South Dakota Public Utilities Commission
Small Generator Interconnection Strawman Rule
Workshop #1:
Overview and Participant Issues

The Regulatory Assistance Project

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STRAWMAN CHANGES TO OREGON RULE

Increases Applicability to 20 MWs; Eliminates Net Metering References

Scope and Applicability

(1) OAR 860-082-0005 through 860-082-0080 (the "small generator interconnection rules" or "OSGIR") establish rules governing the interconnection of small generator facilities with an electric nameplate capacity of ~~10~~ 20 MW or less to the electric transmission and distribution system of a Public Utility. These rules do not apply if the small generator facility is producing electricity for resale to a person other than the interconnecting Public Utility.

~~(2) The OSGIR do not apply to the interconnection of net metering facilities, which is addressed in OAR 860-039-0005 through 860-039-0080.~~

Definition: Eliminates Net Metering Reference

(29) "Minor Equipment Modification" means a change to the proposed Small Generator Facility, the output capacity of the facility, or the proposed interconnection equipment that:

(a) Does not affect the application of the screening criteria in Tiers 1, 2, or 3;

(b) In the Public Utility's reasonable opinion, does not have a material impact on safety or reliability of the public utility's TDS or an Affected System; and

(c) Does not include a change in the Electric Nameplate Capacity of an existing Small Generator Facility, ~~or a change from the type of facility from a Small Generator Facility to a Net Metering Facility.~~

Definition: Eliminates Net Metering Reference

~~(31) "Net metering facility" has the meaning set forth in ORS 757.300(1)(d).~~

(32) "Parallel Operation" or "Parallel" means a Small Generator Facility is connected electrically to a T&D System and the potential exists for electricity to flow from the Small Generator Facility to the T&D System or for the Small Generator Facility and the T&D System to simultaneously feed the same load.

(33) "Pending Completed Applications" means applications for interconnection of other Small Generator Facilities, ~~Net Metering Facilities,~~ or FERC wholesale generators that the Public Utility has deemed completed, but has not yet reviewed or approved pursuant to applicable procedures.

Definition: Increases Applicability to 20 MWs

(39) "Small Generator Facility" means a facility for the production of electrical energy that has an electric nameplate capacity of ~~10~~ 20 MW of less and can operate in parallel with a public utility's TDS.

Increases Applicability to 20 MWs; Eliminates Net Metering References

General Interconnection Provisions

(1) Application: A Party wishing to interconnect, make a capacity change or change the status of a proposed or operating facility, for example from ~~a Net Metering Facility or~~ FERC wholesale generator to a Small Generator Facility must submit an Application to the Public Utility that owns and operates the T&D System to which interconnection is sought.

(a) The Application must be made using a standardized Application form found on the Commission's website as Form 1 or Form 2.

(b) A Small Generator Facility that is Lab Tested, inverter-based and has an Electric Nameplate Capacity of 25 kW or less must use application Form 1 which is a Tier 1 application form. Applications for all other Small Generator Facilities up to ~~10~~ 20 MW in size must use Form 2, which is the Tier 2, Tier 3 and Tier 4 Application Form.

Reduces Application Fees; Uses kW Metric to Compute Fees

(2) Fees: A non-refundable application processing fee is required for all Applications The amount of the fee is dependent upon the review Tier requested in the application and is intended to cover reasonable costs for processing, minor study and evaluation of the application. The application fees are as follows:

(a) Tier 1: ~~$100~~ No fee required.

(b) Tier 2: **~~$500~~ $50 plus $1 per kW of rated generating facility output up to a maximum of $500.**

(c) Tier 3: **~~$1000~~ $100 plus $2 per kW of rated generating facility output up to a maximum of $1,000.**

(d) Tier 4: ~~$1000~~ $100 plus $2 per kW of rated generating output facility up to a maximum of $1,000. Any Tier 4 deposit applies against the study fee.

