remove all costs associated with its Facility charge account. This settlement reflects the removal of all transmission related expenses due to the elimination of the agreement with Basin Electric, and also included a five year average of distribution related expenses. The effect of this adjustment increases expenses by approximately \$2,000.

**Subcontract Labor** – MDU's proposed adjustment to subcontract labor expense included several components. First of all, MDU proposed to increase subcontract labor expense to reflect projected changes using its 2015 budget as a guide. Next, the Company proposed three adjustments to transmission subcontract labor expense. These included 1) Estimated increased transmission charges due to Basin Electric Cooperative (Basin) becoming a member of the Southwest Power Pool (SPP); 2) Removal of the WAPA Net Interchange Transmission Service (NITS) costs as those charges will cease due to Basin becoming a member of SPP; and 3) Estimated increased MISO Schedule 26A costs.

The settlement revises this adjustment to 1) Reflect a five year average of subcontract labor expense, excluding Transmission Expense Accounts 565 and 575, as this expense has shown a tendency to vary from year to year; 2) Remove Transmission Expense FERC Accounts 565 and 575 as those expenses will be recovered through the Transmission Cost Recovery Rider and Fuel Clause Adjustment Rider, respectively, going forward. FERC Account 565 includes SPP charges (including those that will replace the WAPA NITS costs) and MISO Schedule 26 and 26A costs. FERC Account 575 is regional market expense (market administration costs) assessed by MISO.

The net effect of these changes reduces base rate operating expense by approximately \$668,000.

**Big Stone and Coyote Generation Units O&M** – The Company proposed an adjustment to the operations and maintenance costs for both Big Stone and Coyote generation units to reflect 2015 levels of expenses. No major overhauls were scheduled during the test year for either generation unit. The adjustment included projected overhaul and O&M cost increases for Big Stone and projected O&M increases for Coyote. This settlement reflects actual 2015 expenses related to Big Stone and a five year average of expenses related to Coyote. An average for Big Stone, in this instance, Staff felt was not appropriate. With the additions for the AQCS project, only one year's worth of O&M containing the

additions is available. Therefore, all years prior to 2015 would not be reflective of current operating conditions. The effect of this adjustment decreases expenses by approximately \$50,000.

**Materials Expense** – The Company proposed to adjust materials based on a 2015 budget amount less the removal of a non-recurring expense for the replacement of a compressor and some new expenses that were once capitalized but changed to an expense. This settlement reflects an adjusted five year average of materials expense. The compressor was removed from the test year, then, Staff took a five year average of expenses from 2011 through 2015. The effect of this adjustment decreases expenses by approximately \$12,000.

**Heskett II Sand Expense** – The Company proposed to adjust the amount of sand usage from the test year amount. The Company picked December 2013 through November 2014 for its sand usage time frame instead of the 2014 test year. The Company then took this adjusted usage multiplied by the increased cost in sand that is anticipated going forward. This settlement reflects the actual 2015 sand usage in tons. The price the Company expects to incur for sand going forward was provided in contract. Staff took the 2015 sand usage times the price included in the contract to come up with an adjusted test year expense. The effect of this adjustment increases expenses by approximately \$500.

**Reagent Expense** – The Company proposes to recover reagent costs used in the emissions control equipment necessary to comply with EPA regulations through the fuel and purchased power adjustment mechanism. Previously, reagents costs were a component of other O&M and this change results in a shift in recovery from O&M to Fuel. MDU made an adjustment to the test year to reflect the removal of the reagents from the Other Production O&M. The settlement accepts this adjustment.

**Vehicles & Work Equipment** – The Company proposed an adjustment to adjust depreciation for vehicles and work equipment charged to operations and maintenance expense through clearing accounts. The settlement revises the adjustment based on pro forma plant. This adjustment increases operating expense by approximately \$13,000.

**Communication Expense** – The Company proposed an adjustment to communication expense to account for lower telephone and SCADA expense that was partially offset due to increased cell phone charges. Staff updated pro forma amounts for communication expense to 2015 actuals. The effect of this adjustment decreases operating expenses by approximately \$7,000.

