

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of The	)	
Empire District Electric Company for	)	<u>Case No. EA-2019-0010</u>
Certificates of Convenience and Necessity	)	As consolidated with Case No. EA-2019-
Related to Wind Generation Facilities	)	0118

NON-UNANIMOUS STIPULATION AND AGREEMENT

COME NOW The Empire District Electric Company (“EDE”, “Company” or “Empire”), Midwest Energy Consumers Group (“MECG”); Staff of the Missouri Public Service Commission (“Staff”); Renew Missouri Advocates (“Renew Missouri”); and, Missouri Department of Economic Development – Division of Energy (“DE”) (collectively, the “Signatories”) ¹, by and through their respective counsel, and, for their Non-Unanimous Stipulation and Agreement (this “Stipulation”), respectfully state as follows to the Missouri Public Service Commission (“Commission”):

1. The Signatories are entering into this Stipulation solely to settle all contested issues in the case captioned above. Unless otherwise explicitly provided herein, by executing this Stipulation none of the Signatories has approved or acquiesced in any ratemaking or procedural principle, including, without limitation, any method of cost of service or valuation determination or cost allocation, rate design, revenue recovery, or revenue-related methodology. Except as explicitly provided herein, none of the Signatories shall be prejudiced or bound in any manner by the terms of this Stipulation in this or any other proceeding.

2. This Stipulation has resulted from extensive negotiations among the parties, and the terms herein are interdependent and non-severable. If the Commission does not approve this Stipulation unconditionally and without modification, or if the Commission approves the

¹ Counsel for Missouri Department of Conservation, Sierra Club, and National Resources Defense Council have all indicated that they have no objection to this Stipulation and do not request a hearing.

Stipulation with modifications or conditions to which a Signatory objects, then this Stipulation shall be void and none of the Signatories shall be bound by any of the agreements or provisions hereof.

3. The Signatories agree that disputes related to the implementation and operation of this Stipulation (to include any alleged breach of the terms of this Stipulation) may be taken to the Commission for resolution.

4. This Stipulation is based on the unique circumstances EDE presented to the non-utility Signatories. Except to the extent necessary to implement the terms of this Stipulation, this Stipulation shall not be construed to have precedential impact in any other Commission proceeding.

5. The non-utility Signatories have entered into this Stipulation in reliance upon information and representations Empire provided them, and this Stipulation is predicated explicitly upon that information and those representations.

6. When approved by the Commission, this Stipulation shall constitute a binding agreement among the Signatories hereto. The Signatories shall cooperate in defending the validity and enforceability of this Stipulation and the operation of this agreement according to its terms.

7. The Signatories waive the right to cross examination and stipulate and agree to the admission of all testimony pre-filed herein, without the need for witnesses to take the stand. If the Commission accepts the specific terms of this Stipulation without condition or modification, the Signatories waive their respective rights to seek rehearing pursuant to §536.500, RSMo., and their respective rights to judicial review pursuant to §386.510, RSMo. These waivers apply only to a Commission order approving this Stipulation without condition or modification issued in this proceeding, and only to the issues that are resolved hereby.

8. This Stipulation contains the entire agreement of the Signatories concerning the issues addressed herein.

9. This Stipulation does not constitute a contract with the Commission. Commission acceptance of this Stipulation shall not be deemed to constitute an agreement on the part of the Commission to forego the use of any discovery, investigatory powers or other statutory powers which the Commission has. Thus, nothing in this Stipulation is intended to impinge or restrict in any manner the Commission's exercise of any of its statutory powers, including the power to access information.

10. When a Commission order approving this Stipulation becomes effective this Stipulation will become effective.

11. **Planned Ownership Structure and Definitions.** EDE is seeking Commission-issued certificates of convenience and necessity (CCNs) for two wind generation resources each up to 150 MW and located in Barton, Dade, Jasper and Lawrence Counties in and near EDE's service territory in Missouri (Kings Point and North Fork Ridge) and one wind generation resource up to 301 MW located in Neosho County, Kansas (Neosho Ridge); 3) including related transmission interconnection assets (each a "Wind Project", and collectively, the "Wind Projects") using federal tax incentives in conjunction with a tax equity structure. To create the tax equity structure, EDE and a tax equity partner will own a holding company for each Wind Project, each of which will be a direct subsidiary of EDE (the "Wind Holdco"). EDE, via the Wind Holdco, will acquire a wind project company ("Wind Project Co.") that owns a specific Wind Project. After approximately ten years of tax equity participation and EDE joint ownership of the Wind Project Co. (through the Wind Holdco), EDE will have the right to purchase the tax equity partner's ownership interest in the Wind Holdco, at which point EDE would wholly own

the Wind Project Co.²

12. **CCN Conditions.** Any Commission Order that grants EDE a CCN for a Wind Project must include each and every one of the following conditions:

- a. The Wind Project(s) shall be operated in accordance with applicable Southwest Power Pool Integrated Marketplace (“SPP IM”) rules and in a manner that is not detrimental to EDE’s customers;
- b. The Wind Project purchase agreement(s) shall include a requirement that before EDE, or its designated affiliate, is obligated to purchase a Wind Holdco, an independent, third-party professional engineer licensed must confirm in a written report, to be provided to EDE, that the Wind Project owned by the Wind Holdco has achieved mechanical completion, and there is a reasonable likelihood the Wind Project will satisfy the in-service criteria provided for in attached Appendix A, and be timely placed in-service, including a reasonable likelihood that the turbines will meet or exceed the guaranteed power curve for such turbines to be included in the turbine supply agreement(s) with Wind Project Co(s);
- c. The Wind Project must satisfy each of the in-service criteria set out in attached Appendix A;
- d. Plans and Specifications: Empire shall file with the Commission quarterly progress reports on the construction level plans and specifications for the Project, and the first report shall be due on the earlier of the first day of the first calendar quarter beginning after the CCN is issued. Empire shall also include an update on all permits obtained as part of its quarterly progress reports, and will

² There may be multiple tax equity partners, and thus multiple Wind Holdco(s), as well as multiple Wind Project Co(s).

file complete plans and specifications prior to commencement of construction.