Tier 4: Increases Applicability to 20 MWs; Adds Reference to Tier 3

(d) Tier 4 Interconnection Review Procedures: an Public Utility must use the Tier 4 review procedures more specifically set forth in OAR 860-082-0055 for evaluating all Applications to connect Small Generation Facilities that:

(A) Sell power to the Public Utility and,

(B) Have an Electric Nameplate Capacity of ~~10~~ 20 MW or less and,

(C) Do not qualify for or have failed either the Tier 1 ~~or~~ ,Tier 2 or Tier 3 interconnection review procedures.

Exempts Tier 1 from Isolation Device Requirement

(9) Isolation Device: Small Generator Facilities qualifying for interconnection under Tier 2, Tier 3 or Tier 4 interconnection review procedures must be capable of being isolated from the Public Utility.

Tier 1: Eliminates Net Metering Reference

(3) Tier 1 Evaluation and Screening Criteria:

(a) For interconnection of a proposed Small Generator Facility to a radial distribution circuit, the aggregated generation, which includes the proposed Small Generator Facility as well as ~~existing Net Metering Facilities and~~ FERC wholesale generators and Net Metering Facilities and FERC wholesale generators with a higher Queue Position, must not exceed 15 percent of the Line Section annual peak load as most recently measured at the sub-station or calculated for the Line Section.

Tier 1:
Shortens Time for Application Completeness Review and for Status Inquiry

(4) Tier 1 Interconnection Review Procedure:

(a) The Applicant must submit its Application and appropriate fees to the Public Utility at its designated address. The appropriate application is available at the Commission web site, Form 1.

(b) The Public Utility must, within ~~10~~ 5 business days of receipt of the Application, inform the Applicant that the Application is either complete or incomplete. If the application is incomplete, the Public Utility must indicate what information is missing. In the event the Applicant does not receive notification within ~~10~~ 5 business days, the Applicant may contact the Public Utility to determine the status of the Application. If the Public Utility notified the Applicant that the Application is incomplete, the Applicant must provide the required information within 10 business days (or such other time as the parties mutually agree) or the Application is deemed to be withdrawn.

Tier 1: Eliminates Scoping Meeting Re: Higher Queued Applications

(d) Queuing Priority: Once the Public Utility deems the Application to be complete, it must assign the project a Queue Position. The Queue Position of each Application is used to determine any potential Adverse System Impacts of the proposed Small Generator Facility based on the relevant screening criteria set forth in 860-083-0040(3). The Applicant must proceed under the timeframes of this section. ~~The Public Utility must schedule a Scoping Meeting to notify the Applicant about other higher-queued Applications including, but not limited to, Net Metering Facility and FERC wholesale generator Interconnection Applications on the same radial line or Spot Network to which the Applicant is seeking interconnection.~~

Tier 1: Reduces Time for Notice of Planned Commissioning

(g) The Applicant must provide the Public Utility at least ~~20~~ 5 business days notice of the planned commissioning for the Small Generator Facility. The Public Utility has the option of conducting a Witness Test at a mutually agreeable time within 10 business days of the scheduled commissioning or waiving the Witness Test and notifying the Applicant. If the Public Utility does not conduct the Witness Test within 10 business days of the scheduled commissioning date or within a time otherwise mutually agreed upon by the Parties, the Witness Test is deemed waived.

Tier 1: Adds Utility Duty to Reasonably Allow Extension of Time to Cure Testing Failures

(6) Witness Test Not Acceptable: If the Witness Test is conducted and is not acceptable to the Public Utility, the Applicant must be granted a period of 30 calendar days to resolve any deficiencies. The Parties may mutually agree to extend the time period for resolving any deficiencies. A request for extension may not be unreasonably denied by the Public Utility. If the Applicant fails to address and resolve the deficiencies to the satisfaction of the Public Utility within the agreed upon time period, the Application is deemed withdrawn.

Tier 2: Eliminates Net Metering Reference

(3) Tier 2 Evaluation and Screening Criteria:

(a) For interconnection of a proposed Small Generator Facility to a radial distribution circuit, the aggregated generation, which includes the proposed Small Generator Facility as well as existing ~~Net Metering Facilities and~~ FERC wholesale generators and Net Metering Facilities and FERC wholesale generators with a higher Queue Position, on the circuit must not exceed 15 percent of the Line Section annual peak load as most recently measured at the substation or calculated for the Line Section.