**Company Consumption** – The Company proposed to adjust the gas usage in company buildings by using the ratio change between normalized firm gas sales and per books firm gas sales. The Company also proposed to adjust the electric usage in Company buildings by the percent increase between the per books electric revenues and the pro forma electric revenues as calculated by the Company. This settlement reflects no adjustment to the gas usage in Company buildings by rejecting the normalized gas firm sales and average 2014 gas costs, and an adjustment to electric usage in company buildings by the percent increase between the per books revenues and the pro forma revenues as calculated by Staff. The effect of this adjustment decreases expenses by approximately \$50.

**Postage** – MDU proposed an adjustment to reflect an increase in postage costs net of a reduction in postage expense calculated by annualizing the number of customers that were paying bills electronically as of December 2014. This settlement accepts this adjustment and further removes additional costs by

annualizing the number of customers paying electronically to October 2015 levels. The effect of this adjustment reduces operating expenses by approximately \$1,000.

**Uncollectible Accounts** – The Company proposed to adjust the uncollectible accounts expense by using the three year average ratio of net write-offs to revenues applied to the company's calculations of pro forma sales revenues. This settlement reflects a five year average ratio of net write-offs to revenues applied to Staff's calculations of pro forma sales revenues. This adjustment also reflects a five year average ratio of net write-offs applied to the Staff's revenue deficiency. The effect of this adjustment decreases expenses by approximately \$4,000.

**Advertising** – MDU proposed an adjustment to remove advertising expenses that should not be recovered from ratepayers. The settlement accepts this adjustment and further removes additional advertising costs which do not contribute to the provision of safe, adequate, and reliable electric service for South Dakota ratepayers. The effect of this adjustment reduces operating expenses by approximately \$13,000.

**Insurance Expense** – The Company proposed to adjust the insurance expense by using projected expenses for 2015 and a five year average of self-insurance expenses. This settlement reflects actual 2015 insurance expenses and a five year average of self-insurance expenses. The effect of this adjustment increases expenses by approximately \$1,000.

**Software Maintenance Expense** – The Company proposed an adjustment to software maintenance expense included in the test year to adjust for increasing software fees and fixed network expenses. This settlement partially accepts this adjustment to account for Itron's software maintenance expense and the newly implemented OneSource Tax Provision software solutions. The effect of this adjustment decreases operating expenses by approximately \$2,000.

**Industry Dues** – The Company proposed an adjustment to the industry dues expense included in the test year. This settlement accepts those adjustments and further removes additional industry dues expense related to lobbying and other various activities that do not provide for the provision of safe, adequate, and reliable electric service for South Dakota ratepayers. The effect of this adjustment decreases operating expenses by approximately \$1,000.

**Rent Expense** – The Company proposed to adjust the rent expense by reflecting increase in rent due to an additional office lease for General Office operations entered into towards the end of 2014. The test year only included a partial year's worth of expenses related to this new lease and this adjustment increases the test year to include a full year of expenses. This settlement accepts this adjustment.

**Annual Easements** – The Company proposed to adjust the annual easement expense by removing a double payment for Diamond Willow Wind and Cedar Hills Wind Farm made during the test year. MDU's removal of the duplicate payments lowers test year expenses down to the 2015 budgeted amount. This settlement reflects the removal of the duplicate payment, by lowering the test year level down to the 2015 actual expenses rather than the 2015 budget. The effect of this adjustment decreases expenses by approximately \$2,000.

**Rate Case Expense** – The Company proposed to amortize projected rate case costs of \$498,070 over a five year period, plus a three-year average of ongoing regulatory commission expense. This settlement

reflects five year amortization of \$174,627 in rate case expense, plus a five-year average of ongoing regulatory commission expense. The effect of this adjustment decreases operating expenses by approximately \$63,000.

**Regional Market Expense** – MDU proposed an adjustment to reflect a three-year average of the regional market expense assessed by MISO. The settlement rejects this adjustment as the regional market expense was removed as part of the settlement subcontract labor adjustment. These expenses will be recovered through the Fuel Adjustment Clause going forward. The effect of this adjustment reduces operating expense by approximately \$9,000.