Empire shall also include documentation regarding transmission and interconnection progress, including supporting documentation of cost increases or changes in assumptions. In its subsequent quarterly report, Empire shall address any results of the study that are material changes in assumptions or costs related to the Wind Projects;

- e. Empire shall file a copy of the SPP Definitive Impact System Impact Studies within 30 days of receipt. In its subsequent quarterly report, Empire shall address any results of the study that are material changes in assumptions or costs related to the Wind Projects. Empire shall also include a discussion of any sensitivity or curtailment issues raised by SPP in the study. Empire shall also include a proposed plan to address any issues related to those changes in assumptions, costs or curtailment;
- f. Within 30 days of the closing of the transactions set forth in the Wind Project purchase agreements, EDE shall file in Case No. EA-2019-0010 a notice of each such closing and, upon request, shall provide a copy of such documents to the Signatories; and,
- g. The following conditions shall apply to the transactions with the Tax Equity Partner (s):
 - i. EDE, through its ownership in Wind Holdco(s), shall contract with tax equity partner(s) (“TEPs”) for financing of the Wind Projects (a tax equity agreement), which contracts shall include terms consistent with the following parameters:

	Sponsor (Empire)	Tax Equity Partner(s)
Approximate Initial Capital Contribution	*** _____ ***	*** _____ ***
Approximate Expected Return	As determined in future rate cases	*** _____ ***
Partnership taxable income Allocations		
Years 1 to 10 (flip date³)	1%	99%
Thereafter	90%-95%	5%-10%
PTC Allocation		
Years 1 to 10	1%	99%
Partnership cash Distributions		
Years 1 to 5	100%	0%
Years 6 to 10 (flip date)	75%-50%	25%-50%
Thereafter	90%-95%	5%-10%
Contingent Contributions		
Years 1 to 10	None	0% to 2% of Wind Project capital cost per year. Based on actual production in excess of a Threshold
Purchase Option	After the flip date, the Class B Members will have an option to purchase all of the Class A Interests, for 100% of their fair market value	None
Creditworthiness	N/A	A-/A3 or better

³ The “flip date” is the date at which the tax equity partner(s) has achieved its expected return, scheduled to be approximately 10 years from the commencement of commercial operations.

- ii. EDE, through its ownership in the Wind Holdcos, shall enter into any such tax equity agreements with a TEP, as evidenced by an executed Term Sheet with one or more TEPs before issuing the Notice to Proceed with Construction of that project;
- iii. Within 30 days of when it executes a tax equity agreement EDE shall file in Case No. EA-2019-0010 a notice it has executed the agreement and provide to each of the other Signatories a copy of that tax equity agreement; and
- iv. The tax equity agreement that EDE executes for a Wind Project must satisfy each and every one of the parameters in the table above.

13. **Rate Basing Wind Projects.** So long as EDE's Wind Projects acquisitions comply with the terms of this Stipulation, and subject to any prudency review as provided below, EDE should be authorized to record its capital investment to acquire the Wind Projects as utility plant in service subject to audit in EDE's next general rate case consistent with the Commission's Report and Order in Case No. EO-2018-0092.
14. **Prudency not waived.** This Stipulation does not preclude the Commission or the Signatories from reviewing the reasonableness and prudency of the costs of each Wind Project in a general rate proceeding following the date when that/those Wind Project(s) is/are fully operational and used for service.
15. **Depreciation Rate Study.** Upon placing in-service, EDE shall utilize the 3.33% depreciation rate authorized in EO-2018-0092. In the first depreciation study completed after the Wind Projects are placed in-service, EDE shall incorporate the Wind Projects in that depreciation study, unless it shows the Commission that it does not have enough information concerning the Wind Projects to include them in that depreciation study.

16. **Rate Case Recommendations.** In any EDE general rate case(s) where a Wind Project is first included in EDE's rate base for setting rates, the Signatories shall recommend a true-up period that ends no later than five (5) months prior to the operation of law date. A Wind Project will be excluded from EDE's rate base used for setting EDE general distribution rates if the Wind Project does not satisfy the in-service criteria for that Wind Project before the end of the true-up period.
17. **Asbury.**
- a. EDE shall abide by its agreement with IBEW #1474 which contains various employee protections to apply in the event of the retirement or sale of Asbury;
 - b. If Asbury is sold or retired between general rate cases, the Commission should authorize Empire to create a regulatory asset representing the undepreciated balance of the Asbury facility (net book value); and,
 - c. If Asbury is sold or retired between general rates cases, EDE will create a regulatory liability account to accrue the types of costs and revenues included in EDE's cost of service used for setting general rates in its last preceding general rate case that EDE no longer incurs after retiring Asbury, including—costs such as, but not limited to capital costs, depreciation expense, property taxes, operations and maintenance expense, fuel costs, SPP revenues and any deferred income tax effects.
18. **Non-Residential Access to Renewable Energy and Credits ("REC").** In the first general rate case to include a Wind Project, EDE shall propose a tariff to implement a program by which Missouri retail non-residential customers may purchase a portion of RECs received from the Wind Project.
19. **Auditing, Inspection of Books and Records.** Staff, OPC, and the other Signatories each shall have the authority to review, inspect and audit books, accounts and other records held by EDE, Liberty Utilities Service Corp., Wind Holdco(s), and Wind Project Co(s), for the purposes of

ensuring compliance with Commission Rule 4 CSR 240-20.015⁴ and this Stipulation, and to make their findings and opinions available to the Commission. EDE shall make all such books, accounts, and other records available for inspection at one or more locations in Missouri. This provision is not intended to restrict or limit the existing powers of the Staff, OPC, or any other Signatory to review, inspect and audit those books, accounts and other records.