Tier 2: Eliminates Net Metering Reference

(f) The Small Generator Facility, in aggregate with other generation ~~and existing Net Metering Facilities~~ and FERC wholesale generators ~~and Net Metering Facilities~~ and FERC wholesale generators with a higher Queue Position, interconnected to the distribution side of a substation transformer feeding the circuit where the Small Generator Facility proposes to interconnect, must not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four distribution busses from the point of interconnection).

Tier 2: Shortens Time for Application Completeness Review and for Status Inquiry

(4) Tier 2 Interconnection Review Procedure:

(a) The Applicant must submit its Application and appropriate fees to the Public Utility at its designated address. The Application form is available on the Commission web site as Form 2. The Applicant may request, from the Public Utility, non-confidential from the Public Utility for an identified, approved interconnection to facilitate obtaining Field Tested status. The Public Utility may charge a nominal processing fee but will not unreasonably refuse to provide such information if requested.

(b) The Public Utility must, within ~~10~~ 5 business days of receipt of the Application, inform the Applicant that the Application is either complete or incomplete. If the application is incomplete, the Public Utility must indicate what information is missing. In the event the Applicant does not receive notification within ~~10~~ 5 business days, the Applicant may contact the Public Utility to determine the status of the Application.

Tier 2: Reduces Time for Notice of Planned Commissioning

(i) The Applicant must provide the Public Utility at least ~~20~~ 5 business days notice of the planned commissioning for the Small Generator Facility. The Public Utility has the option of conducting a Witness Test at a mutually agreeable time within 10 business days of the scheduled commissioning. If the Public Utility does not conduct the Witness Test within 10 business days of the scheduled commissioning date, or within the time otherwise mutually agreed upon by the parties, or if the Public Utility notifies the Applicant of its intent not to perform the test, the Witness Test is deemed waived.

Tier 2:Adds Utility Duty to Reasonably Allow Extension of Time to Cure Testing Failures

(6) Witness Test Not Acceptable: If the Witness Test is conducted and is not acceptable to the Public Utility, the Applicant must be allowed a period of 30 calendar days to resolve any deficiencies. A request for extension may not be unreasonably denied by the Public Utility. The Parties may mutually agree to extend the time period for resolving any deficiencies. If the Applicant fails to resolve the deficiencies to the satisfaction of the Public Utility within the agreed upon time period, the Application is deemed withdrawn.

Tier 3: Changes Reference From Area Network to TDS; Removes Tier 2 15% Screen From Tier 3 Screen

Tier 3 Interconnection

(1) Applicability: The Public Utility must use the Tier 3 interconnection review procedures for an Application that does not qualify for Tier 1 or Tier 2 review and meets all the requirements set forth in subsections (a) through (c) below:

(a) The Small Generator Facility has an Electric Nameplate Capacity rating of 10 MW or less; and

(b) The proposed Point of Interconnection is not to a Transmission Line; and

(c) The Small Generator Facility does not export power beyond the point of interconnection and utilizes low forward power relays or other protection functions that prevent power flow onto the ~~Area Network~~ TDS;

(2) Approval: A Tier 3 Small Generator Facility, as defined in section (1) of this rule, meeting the screening criteria set forth in sections (3) and (4) below must be further evaluated using Tier 2 Screening Criteria set forth in OAR 860-082-0045(3) except that the 15 percent screen of OAR 860-082-0045(3)(a) shall not apply to Tier 3 Small Generator Facilities. Once the Tier 2 Screening Criteria are met, the Application must be reviewed using the procedure set forth in section (5) of this rule. Tier 3 interconnections do not require an Interconnection Feasibility Study; however, the Public Utility may choose to conduct such a study at its own expense, and it must complete the Interconnection Feasibility Study within 25 calendar days.