**Revisions to Existing Depreciation Accrual Rates** – MDU proposed changes to its existing accrual rates based on a consultant's analysis of the Company's historical retirement experience to estimate average remaining life accrual rates for its electric plant in service at December 31, 2014. (*See discussion above under <u>Rate Base</u> of MDU's proposed accrual rates and the changes effected by this settlement<sup>7</sup>*). The effect of all of these accrual rate reductions is realized as part of the Depreciation on Plant Additions and Annual Depreciation on Large Plant Additions adjustments, as well as the Infrastructure Rider, which are discussed below.

**Depreciation on Plant Additions** – The Company proposed an adjustment to restate depreciation expense to the average pro forma level of plant in service and to reflect proposed accrual rates. The settlement revises this adjustment based on the settlement test year plant annualization and post-test year plant addition adjustments as well as revised accrual rates. This adjustment decreases depreciation expense by approximately \$268,000.

Annual Depreciation on Large Generation Projects – MDU proposed an adjustment to restate depreciation expense to the average pro forma level of plant in service and to reflect proposed accrual rates. The settlement revises this adjustment based on the settlement large generation project adjustment and revised accrual rates. This adjustment decreases depreciation expense by approximately \$708,000.

Acquisition Adjustment – MDU rate case docket F-3576 established an amortization of the Coyote Station acquisition adjustment. The amortization of this acquisition adjustment ended in 2014. Thus, MDU has proposed to exclude the amortization expense and any net plant associated with this acquisition adjustment from the test year. Staff accepts this adjustment.

**Amortization of Retired Power Plants** – MDU rate case docket F-3576 also established an amortization of projected decommissioning costs of several retired power plants. This came with a tracking mechanism stipulated by the parties to capture any over- or under-recovery between projected and actual cost in a future rate case filing. MDU proposes this adjustment to true-up the over-recovery between projected costs and actual costs over a ten year amortization period, with the unamortized amount a credit to rate base. In its proposal, MDU removes \$6,650 of the \$46,437 over-recovery, as this represents an estimate of decommissioning work still to be done at the Glendive power plant. Staff's adjustment 1) rejects the removal based on an estimate of future costs and 2) uses the average

<sup>&</sup>lt;sup>7</sup> The depreciation rates are shown on Exhibit D to the Settlement Stipulation.

unamortized amount as a credit to rate base. This adjustment decreases expense by approximately \$1,000.

**Amortization of Unrecovered Plant** – In docket EL09-025<sup>8</sup>, MDU was allowed deferral of the costs associated with its abandoned efforts to acquire generation resources in the Gascoyne, Milton R. Young III, and Big Stone II projects until disposition of its next general rate case. Thus, MDU proposes in this filing to amortize these deferred costs over ten years with the unamortized amount added to rate base. Staff accepts the proposed amortization expense.

Amortization of Decommissioning of Power Plants – MDU proposed this adjustment to recover expected future costs for decommissioning of its existing generation fleet upon retirement. Although actual amounts are not known at this time, it is Staff's opinion this is appropriate to insure these decommissioning costs are matched with the customers who are seeing the benefit from the existing fleet of generation. MDU proposed these estimated costs be amortized over the remaining lives of the plant, with the average accumulated amortization upon one year of interim rates going into effect as an offset to rate base. The settlement reflects the following changes:

- 1. Removed all contingencies from the decommissioning estimates;
- 2. Revised remaining life for Big Stone and Miles City to agree with depreciation study;
- 3. Revised remaining life for Thunder Spirit Wind to correspond with the change made to depreciation; and
- 4. Revised offset to rate base to the average accumulated amortization upon one year of final rates going into effect.

These modifications decrease expense by approximately \$52,000.

**Property Taxes** – The Company proposed an adjustment to restate property taxes to the pro forma level of plant in service based on the 2014 ratio of property taxes to plant. The settlement revises this adjustment based on the settlement test year plant annualization, post-test year plant addition, and large generation projects adjustments. This adjustment increases property taxes by approximately \$5,000.