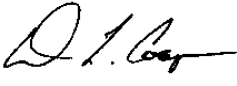
20. **State and wholesale jurisdictional cost allocation for Missouri ratemaking.** For Missouri ratemaking purposes, the Wind Project capital investments and costs will be allocated between Missouri and the other states in which EDE provides electric service using typical state and wholesale jurisdictional allocators. Only the Wind Project capital investments and expenses allocated to the Missouri state jurisdiction may be included in Empire's cost of service for setting rates in Missouri.
21. **Market Price Protection Mechanism ("MPP").** The Signatories agree that a market price protection mechanism, as further described in Appendix B, shall be implemented. In general terms, that mechanism seeks to provide for the sharing of risk between customers and shareholders associated with the possibility of reduced market prices and wind production associated with the Wind Projects. Such mechanism reflects the possibility that all Wind Projects may not be included in EDE rates in the same rate case. As such, the mechanism shall go into effect on the first day of the month after the effective date of rates in which a Wind Project is first placed into rates and shall remain in effect for 10 years following the effective date of rates resulting from the first general rate case in which all Wind Projects are included in rates.
22. **Future Battery / Energy Storage Technology.** In the event that it is determined that a certificate

⁴ References herein to specific Commission rules are expressly intended by the Signatories to include successor rules with substantially the same content and language, however renumbered or reorganized.

of convenience and necessity from the Commission is not required, Empire shall, three months prior to installing any battery or energy storage device, make a presentation to the parties, regarding the costs and benefits and the impact on rates of installing such battery / energy storage technology. Such presentation shall include, but is not limited to, a discussion of the retirement of current generating units or the postponement of future generation additions resulting from the installation of the battery / energy storage technology. Further, such presentation will provide a discussion of how Empire's battery / energy storage technology is incorporated into and dispatched within the Southwest Power Pool. In the event that the battery / energy storage is on the customer side of the meter, Empire shall discuss rate design changes, if any, necessary to maximize the benefits of the battery / energy storage technology. Empire shall allow for reasonable discovery from the Signatories and OPC regarding the costs and benefits of the battery / energy storage technology.

WHEREFORE, the Signatories respectfully request the Commission to issue an order approving this Stipulation and Agreement and authorizing the Company to take such other actions

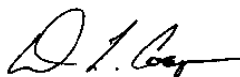
as are necessary to implement the terms hereof.

 Dean L. Cooper MBE #36592 Diana C. Carter MBE #50527 BRYDON, SWEARENGEN & ENGLAND P.C. 312 E. Capitol Avenue P. O. Box 456 Jefferson City, MO 65102 (573) 635-7166 dcarter@brydonlaw.com dcooper@brydonlaw.com ATTORNEYS FOR THE EMPIRE DISTRICT ELECTRIC COMPANY	<u>//S// Casi Aslin by dlc</u> Casi Aslin Legal Counsel Missouri Bar No. 67934 <u>//S// Nicole Mers by dlc</u> Nicole Mers Deputy Counsel Missouri Bar No. 66766 P. O. Box 360 Jefferson City, MO 65102 (573) 751-8517 (Telephone) (573) 751-9265 (Fax) Casi.Aslin@psc.mo.gov Nicole.mers@psc.mo.gov ATTORNEY FOR THE STAFF OF THE PUBLIC SERVICE COMMISSION
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CERTIFICATE OF SERVICE

The undersigned certifies that a true and correct copy of the foregoing document was sent by electronic mail, on April 5, 2019, to the following:

Nicole Mers Office of the General Counsel staffcounsel@psc.mo.gov nicole.mers@psc.mo.gov	Nathan Williams Office of the Public Counsel opcservice@ded.mo.gov nathan.williams@ded.mo.gov
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APPENDIX A TO THE NON-UNANIMOUS STIPULATION AND AGREEMENT
FILE EA-2019-0010
Wind Project In-Service Criteria

1. All major construction work shall be completed.
2. For each wind turbine to be considered for inclusion in rate base, the criteria in part 2, 3, 4, 5, and 6 shall have been met.
3. Mechanical completion has been achieved, meaning:
 - a. The turbine and its support tower are assembled, erected, and installed in accordance with the turbine supplier's technical specifications and quality assurance procedures;
 - b. Utility has installed, or caused to be installed, all necessary communication facilities needed to achieve SCADA functionality; and
 - c. Each item on the Mechanical Completion Checklist has been satisfied and the turbine is ready to commence commissioning.
4. The turbine has been commissioned and a Commissioning Completion Certificate has been completed.
5. An operational test of the turbine as outlined in this part 4 has been successfully completed on at least ten percent of the total number of turbines in a Wind Farm. The operational test shall be completed using the plant SCADA and turbine-mounted sensing and monitoring equipment. Each tested turbine shall have sustained for two consecutive hours a power output of at least 90% of the turbine supplier's guaranteed output as determined by wind speed observed at or above the Predicted Mean Turbine Hub-height Wind Speed and the Air Density, subject to the following:
 - a. Failure of any turbine to achieve the operational test provided for by this part 4 shall mean that the turbine shall be repaired, if needed, and retested. In addition, the test

population size shall be increased from ten percent to twenty percent and each of the tested turbines shall comply with this part 4.

5. Additionally, sufficient Energy Export Facilities exist to carry the total net electrical capacity from the completed turbines into the distribution/transmission system and the turbines have been synchronized to the grid.
6. Review of operating Data. The Company will provide Operating Data for each commissioned turbine and its review of such data. The Company's review will be certified by a Professional Engineer licensed in the State of Missouri.
7. Definitions:
 - a. "Wind Project" shall mean a collection of completed wind turbine generators aggregated into one point of interconnection to the grid.
 - b. "Energy Export Facilities" shall mean those facilities that interconnect the wind farm generator step-up transformer high voltage terminals to the Interconnection Point
 - c. "Predicted Mean Turbine Hub-height Wind Speed" shall mean the mean wind speed at the turbine's hub height as predicted in the pre-construction wind resource assessment.
 - d. "Pre-construction wind resource assessment" shall mean the third party financeable wind resource assessment specific to each site.
 - e. "Air Density" shall mean the average air density at average hub elevation as determined by the wind resource assessment report or by field measurement equipment.
 - f. "Commissioning Completion Certificate" has the meaning given it in the Turbine Supply Agreement.

- g. "Interconnection Facilities" shall mean those facilities that interconnect the Wind Farm generator step-up transformer high voltage terminals to the point of interconnection to the grid.
- h. "Mechanical Completion Checklist" has the meaning given it in the Turbine Supply Agreement.
- i. "Operating Data" shall mean the quantity of electricity produced by each Turbine, the average wind speed at each Turbine, and the output voltage at each Turbine, in each case on an hourly interval.