Tier 3: Eliminates Net Metering Reference

(4) Tier 3 Alternative Evaluation and Screening Criteria -- Not Networked: For a Small Generator Facility to interconnect to a distribution circuit that is not networked, the criteria set forth in subsections (a) through (f) below must be met:

(a) The Small Generator Facility has an Electric Nameplate Capacity of 10 MW or less and;

(b) The aggregated total of the Electric Nameplate Capacity of all of the generators on the circuit including existing ~~Net Metering Facilities and~~ FERC wholesale generators ~~and Net Metering Facilities~~ and FERC wholesale generators with a higher Queue Position, and the proposed Small Generator Facility, is 10 MW or less and;

Tier 3: Shortens Time for Application Completeness Review

(5) Tier 3 Interconnection Review Procedure:

(a) The Applicant must submit its Application and appropriate fees to the Public Utility at its designated address. The Application form is available on the Commission web site as Form 2.

(b) The Public Utility must, within ~~10~~ 5 Business Days of receipt of the Application, inform the Applicant that the Application is either complete or incomplete. If the Application is incomplete, the Public Utility must indicate what information is missing. In the event the Applicant does not receive notification within 10 business days, the Applicant may contact the Public Utility to determine the status of the Application.

(c) If the Public Utility does not have a record of receipt of the Application, the Applicant must provide the Public Utility with an additional copy of the Application. If the Applicant can demonstrate that the original completed Application was delivered to the Public Utility, the Public Utility must forgo the initial ~~10~~ 5 business day response period; and complete its review within 20 business days of its receipt.

Tier 3: Eliminates Net Metering Reference

(d) Queuing Priority: Once the Public Utility deems the Application to be complete, it must assign the project a Queue Position. The Queue Position of each Application is used to determine any potential Adverse System Impacts of the proposed Small Generator Facility based on the relevant screening criteria summarized in sections (3) and (4) of 860-082-0050. The Applicant must proceed under the timeframes of this section. The Public Utility must schedule a Scoping Meeting to notify the Applicant about other higher-queued Applications including, but not limited to, ~~Net Metering Facility Applications and~~ FERC Interconnection Application on the same radial line or Area Network to which the Applicant is seeking to interconnect.

Tier 3: Reduces Time for Notice of Planned Commissioning

(i) The Applicant must provide the Public Utility at least ~~20~~ 5 business days notice of the planned commissioning for the Small Generator Facility. The Public Utility has the option of conducting a Witness Test at a mutually agreeable time within 10 business days of the scheduled commissioning. If the Public Utility does not conduct the Witness Test within 10 business days of the scheduled commissioning date, or within the time otherwise mutually agreed upon by the parties, or if the Public Utility notifies the Applicant of its intent not to perform the test, the Witness Test is deemed waived.

Tier 3:Adds Utility Duty to Reasonably Allow Extension of Time to Cure Testing Failures

(7) Witness Test Not Acceptable: If the Witness Test is conducted and is not acceptable to the Public Utility, the Applicant must be allowed a period of 30 calendar days to resolve any deficiencies. A request for extension may not be unreasonably denied by the Public Utility. The Parties may mutually agree to extend the time period for resolving any deficiencies. If the Applicant fails to resolve the deficiencies to the satisfaction of the Public Utility within the agreed upon time period, the Application is deemed withdrawn.

Tier 4: Extends Applicability to All Jurisdictional Interconnections

Tier 4 Interconnection

(1) Applicability: The Public Utility must use the Tier 4 interconnection review procedures for an Application that does not qualify for Tier 1, Tier 2, or Tier 3 review and for which the Small Generator Facility has an Electric Nameplate Capacity that is ~~10~~ 20 MW or less. Generators larger than 20 MW still subject to state jurisdiction will be handled as Tier 4 applications.

Exempts Tier 1 From Special Metering

Metering and Monitoring

(l) Metering: The Interconnection Customer is responsible for the cost of the purchase, installation, operation, maintenance, testing, repair, and replacement of any special metering and data acquisition equipment deemed necessary by the terms of the (separate) Power Purchase Agreement except that Tier 1 customers may use existing metering equipment unless the Public Utility elects to install metering equipment at its expense. The Public Utility must install, maintain and operate the metering equipment. Parties must be granted unrestricted access to such equipment as may be necessary for the purposes of conducting routine business.