**Payroll Taxes** – MDU proposed corresponding adjustments to recognize the 2015 wage increases as they pertain to Social Security, Medicare, Federal Unemployment Tax, and State Unemployment Tax contributions. Staff agreed the pay increases would have a similar impact on payroll tax expense, but made the following modifications:

- Revised the pro-forma increase to match the percent increase calculated for the labor adjustment, which revised the union percent increase and removed all executive and one-third of non-executive incentive compensation awards; and
- 2. Removed the adjustments for Federal Unemployment Tax and State Unemployment Tax, as wages subject to these taxes are capped at \$7,000 and \$15,000, respectively.

<sup>&</sup>lt;sup>8</sup> EL09-025 – In the Matter of the Application by Montana-Dakota Utilities Co. for Authority for Deferred Accounting

These modifications decrease expense by approximately \$5,000.

**Electric Production Taxes** – MDU pays a Wholesale Energy Tax based on the number of kilowatt hours of electricity transmitted in the state of Montana, a Generation Tax on all electricity and electrical energy generated in the state of Montana, and a Coal Conversion Tax based on installed capacity of generating plants and the kilowatt hours of electricity produced in North Dakota. Additionally, MDU will pay a North Dakota Wind Generation Tax for the Thunder Spirit Wind Farm. MDU proposed an adjustment to electric production taxes based on 2014 actual volumes re-dispatched as if Thunder Spirit Wind Farm was online for 12 months. The settlement accepts the majority of this adjustment, but removes the North Dakota Wind Generation Tax adjustment as all costs associated with the Thunder Spirit Wind Farm will be recovered through the Infrastructure Rider as discussed more thoroughly below. The effect of this adjustment reduces operating expenses by approximately \$24,000.

**Interest Synchronization** – The settlement synchronizes the tax deduction for interest expense with the weighted cost of long-term debt and the historic test year rate base as adjusted for known and measurable changes.

**Book/Tax Depreciation on Plant Additions** – The Company proposed an adjustment to deferred income taxes associated with 2015 plant additions. The settlement revises the adjustment based on the settlement pro forma plant additions. Due to the offsetting adjustment to federal income taxes, this adjustment has no impact to the revenue requirement other than slight impacts to the cash working capital adjustment.

**Book/Tax Depreciation on Large Generation Projects** – MDU proposed an adjustment to deferred income taxes associated with the large generation projects. The settlement revises the adjustment based on the settlement large generation projects adjustment. Due to the offsetting adjustment to federal income taxes, this adjustment has no impact to the revenue requirement other than slight impacts to the cash working capital adjustment.

**Production Tax Credit** – The Company proposed an adjustment to reflect the production tax credits of \$0.023 per kWh associated with pro forma kWh at MDU's three wind facilities: Cedar Hills, Diamond Willow, and Thunder Spirit. The settlement revises this adjustment to remove the per books production tax credits from the test year since the production tax credits associated with Cedar Hills and Diamond Willow will flow through the fuel clause, and the production tax credits associated with Thunder Spirit will flow through the Infrastructure Rider. This adjustment increases operating income by approximately \$1,037,000.

**Elimination of Closing/Filing and Prior Period** – MDU's test period financial statements include various tax accruals for expected tax liabilities and true-up adjustments to both current and deferred income taxes for the tax consequences of events that took place in prior accounting periods. The ratemaking allowance for federal income taxes, however, reflects only the tax consequences of the taxable income that is determined for ratemaking purposes. Therefore, it is necessary to remove from ratemaking consideration the closing, filing and prior period tax adjustments to the extent they are not included in

the ratemaking determination of MDU's taxable income for the test year. Staff accepted MDU's adjustments in this regard.

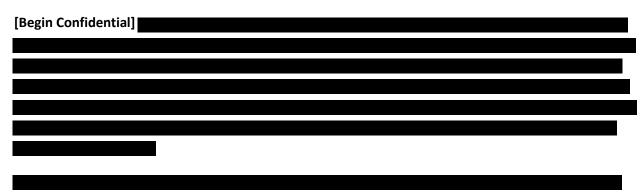
**Aviation Expense** – Staff proposed an adjustment to the aviation expense included in the test year. This settlement is consistent with the treatment in Docket NG12-008 and removes 50% of aviation operating expenses related to use of the corporate aircraft. The effect of this adjustment decreases operating expenses by approximately \$9,000.