**APPENDIX B TO THE NON-UNANIMOUS STIPULATION AND AGREEMENT
FILE EA-2019-0010
Market Protection Provision**

1. Introduction

The Market Protection Provision will allow for a creation of a regulatory liability, as well as associated carrying costs, to provide protection from downside risk created by the Wind Projects during the Guarantee Period. The amortization of the regulatory liability will occur at the end of the Guarantee Period. This document will discuss how to calculate the regulatory liability. Empire shall calculate and track the Annual Wind Value annually and will make the information, and supporting documentation, available to the parties.

2. Definitions

ASV = Annual Sharing Value = AWV * Sharing Percentage (row 27 excel)

ASV_Sum = sum of all prior years ASV inclusive of current year (row 29 excel)

AWV = Annual Wind Value (row 16 of excel)

Guarantee = maximum exposure to the negative (regulatory liability) that the Company is exposed over the life of the guarantee. The Guarantee will be a fixed positive value of \$52,500,000 Missouri jurisdictional (cell B7) exclusive of carrying costs.

Guarantee Period = Begins at the first day of the month after the first Wind Project is placed into rates and will run until the end of the 10th full year (120 months) after the last Wind Project is entered into rates.

Missouri Reg_Input = the jurisdictional percentage of the Reg_Input amount. The actual percentage will be based on the prior rate case's jurisdictional allocation ratios. (row 48 excel)

PPA_Replacement Value = value associated with replacing the existing wind PPAs during the period of the guarantee, as shown on Exhibit C (row 15 excel)

Reg_Inputs = amount added to a regulatory liability (negative number) (row 46 excel)

Reg_Input pre-limit = the calculated Reg_Input before the upper limit is placed on it to prevent an overpayment to the Company (row 41 excel)

Sharing Percentage = 50% (cell B9)

SPP\$ = Southwest Power Pool revenues for the Wind Projects (row 13 excel)

Wind Projects = the up to 600 MW of new wind projects procured by Empire.

WRR = Wind Revenue Requirement = sum of operation and maintenance expense, labor expense, tax equity payments / (credits), property taxes, return on and of (depreciation) and income taxes for the new Wind Projects (row 14 excel, as calculated in Exhibit B).

3. Calculations

Exhibit A – Market Protection Provision Flow Chart can be used to help walk through the calculations required to determine the amount of the regulatory liability. Exhibit B – Wind Data spreadsheet shows an example for calculation of the wind costs (WRR). Exhibit C – PPA Replacement value, shows the amount of benefit associated by year with the existing wind power purchase agreements. Exhibit D – Regulatory Asset Example spreadsheet, shows one example of the calculations for the regulatory liability.

Calculate AWV:

On an annual basis, the Annual Wind Value (AWV) will be calculated based on the SPP market revenues earned by the Wind Projects (SSP\$) less the Wind Projects costs (WRR) plus the value associated with avoiding the replacement of the existing wind power purchase agreements (PPA_Replacement). The existing wind power purchase agreements are Elk River and Meridian Way. This is shown in Exhibit D row 16.

The SPP Revenue is based on the SPP invoice for total revenue earned by the Wind Projects. The Wind Revenue Requirement is calculated by:

- i) Adding the total labor, operation and maintenance costs required to operate the Wind Projects.
- ii) Adding the payments to tax equity partner, less the PAYGO payments received from tax equity partner.
- iii) Adding the proforma calculation costs for the Wind Projects based on the methodology in Exhibit B for the following:
 - a. Enter the actual net capital cost for the Wind Projects, inclusive of transmission costs.
 - b. Calculate the straight line depreciation based on the listed schedules for each capital expenditure.
 - c. Calculate the accumulated depreciation.
 - d. Calculate the net rate base amount.
 - e. Calculate the Return on Equity by multiplying the authorized equity capital percentage by the net rate base and by the authorized equity return percentage from the most recent Empire rate case.
 - f. Calculate the cost of debt by multiplying the authorized debt capital percentage by the net rate base and by the incremental debt cost percentage from the most recent Empire rate proceeding after the Wind Projects are placed in service.
 - g. Calculate the Income tax payable for the Wind Projects by dividing the return on equity amount in dollars by one minus the composite tax rate then multiply that quotient by the return on equity in dollars.
 - h. Calculate the property taxes as 0.86% multiplied by the net rate base amount.
- iv) The depreciation, return on equity, cost of debt, income tax payable and property tax proforma calculations will be added to the totals in i) and ii) to produce the Wind Revenue Requirement.

Sharing Provision:

Apply the 50% sharing factor to the AWW to determine the Annual Sharing Value (ASV).

Adjustment at the end of the Guarantee Period:

At the end of the Guarantee Period, the accumulated value of the Wind Projects will be reviewed to determine if a regulatory liability exists.

The ASV will be summed for all years of the Guarantee Period to calculate the Annual Sharing Value Sum (ASV_Sum, row 33 of Exhibit D). This will then be compared against the maximum Guarantee to ensure that the Guarantee is not exceeded. This will determine the amount of the regulatory liability prior to the upper limit (Reg_Input pre-limit, row 41 in Exhibit D). If the amount of the Reg_Input pre-limit is positive, then the regulatory liability would be equal to zero. This value is the Reg_Input, shown in row 46 of Exhibit D.

The last step is to apply the Missouri jurisdictional adjustment to the Reg_Input to determine the amount that will apply in the Missouri rate adjustments.

Any regulatory liability existing at the end of the Guarantee Period shall be amortized starting with the effective date of rates in the first rate case after the end of the Guarantee Period. The appropriate amortization period will be determined in such rate case. If the ASV_Sum amount (row 29) exceeds the Guarantee amount of \$52,500,000 (Missouri jurisdictional) at the end of the Guarantee period, the treatment of any amounts above the Guarantee shall be determined in the first rate case after the end of the Guarantee Period.

Start Calculation

Definitions

SPP\$ = Southwest Power Pool revenues for the Wind Projects

WRR = Wind Revenue Requirement = operation and maintenance, labor, tax equity payments / (credits), property taxes, return on and of, income taxes

PPA_Replacement = value associated with replacing the existing wind PPAs during the period of the guarantee, as shown on Exhibit C.