Replaces Dispute Resolution Provisions With This Language

Dispute Resolution

Before filing a Complaint with the Commission, the Public Utility, Applicant or Interconnection Customer must first provide the other Party and Commission Staff with a written Notice of Dispute (Notice). Such Notice may describe in detail the nature of the dispute and a proposed resolution. Commission Staff may assist the parties in informal resolution if so requested. In the event the parties are unable to resolve the dispute within 30 calendar days or such other period as the Parties may agree upon by mutual agreement, the complaining party may formally file a Complaint with the Commission according to ARSD 20:10:01:08.01.

REVIEW OF STAKEHOLDER ISSUES

Technical Interconnection Requirements

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
3	General Requirements-Isolation Device: proposed lack of utility accessible and lockable disconnect switch requirement for Tier 1 interconnections.	MidAmerican requires a utility accessible and lockable disconnect switch for all generator interconnections, regardless of size.	Mid-American Energy Co.
4	Technical	Disconnect Switches -- There are some inconsistencies in the Strawman rules regarding when disconnect switches have to be used	Black Hills Power
3	General Requirements-Isolation Device: proposed lack of utility accessible and lockable disconnect switch requirement for Tier 1 interconnections.	MidAmerican requires a utility accessible and lockable disconnect switch for all generator interconnections, regardless of size.	Mid-American Energy Co.
4	Page 11. (A) "A draw-out type circuit breaker with the provision for padlocking at the draw-out position can be considered an isolation device for purposes of this requirement."	A draw-out type circuit breaker above 240 Vac should not be used as an isolation device because of a potential "arc flash hazard" that may exist when drawing out the breaker. Only trained and properly equipped and qualified personnel should do this. That person and the required equipment may not be available in emergency situations.	Montana-Dakota Utilities Co.

Technical Interconnection Requirements

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
3	Technical Interconnection Requirements	Would like to see more diagrams / illustrations worked into this document.	Otter Tail Power Co.
1	Tier II or III	What issues for synchronizing, or cycles per second	Dave Staub
2	Utility loss of power on distribution line with continued small generation production	What sequence of action	Dave Staub
5	Metering	Who provides the metering for the small producer?	Black Hills Electric Coop

Technical Interconnection Requirements

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
1	Pg 1 – last sentence – regarding power produced by small generators entering the T&D system	We would be concerned that power from small generators not be able to directly enter into our T&D system, because if power from small generators is able to directly enter into our T&D system there could be unanticipated problems with T&D system reliability.	NorthWestern Energy
5	Page 14, 17, (3) evaluation and Screening Criteria, (a) ….must not exceed 15 percent of the Line section annual peak load …	For purposes of reference, MDU's circuit capacity varies from location to location, but typical capacities are: 4kV capacity = 140 amps = 1000kVA, 15% then = 151kVA. 12.47kV capacity = 200 amps = 4320kVA, 15% then = 648kVA.	Montana-Dakota Utilities Co.

Technical Interconnection Requirements: IEEE 1547

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
4	The technical interconnection requirements to be used are not clearly spelled out. IEEE 1547 is in the definitions but not clearly required as the base requirements. The commissioning should conform to IEEE 1547.1 but this is not clearly stated.	The General Requirements should state that all distribution connected interconnections for <= 10 MW (upper limit of standards) facilities are to be in conformance with IEEE 1547 and all commissioning is to be in conformance with 1547.1. The text should recommend following the guidance of IEEE 1547.2 for the interconnection studies and considerations (this guide should be approved prior to the SD process completion). In several places, the strawman states that no requirements can be imposed beyond those stated in the rules. This needs to be amended to allow additional technical requirements for larger facilities. IEEE 1547 does not cover all situations and 1547 indicates that some specialty requirements will be needed.	NSP/Excel

Technical Interconnection Requirements: IEEE 1547

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
1	When conflicts between SD-PUC procedure and IEEE 1547 are discovered, which shall control?	Would like to see a paragraph that IEEE 1547 has control for technical items if a conflict is discovered.	Montana-Dakota Utilities Co.
8	Page 32, under (3) Telemetry, paragraphs (b), (c), (d), (e).	These paragraphs are too specific in respect to the requirements and to certain technologies. It is recommended that these specific items be removed from the rules. This would allow IEEE 1547.3 to apply. Additionally if the Interconnection Customer wishes to sell into the MISO market, MISO requirements would apply and these monitoring requirements are in conflict.	Montana-Dakota Utilities Co.