**Storm Damage** – Staff proposed to average storm damage expenses not included in the electric distribution maintenance adjustment over a five year period from 2011 through 2015. The effect of this adjustment increases operation expenses by approximately \$25,000.

**Vegetation Management** – Staff proposed to average vegetation management costs not included in the electric distribution maintenance adjustment over a five year period from 2011 through 2015. The effect of this adjustment increases operation expenses by approximately \$2000.

# Cost of Capital and Rate of Return

Per Statement G, MDU requested an overall rate of return of 7.588% on a capital structure consisting of 49.515 percent common equity, 1.242 percent preferred stock, 8.108 percent short term debt and 41.135 percent long term debt. The embedded cost of long term debt was 5.949 percent while the embedded cost of short term debt was 1.631 percent. Normally short term debt is not considered in capital structure for ratemaking purposes because the rate base should be financed with an appropriate mix of long term sources of capital. However, at the present time short term debt is quite low and ratepayers are benefitting from its inclusion in the capital structure. Also, without its inclusion, the equity ratio would be excessively high, harming ratepayers. Based on these case-specific considerations, Staff accepted all components of the overall rate of return request for settlement except the requested rate of return on equity of 10 percent.



[End Confidential], the settlement overall rate of return is

7.216 percent.

# **Revenue Deficiency**

As shown on Exhibit\_\_\_\_(PJS-1), Schedule 1, Staff's determination of the adjusted average rate base is \$33,492,561. Multiplying the adjusted average rate base by the settlement rate of return of 7.216%,

results in a required operating income of \$2,416,823. When compared to the operating income with present rates, the income deficiency is \$407,973, and after applying the gross revenue conversion factor to add additional income taxes made necessary by the increase, the revenue deficiency is \$627,651.

MDU proposed an adjustment to reflect the gross receipts tax rate of .14%, the current rate as of the application date. Staff's gross receipts tax adjustment reflects the changes made to pro-forma revenues and also uses the gross receipts tax rate of .14%. Since a settlement had already been reached by the time the rate was decreased to .135% on April 11, 2016 and any corresponding adjustments would be de minimis, the Settlement accepts the gross receipts tax rate as proposed. Adding the gross receipts tax amount of \$879 to the revenue deficiency results in a total base rate revenue deficiency of \$628,530.

### **RATE DESIGN ISSUES**

The Parties agree in principle on all issues regarding rate design and the class revenue distribution. The settlement position reached between the Parties is discussed below.

# Class Cost Allocation/Spread of the Increase

MDU's initial filing included a class cost of service study, which indicated that all classes except the Large General rate class were not contributing a fair share to the Company's overall rate of return. Staff took issue with the "minimum distribution system" approach used in MDU's study to classify poles, conductors and transformers to both the demand and the customer cost classifications. Instead, Staff argued that the minimum distribution system approach understates the contribution of the Residential and Small General classes to the Company's overall rate of return. Once the minimum distribution system approach was eliminated from MDU's cost study the rates of return for the Residential and Small Firm General classes moved closer to the system-wide average rate of return. MDU had proposed to increase each rate class by a uniform percentage. Based on Staff's cost analysis, excluding the minimum distribution system approach, a uniform spread of the increase proposed by MDU brings the classes closer to the system-wide average rate of return and is a reasonable outcome in this proceeding. The following table illustrates the agreed-upon spread of the increase to the various classes of service.