AWV = Annual Wind Value (row 16 of excel)

Sharing Percentage = 50% (cell B9)

ASV = Annual Sharing Value = AWV * Sharing Percentage (row 27 excel)

ASV_Sum = sum of all prior years ASV inclusive of current year (row 29 excel)

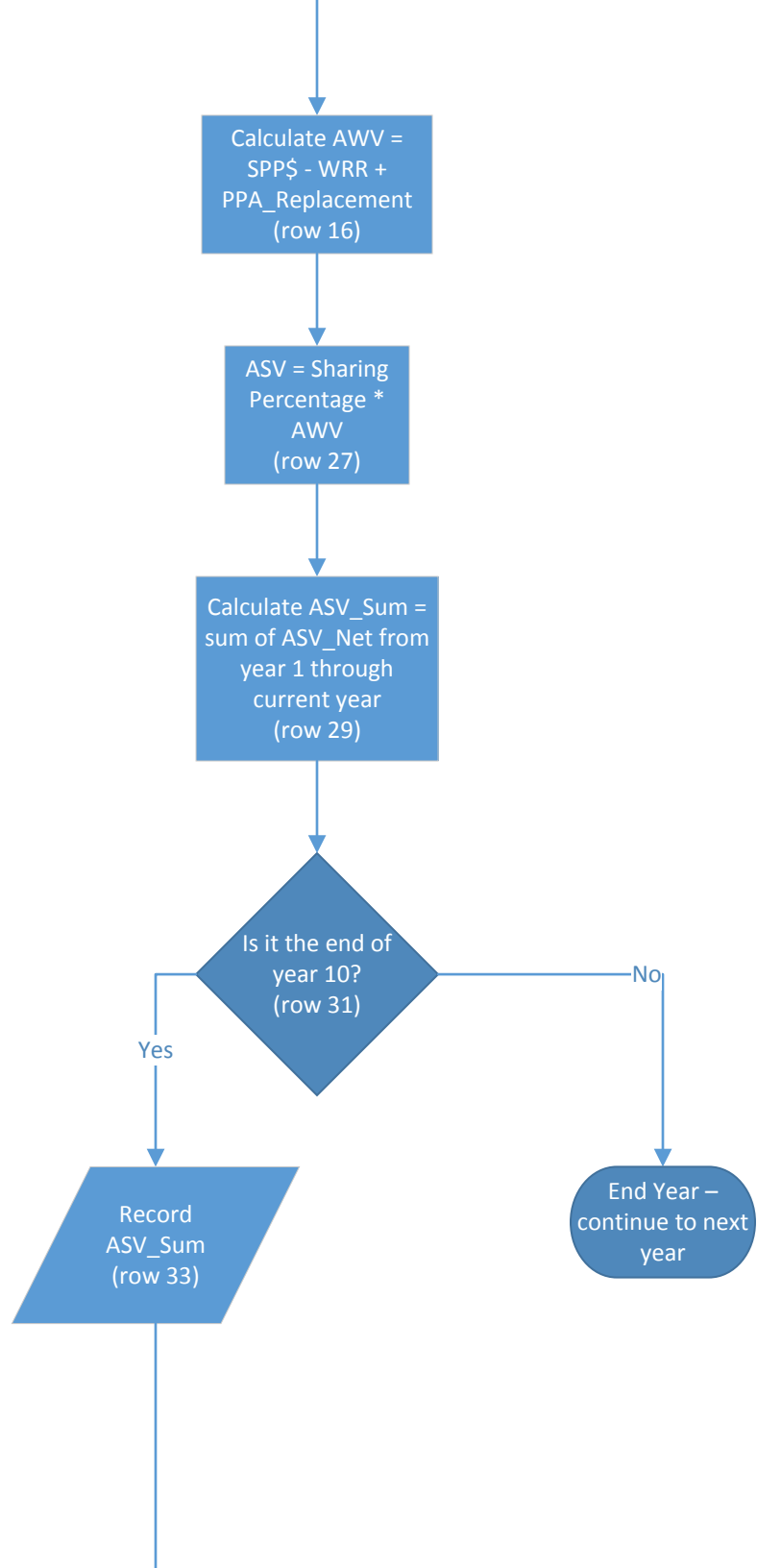
Reg_Input pre-limit = the calculated Reg_Input before the upper limit is placed on it to prevent an overpayment to the Company (row 41 excel)

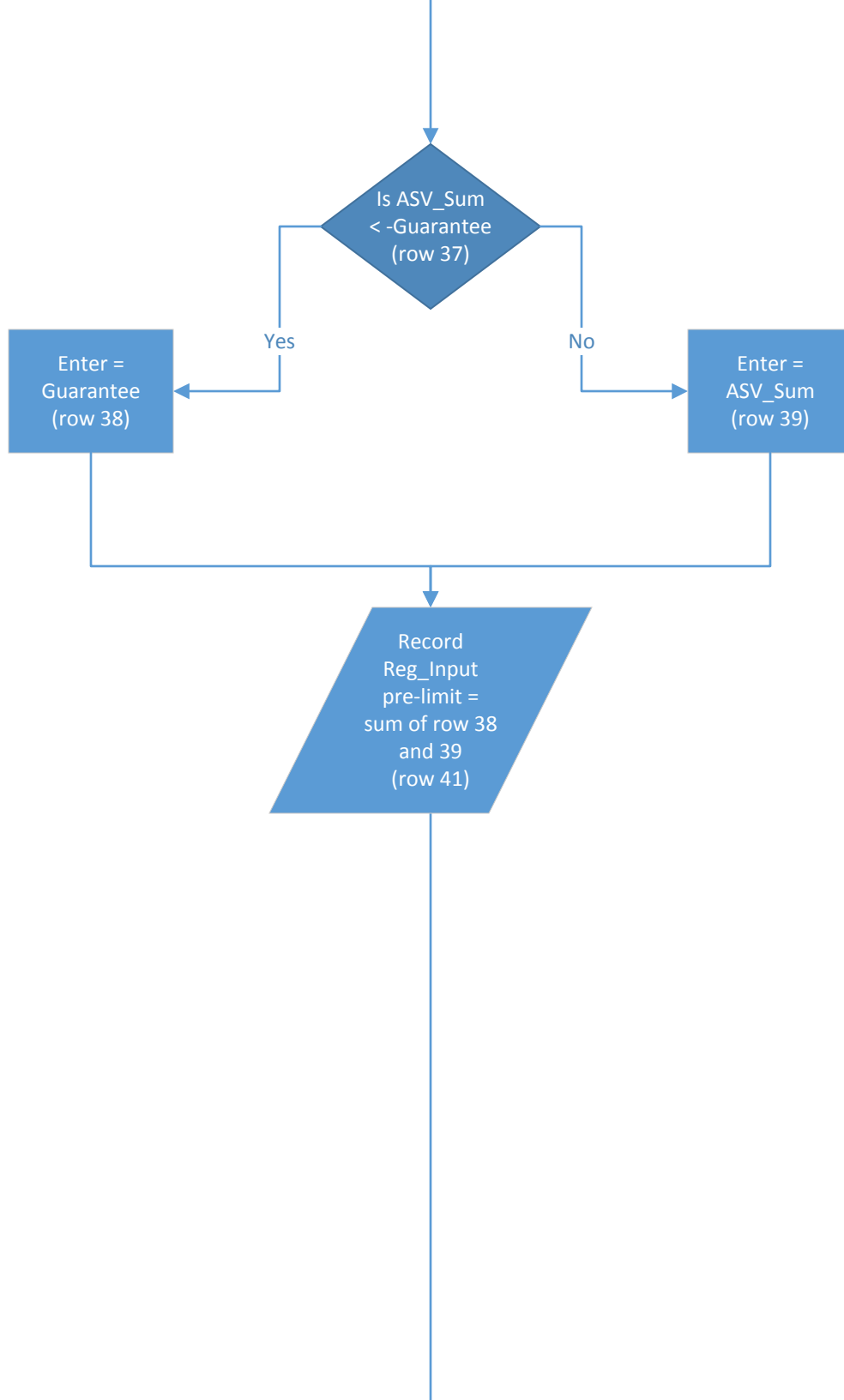
Reg_Inputs = amount added to a regulatory liability (negative number) (row 46 excel)