Technical Interconnection Requirements: Other Issues

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
3	Quality	Do utilities have to purchase power from a producer who cannot provide utility grade power?	Black Hills Electric Coop
4	Regulation	Who will regulate the small producer?	Black Hills Electric Coop
5	How can we ensure no brownouts and blackouts with enhanced grid interconnections/ Any safety valves available?	All five areas need addressing	Senator Frank
2	Electric Transmission and Distribution System	- Left Blank-	InterTribal Economic Alliance

Jurisdiction, Scope & Applicability

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
5	This strawman says it includes connection to transmission lines where sale is to the host utility. The FERC position is that all connections to lines classified as transmission, regardless of voltage is FERC jurisdictional and under SGIP or LGIP rules.	All references of connection to transmission lines under these procedures should be removed. If transmission connection references are kept, a position document disagreeing with FERC will be needed.	NSP/Excel
1	Technical	IEEE 1547 does not apply to generation greater than 10MW; BHP design practices would not be able to accommodate greater than 10 MW based on definition of "distribution system" in proposed rules	Black Hills Power
5	Applicability	MidAmerican believes any standardized procedures should only be applicable to distributed generation that is capable of operating in continuous parallel with the utility system (longer than 100 milli-seconds) AND which is capable of injecting power on a continuous basis into the utility system. Specifically, stand-by diesel generators that operate in break-before-make mode as well as co-generation facilities which are sized much less than the customer load or are prevented from back-feeding into the utility system via reverse power relays should not be under standardized requirements.	Mid-American Energy Co.

Jurisdiction, Scope & Applicability

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
2	When must SD-PUC procedure be used and not MISO or FERC or other system operator standard procedures be used?	Would like to see a paragraph that clearly defines when SD-PUC procedure must be followed vs when other "standard" procedures must be followed. Two different and competing procedures should not have to be applied to the same interconnection. Presently any Interconnection Customer that wishes to sell into the MISO market is required to use the MISO procedure, no matter how small the generation or what voltage they are connected to.	Montana-Dakota Utilities Co.
3	Page 6. Definitions, (42) -- "Transmission Line" means any line operating at or above 50,000 volts.	For MDU, MISO has control over the 41.6kV system, and 41.6kV is considered transmission. Recommend the definition be changed to: "Transmission Line" means any line operating at or above 35,000 volts.	Montana-Dakota Utilities Co.

Procedural: Tier Structure

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
1	This strawman has a non-exporting Tier 3 review level. This allows up to 10 MW units to connect without full technical impact review. While this may be appropriate for short, urban, high capacity feeders, it is not appropriate for rural, 4 kV, weak, or long feeders.	There are several possible approaches. As a minimum, the utility must be allowed to do a suitable technical study where they deem it necessary. They would have to provide justification for this. The customer should pay for this. As an alternate, the customer pays if adverse findings occur such as done in the TX rules. Tier 3 is not needed and should be deleted. Normal practice is to abbreviate or skip Tier 4 studies to the extent practical. Non-exporting Tier 4 reviews would normally be abbreviated while catching the few with excessive impact. Three tiers in the CO rules, essentially 1, 2, and 4, are working well. The FERC SGIP and the new NM rules use three.	NSP/Excel
1	Tier Classifications	What are the various criteria used to determine which tier (1 through 4) a project falls within?	Otter Tail Power Co.
3	Procedural	Simplification of Tier 1 Process -- The Tier 1 application and agreement process should be modeled after the SGIP 10 kW inverter process. The agreement should be a simpler process instead of combined with the other Tiers.	Black Hills Power