Revenue Class	Increase		Percent
Residential	\$	322,096	4.50%
Small General Service	\$	142,519	4.51%
Large General Service	\$	130,762	4.50%
General Space Heating Service	\$	14,086	4.37%
Municipal Lighting	\$	11,104	4.61%
Municipal Pumping	\$	4,561	4.51%
Outdoor Lighting Service	\$	3,088	4.51%
Total Retail	\$	628,216	4.50%

# Rate Design

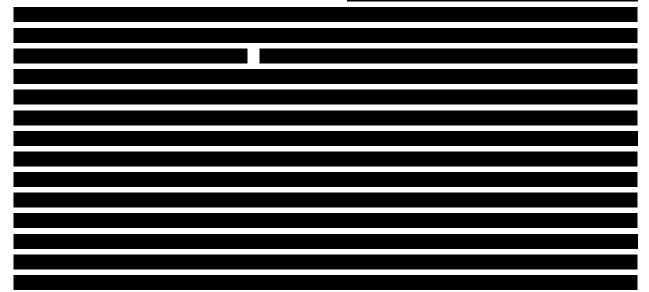
**Residential Customer Charge** – MDU's present rate schedules contain a \$6.00/month customer charge for the Residential Rate 10 class. MDU proposed to increase the charge to \$0.35/day (\$10.65/month). MDU claimed that its cost studies support an even higher Residential monthly customer charge --- \$20.45/month. Staff's cost analysis did not support such a large increase in the Residential service charge but Staff agreed that some increase in the customer charge is reasonable at this time. Ultimately, MDU and Staff agreed to a \$0.247/day (\$7.50/month) customer charge for the Residential Rate 10 class.

# STAFF OVERVIEW OF SETTLEMENT REGARDING RIDERS

# Rate 56 Infrastructure Rider

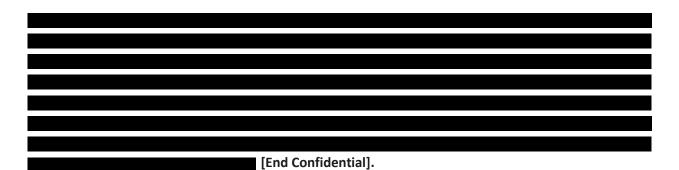
Thunder Spirit Wind (TSW) is a 107.5 MW wind farm located in Hettinger, North Dakota. In the 2013 IRP, generic wind generation is selected in all sensitivity cases including the base plan<sup>9</sup>. MDU had the option of entering into a PPA arrangement with ACE Wind (ACE) or owning TSW. Based on a review of the IRP analysis and results, related discovery, and updated modeling results in witness Neigum's testimony, TSW seems to be a cost effective investment at a levelized cost of less than \$35/MWh.

MDU's IRP modeling results indicate that the owned TSW option results in a lower Net Present Value (NPV) of revenue requirements of \$30 million in the 2013 IRP analysis compared to the restated PPA with ACE. However, these savings are only realized if all the assumptions are actually at a level close to that assumed in the IRP modeling. **[Begin Confidential]** 



**[End Confidential].** The Parties agreed to cost recovery for TSW through the infrastructure rider with the explicit provision that Staff reserves the right to propose alternative treatment or adjustments to the revenue requirement, including true-up of prior years' revenue requirements, in each annual rider filing and future rate cases. **[Begin Confidential]** 

<sup>&</sup>lt;sup>9</sup> See MDU's Response to Staff DR 1-8, 2013 IRP, Volume IV, Table 3-1.



In addition, Staff recognizes that under traditional rate making, the costs are highest in the beginning and reduce over time as the asset depreciates and that the revenue requirement stays at this high level until the Company decides to file another rate case. Had TSW been included in base rates under a traditional approach, the level built into rates would be higher than the first year PPA price. In that case, there would be no savings to ratepayers after all. The rider helps to capture the reduced revenue requirement as the asset depreciates while being recovered through the rider. MDU also agreed to defer a portion of the first year costs in the amount of \$209,779 to be recovered in subsequent years in order to provide a smoothing effect.

MDU also agreed to report average capacity factors, transmission curtailments, and economic curtailments on an annual basis. Staff will have the opportunity to review all aspects of the revenue requirement and propose necessary adjustments with each annual filing and again prior to the asset being transferred to base rates.

The estimated revenue requirements for the first five years are shown on Exhibit BAM-3 and are summarized here:

### Rate Base

The Rate Base calculations are shown on lines 1 through 10. Production Plant in Service for year 1 is based on the actual capital costs of Thunder Spirit Wind as of December 31, 2015. Year 3 includes an increase in plant in service reflecting estimated additional capital costs to be incurred.