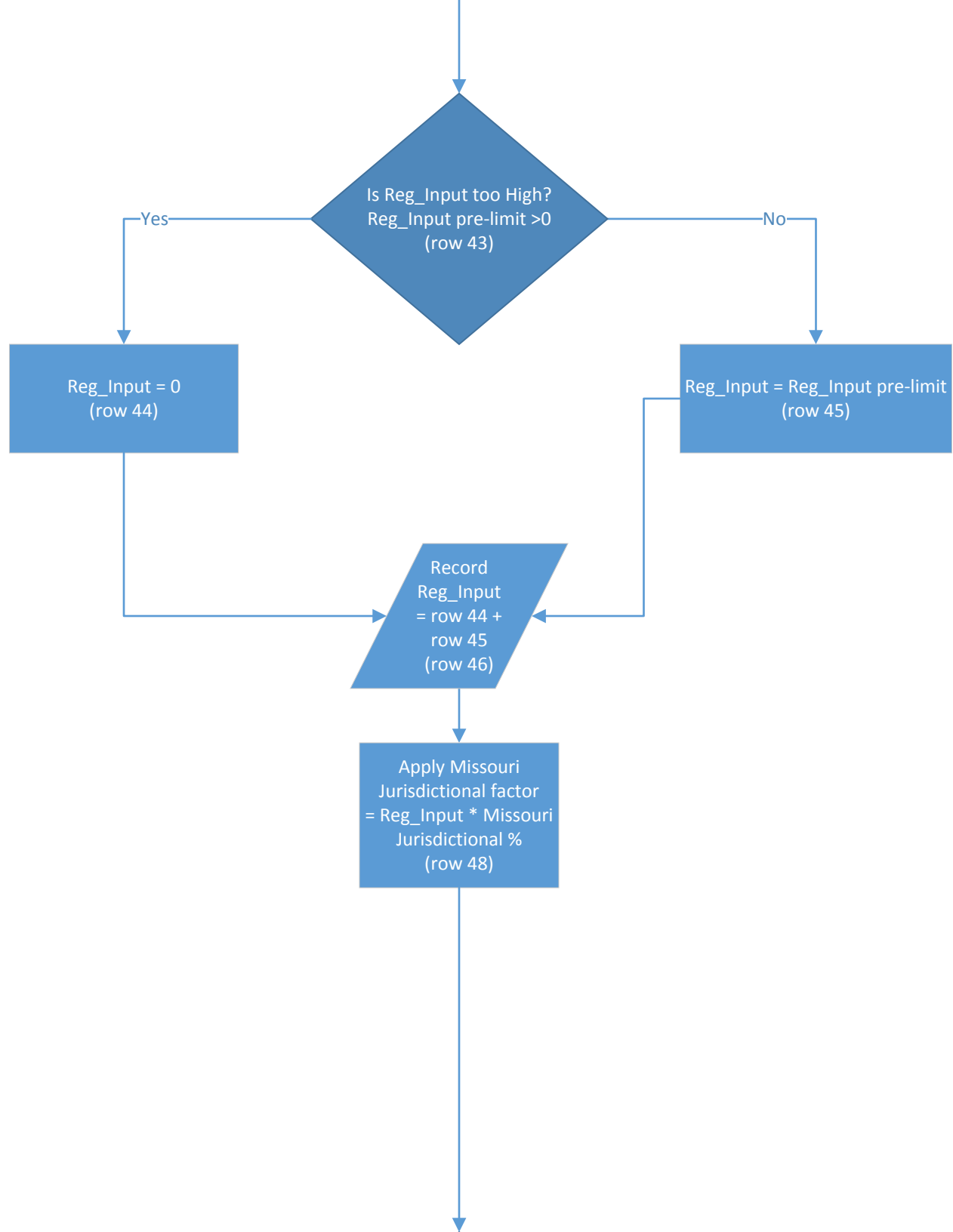
Guarantee = maximum exposure to the negative that the Company is exposed over the life of the guarantee. The Guarantee equals the Missouri Jurisdictional Guarantee divided by the Missouri jurisdictional percentage (cell B8)

Missouri Jurisdictional Guarantee = \$52,500,000 Missouri jurisdictional (cell B7)

Missouri Reg_Input = the jurisdictional percentage of the Reg_Input amount. The actual percentage will be based on the prior rate case's jurisdictional allocation ratios (row 48 excel)







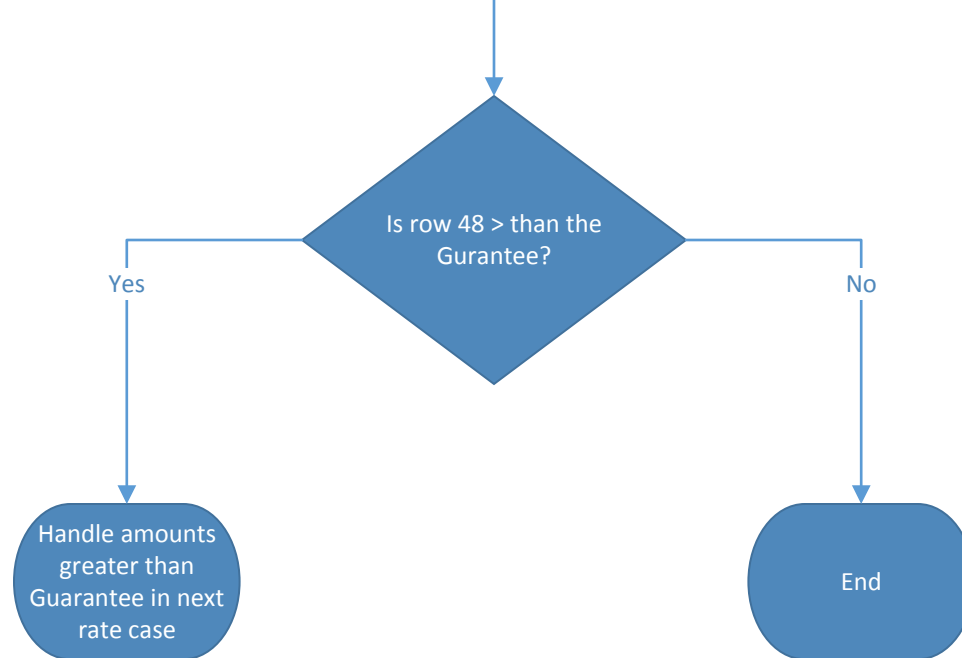


EXHIBIT B

HAS BEEN MARKED
HIGHLY CONFIDENTIAL

Exhibit C – PPA Replacement Value

1				2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2	Elk River	GWh		563	566	565	560	563	565	566	539	0	0	0	0	0
3	Meridian	GWh		313	314	310	308	311	312	313	311	309	308	304	0	0
4																
5	Guarantee Period						1	2	3	4	5	6	7	8	9	10
6																
7	Number of PPA replacement GWh replaced by New Wind during Guarantee Period															
8	3,415 GWh															
9																
10	Allocated Benefit of PPA replacement GWh						0	0	0	0	0	563	564	568	872	872
11	Reduction in Revenue Requirement from PPA replacement						0	0	0	0	0	19	18	18	28	27
12																
13																
14																
15																
16																

Market Protection Provision - Expected Case Example													
Row Number													
3	Changes related to Wind Value		All numbers utilized, unless specified elsewhere in the STIP, are for example only, actual values will be input into the calculation during the life of the MPP										
4	P50	Wind Production											
5	Mid	Market Prices											
6													
7	52,500,000	85%	Missouri Portion										
8	61,764,706	million	Guarantee Cap										
9	50%		Sharing percentage										
10													
11													
12		Years		1	2	3	4	5	6	7	8	9	10
13		SPP Market Revenue		64,471,600	69,448,182	72,576,623	76,390,854	79,237,197	81,804,765	85,422,609	88,921,482	92,717,430	96,947,113
14		Wind Revenue Requirement		79,450,096	73,039,349	75,127,484	73,479,569	73,358,679	82,513,078	80,900,583	79,975,732	78,809,234	76,810,531
15		PPA Replacement Value		0	0	0	0	0	18,798,365	18,463,438	18,378,491	27,815,790	27,110,346
16		Annual Wind Value (AWV)		(14,978,496)	(3,591,168)	(2,550,860)	2,911,285	5,878,517	18,090,053	22,985,463	27,324,241	41,723,986	47,246,928
17													
18		Accumulative AWV		(14,978,496)	(18,569,664)	(21,120,524)	(18,209,239)	(12,330,721)	5,759,331	28,744,795	56,069,036	97,793,022	145,039,951
19													
20													
21													
22													
23													
24													
25													
26													
27		Annual Sharing Value (ASV)		(7,489,248)	(1,795,584)	(1,275,430)	1,455,643	2,939,259	9,045,026	11,492,732	13,662,121	20,861,993	23,623,464
28													
29		ASV_Sum		(7,489,248)	(9,284,832)	(10,560,262)	(9,104,619)	(6,165,361)	2,879,666	14,372,397	28,034,518	48,896,511	72,519,975
30													
31		Year of Assessment											1
32													
33		ASV_Sum											72,519,975
34													
35													
36													
37		Is ASV_Sum < -Guarantee											No
38		if yes; Guarantee											
39		if no; ASV_Sum											72,519,975
40													
41		Reg_Input pre-limit											72,519,975
42													
43		Is Reg_Input too high?											Yes
44		if Yes, Reg_Input =											0
45		if No, Reg_Input =											
46		Reg_Input											0
47													
48		Missouri Reg_Input											0