Accumulated Depreciation based on a 25-year life and Accumulated Deferred Income Taxes are subtracted from Production Plant in Service to arrive at the Ending Rate Base.

The Average Rate Base is calculated by taking the average of the current year ending rate base component and the previous year ending rate base component.

### **Operating Income**

Operating Income, Production Operation & Maintenance Expense, is found on lines 11 through 16 on Exhibit BAM-3 and includes several items. First, labor costs included are based on the actual salary for a wind technician hired on December 14, 2015, along with associated benefits.

Maintenance Costs include the costs associated with a turbine maintenance agreement, vehicle expenses, training expenses, telephone/cellphone costs, utilities, uniforms, MRETS, and Vaisala wind forecasting.

Annual easements costs and insurance costs make up the remaining production O&M expense.

Depreciation expense is based on the settlement depreciation rate using an average service life of 25 years.

In lieu of property taxes, MDU pays a Wind Generation Tax in North Dakota. These costs are reflected in the rider as well as a credit of the production tax credits of \$0.023 per kWh.

Finally, the rider synchronizes the tax deduction for interest expense with the weighted cost of long-term debt and average rate base and calculates the federal income taxes.

### Revenue Deficiency

The settlement rate of return of 7.22% is multiplied by the operating income to arrive at the Required Operating Income. The Increase in Operating Income Required is calculated by subtracting the Operating Income from the Required Operating Income. After applying the gross revenue conversion factor to add additional income taxes made necessary by the increase, the estimated first year total company revenue deficiency associated with Thunder Spirit Wind is \$15,811,715. The total company revenue requirement is allocated to South Dakota based on the AED/Energy – Factor 3 allocation factor established in this rate case. The resulting estimated first year South Dakota revenue deficiency is \$811,631. After the first year deferral of \$(209,779) is applied, the resulting first year revenue deficiency to be recovered from customers through the Infrastructure Rider is \$601,852. Next, this amount is reduced by the estimated amount related to Thunder Spirit that will be recovered through interim rates from January through June 2016. This results in a revenue requirement of \$358,787 to be recovered from customers beginning July 1, 2016.

# Rate

The net revenue requirement of \$358,787 is divided by the estimated sales for July – December 2016 to arrive at an initial rate of \$0.00497 per kWh.

The Infrastructure Rider rate will be adjusted annually<sup>10</sup> to reflect the Company's most recent project capital costs and expenses. A true-up will reflect any over or under collection of revenue based on actual expenditures form the preceding twelve month period plus carrying charges or credits accrued at a rate equal to the overall rate of return of 7.22%.

# Rate 57 Environmental Cost Recovery Rider

The Company proposed to establish an environmental cost recovery rider tariff to recover the jurisdictional costs to be incurred by MDU in complying with federal and state environmental mandates

<sup>&</sup>lt;sup>10</sup> The Infrastructure Rider will be filed at least 60 days prior to the proposed effective date of May 1 each year.

determined to be eligible for recovery under SDCL 49-34A-97. The settlement accepts the establishment of such a tariff. No costs will be recovered at this time and MDU must file for approval of any costs to be recovered through the Environmental Cost Recovery Rider.

# Rate 58 Fuel and Purchased Power Adjustment

MDU proposed several changes to the Fuel and Purchased Power Adjustment, including: 1) Reflecting 100 percent of MDU's cost of fuel and purchased power instead of the current 90 percent; 2) Using a four month average of costs and sales rather than a three month average, to further smooth the monthly adjustments and reduce the over and under collection of costs throughout the year; 3) Recovery of additional short-term energy solutions to replace recently expired contracts such as the bilateral contract with We Energies which provided MDU capacity; 4) Credit 85 percent of all wholesale margins to customers; 5) Implementation of a Deferred Fuel Cost account with an annual true-up, similar to its purchased gas cost adjustment<sup>11</sup>; 6) Credit 100 percent of all revenues from sales of RECs; 7) Include reagents expense; and 8) Include the cost of delivering fuel to Heskett III Combustion Turbine.

The settlement accepts items 1, 2, 3, 5, 6, 7, and 8 above, modifies MDU's proposal on wholesale margins to credit 100 percent of all wholesale margins instead of 85 percent, and also allows for recovery of MISO market administration costs. In addition, 100 percent of the PTCs received for Diamond Willow and Cedar Hills will be credited to the fuel clause. The impact on the net revenue increase of crediting the PTC's to the Fuel Clause is \$(294,887).

# Rate 59 Transmission Cost Recovery Rider

MDU proposed to establish a transmission cost recovery rider tariff to recover the jurisdictional costs of new or modified transmission facilities that are not a part of base rates determined to be eligible for recovery under SDCL 49-34A-25.1. The Company's request was to establish the mechanism for future use and did not propose an adjustment to be charged at the time.

The settlement establishes a tariff and a rate to be effective July 1, 2016. Initially, the tariff allows for recovery of Midcontinent Independent System Operator (MISO) and Southwest Power Pool (SPP) costs. MISO costs include Schedule 26 and Schedule 26A expenses. Regarding MDU's Schedule 26A costs, MDU will utilize the rate templates filed with FERC and replace the overall rate of return with an overall rate of return based on the Company's actual capital structure, including short-term debt, actual long-term debt costs as of the prior year, 12-month average short-term debt costs for the prior year, and the rate of return on common equity approved in this rate case. This information will be used to compute an adjustment applicable to that portion of the MDU MISO Schedule 26A costs to be recovered via the Transmission Cost Recovery Rider. This method is similar to that approved for MidAmerican Energy Company in its most recent rate case. Since MDU only owns one Schedule 26 cost shared project and this project is included in base rates, the revenue MDU receives for this project will be credited 100% to customers.

<sup>&</sup>lt;sup>11</sup> MDU will track monthly the difference between cost recovered and actual costs, with the difference placed in a deferred account that will be trued-up effective July 1 each year subject to a carrying charge or credit.

The initial rate is based on an estimated annual expense of \$440,688 based on similar 2015 expenses. This amount is reduced by the estimated amount of costs related to the Transmission Rider that will be recovered through interim rates from January through June 2016. This results in a revenue requirement of \$264,544 to be recovered from customers beginning July 1, 2016.

Such amount is subject to true-up and MDU will make an annual filing each year to be effective May 1<sup>st</sup>, with a filing to be made at least 60 days prior to the proposed effective date. MDU may request recovery of incremental transmission investments in the annual filings and these would be subject to approval by the Commission.

The amount of \$264,544 is divided by the estimated sales for July – December to arrive at an initial rate of \$0.00366 per kWh.

# TOTAL RATE INCREASE

While approval of the Settlement Stipulation will result in the base rate increase of \$628,530 mentioned above, once the Thunder Spirit Wind and Transmission Tracker increases are added and the Production Tax Credits are credited to the Fuel Clause, the rate case represents a total approximate rate increase to customers of \$1,376,183.

Total Rate Increase	\$1,376,183
PTCs to Fuel Clause	(294,887)
Transmission Tracker	440,688
Thunder Spirt Wind	601,852
Base Rates	\$628,530

# **OTHER ISSUES**

**Rate Moratorium** – The Parties agree that MDU shall not file any rate application for an increase in base rates which would go into effect prior to January 1, 2019, subject to the occurrence of certain extraordinary events.

**Implementation of Rates** – The tariffs shown on Exhibit A attached to the Stipulation are proposed to be implemented for service rendered on and after July 1, 2016. Customer bills will be prorated so that usage prior to that date is billed at the previous rates and usage on and after that date is billed at the new rates.

**Interim Rate Refund** – Interim rates were implemented on January 1, 2016. Approval of the Settlement will authorize a rate increase less than the interim rate level. The Company agrees to refund customers the difference between interim rates and new rates established by the settlement for usage during the period January 1, 2016, through the effective date of final rates. As part of the refund, MDU will include interest, calculated by applying a 7% annual interest to the average refund balance for each month that interim revenues were collected. A detailed refund plan is provided as Exhibit B to the Stipulation.

### RECOMMENDATION

For the reasons stated above, Staff recommends the Commission grant the Joint Motion for Approval of Settlement Stipulation and adopt the Stipulation without modification.