Market Protection Provision - High Market Case Example												
Row Number												
3	Changes related to Wind Value		All numbers utilized, unless specified elsewhere in the STIP, are for example only, actual values will be input into the calculation during the life of the MPP									
4	P50	Wind Production										
5	High	Market Prices										
6												
7	52,500,000	85%	Missouri Portion									
8	61,764,706	million	Guarantee Cap									
9	50%		Sharing percentage									
10												
11												
12		Years	1	2	3	4	5	6	7	8	9	10
13		SPP Market Revenue	77,933,217	83,917,628	88,001,574	93,523,202	97,406,597	102,525,215	106,837,913	112,515,262	120,033,678	127,170,631
14		Wind Revenue Requirement	79,450,096	73,039,349	75,127,484	73,479,569	73,358,679	82,513,078	80,900,583	79,975,732	78,809,234	76,810,531
15		PPA Replacement Value	0	0	0	0	0	18,798,365	18,463,438	18,378,491	27,815,790	27,110,346
16		Annual Wind Value (AWV)	(1,516,879)	10,878,279	12,874,090	20,043,633	24,047,918	38,810,502	44,400,768	50,918,020	69,040,235	77,470,447
17												
18		Accumulative AWV	(1,516,879)	9,361,400	22,235,490	42,279,123	66,327,041	105,137,543	149,538,311	200,456,332	269,496,566	346,967,013
19												
20												
21												
22												
23												
24												
25												
26												
27		Annual Sharing Value (ASV)	(758,439)	5,439,139	6,437,045	10,021,816	12,023,959	19,405,251	22,200,384	25,459,010	34,520,117	38,735,223
28												
29		ASV_Sum	(758,439)	4,680,700	11,117,745	21,139,561	33,163,520	52,568,772	74,769,156	100,228,166	134,748,283	173,483,507
30												
31		Year of Assessment										1
32												
33		ASV_Sum										173,483,507
34												
35												
36												
37		Is ASV_Sum < -Guarantee										No
38		if yes; Guarantee										
39		if no; ASV_Sum										173,483,507
40												
41		Reg_Input pre-limit										173,483,507
42												
43		Is Reg_Input too high?										Yes
44		if Yes, Reg_Input =										0
45		if No, Reg_Input =										
46		Reg_Input										0
47												
48		Missouri Reg_Input										0

Market Protection Provision - Low Market Case Example													
Row Number													
3	Changes related to Wind Value		All numbers utilized, unless specified elsewhere in the STIP, are for example only, actual values will be input into the calculation during the life of the MPP										
4	P50	Wind Production											
5	Low	Market Prices											
6													
7	52,500,000	85%	Missouri Portion										
8	61,764,706	million	Guarantee Cap										
9	50%		Sharing percentage										
10													
11													
12		Years		1	2	3	4	5	6	7	8	9	10
13		SPP Market Revenue		55,903,490	59,310,435	61,474,627	64,366,912	66,334,203	68,509,077	70,737,118	72,961,801	75,101,477	77,975,266
14		Wind Revenue Requirement		79,450,096	73,039,349	75,127,484	73,479,569	73,358,679	82,513,078	80,900,583	79,975,732	78,809,234	76,810,531
15		PPA Replacement Value		0	0	0	0	0	18,798,365	18,463,438	18,378,491	27,815,790	27,110,346
16		Annual Wind Value (AWV)		(23,546,606)	(13,728,915)	(13,652,857)	(9,112,657)	(7,024,477)	4,794,364	8,299,973	11,364,559	24,108,034	28,275,081
17													
18		Accumulative AWV		(23,546,606)	(37,275,521)	(50,928,377)	(60,041,034)	(67,065,511)	(62,271,146)	(53,971,174)	(42,606,614)	(18,498,581)	9,776,501
19													
20													
21													
22													
23													
24													
25													
26													
27		Annual Sharing Value (ASV)		(11,773,303)	(6,864,457)	(6,826,428)	(4,556,328)	(3,512,238)	2,397,182	4,149,986	5,682,280	12,054,017	14,137,541
28													
29		ASV_Sum		(11,773,303)	(18,637,760)	(25,464,189)	(30,020,517)	(33,532,755)	(31,135,573)	(26,985,587)	(21,303,307)	(9,249,290)	4,888,250
30													
31		Year of Assessment											1
32													
33		ASV_Sum											4,888,250
34													
35													
36													
37		Is ASV_Sum < -Guarantee											No
38		if yes; Guarantee											
39		if no; ASV_Sum											4,888,250
40													
41		Reg_Input pre-limit											4,888,250
42													
43		Is Reg_Input too high?											Yes
44		if Yes, Reg_Input =											0
45		if No, Reg_Input =											
46		Reg_Input											0
47													
48		Missouri Reg_Input											0

Market Protection Provision - Low Market Case and Low Wind Example													
Row Number													
3	Changes related to Wind Value			All numbers utilized, unless specified elsewhere in the STIP, are for example only, actual values will be input into the calculation during the life of the MPP									
4	P95	Wind Production											
5	Low	Market Prices											
6													
7	52,500,000	85%	Missouri Portion										
8	61,764,706	million	Guarantee Cap										
9	50%		Sharing percentage										
10													
11													
12			Years	1	2	3	4	5	6	7	8	9	10
13			SPP Market Revenue	47,372,075	50,259,087	52,093,003	54,543,897	56,210,960	58,053,927	59,941,948	61,827,122	63,640,263	66,075,484
14			Wind Revenue Requirement	79,544,102	73,796,343	75,884,477	74,265,678	74,007,582	81,971,555	80,373,142	79,433,441	78,282,198	76,466,228
15			PPA Replacement Value	0	0	0	0	0	18,798,365	18,463,438	18,378,491	27,815,790	27,110,346
16			Annual Wind Value (AWV)	(32,172,027)	(23,537,256)	(23,791,475)	(19,721,781)	(17,796,622)	(5,119,263)	(1,967,756)	772,172	13,173,856	16,719,602
17													
18			Accumulative AWV	(32,172,027)	(55,709,283)	(79,500,757)	(99,222,538)	(117,019,160)	(122,138,423)	(124,106,179)	(123,334,007)	(110,160,151)	(93,440,549)
19													
20													
21													
22													
23													
24													
25													
26													
27			Annual Sharing Value (ASV)	(16,086,013)	(11,768,628)	(11,895,737)	(9,860,890)	(8,898,311)	(2,559,632)	(983,878)	386,086	6,586,928	8,359,801
28													
29			ASV_Sum	(16,086,013)	(27,854,641)	(39,750,379)	(49,611,269)	(58,509,580)	(61,069,211)	(62,053,090)	(61,667,004)	(55,080,075)	(46,720,274)
30													
31			Year of Assessment										1
32													
33			ASV_Sum										(46,720,274)
34													
35													
36													
37			Is ASV_Sum < -Guarantee										No
38			if yes; Guarantee										
39			if no; ASV_Sum										(46,720,274)
40													
41			Reg_Input pre-limit										(46,720,274)
42													
43			Is Reg_Input too high?										No
44			if Yes, Reg_Input =										
45			if No, Reg_Input =										(46,720,274)
46			Reg_Input										(46,720,274)
47													
48			Missouri Reg_Input										(39,712,233)