Fees & Cost Recovery

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
5	Procedural	Fees -- It takes time to review applications and evaluate the identified screens; FERC Order 2006 permits administrative fees; Other rate payers should not subsidize small generator interconnection customers; A deposit should be required prior to commencement of a study	Black Hills Power
1	Page 12 1. Additional study costs	When would these be required and how does the applicant know they are justified?	Tom Hurd
2	Page 68. 4.4 system upgrades	This is not clear as to when this would be called for and the applicant's rights for review and compensation, plus the utility would then own what the applicant has paid for?	Tom Hurd
2	Pg 12 – consultant costs	We believe the estimated $100/hr is too low. A range of $150 - $250/hr is more realistic.	NorthWestern Energy
9	Page 7, 8. $ amounts proposed for fees of tier 2, 3, and 4.	The proposed amounts will not begin to cover the actual costs of any studies required. Only tier 1 could interconnect with a limited amount of review.	Montana-Dakota Utilities Co.
4	Interconnection Costs	Like to see more clarification on who is responsible for what interconnection costs and what is determined as "reasonable" costs?	Otter Tail Power Co.
4	Interconnection System Impact Study	- Left Blank-	InterTribal Economic Alliance
1	Cost	Will utilities be able to recover their infrastructure costs?	Black Hills Electric Coop

Timelines

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
2	A number of the response and study intervals have been modified in the strawman text to shorter intervals. In almost all cases, the stated time is too short. Especially for larger projects, adequate review and response are not practical within the required time limits.	The original response intervals are usable and appropriate for smaller facilities. The proposed changes in the strawman should be removed. The rules in some other states have a 5 day reply interval to acknowledge receipt of the application. For Tiers 2, 3, and 4, the proposed witnessing testing timeline is not appropriate for larger facilities. For 250 kW and up projects, commissioning is usually a multiple step, multi-day process. By 1 MW, commissioning often stretches over weeks. As a minimum, "or as mutually agreed upon" should be appended to the 10 day testing interval language. There should be no forced approval when the applicant takes longer. The present wording appears to allow the applicant to delay and force receipt of the approval to interconnect. Preferably for larger facilities, such as > 200 kW, the language should require mutually agreed upon schedules without a mandated interval.	NSP/Excel
3	The strawman covers up to 20 MW facilities. Tier 4 applies up to 20 MW. The specific steps and timeframes in Tier 4 are not appropriate for large projects. Large projects are totally custom designs and are often unusual and "pushing the envelope".	Above 10 MW, the rules should be based on mutually agreed upon processes and schedules. These projects will be rare and involve competent players on both sides. Except for some 34.5 kV distribution, almost no feeders are capable of handling larger than 5 MW or so facilities.	NSP/Excel

Timelines

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
2	Procedural	Time Frames for review are generally too short -- Move the 5 day review time to 10 day; Utility needs time to allow adequate scheduling of company resources, 5 days is too short; A time frame should be placed on the customer to return agreements to keep the process on track and so it does not affect other applicants in the queue	Black Hills Power
3	Pg 20 – notification for commissioning	5 days for notification of commissioning is too short. We suggest it be the original 10 day time period.	NorthWestern Energy
6	Page 15, 19, 23. In the "Tier 1, 2, 3 Interconnection Review Procedure" (b) "The Public Utility must, with 5 Business Days"	5 business days is a pretty short period of time to review the applications for completeness. 10 days is more reasonable.	Montana-Dakota Utilities Co.

Contracts & Forms

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
5	Insurance	This seems to be an understated item in many States, more emphasis should be placed on this item.	Otter Tail Power Co.
3	Interconnection agreement	- Left Blank-	InterTribal Economic Alliance
4	Insurance, Assignment, Indemnity (article 5)	These provisions need to be conformed to SD law. There should be a specific requirement for insurance of a certain amount and with certain terms instead of the generalized statement. The assignment provisions appear to require consent in all cases, but should not in the event of an approved utility disposition.	Mid-American Energy Co.

Recordkeeping & Reporting

Comments and Suggestions Regarding			
Priority	**Area**	**Area of Priority**	**Source**
2	Record Keeping and Reporting Requirements	MidAmerican questions the necessity and purpose of requiring utilities to make detailed records and provide a yearly report for all interconnection requests.	Mid-American Energy Co.
7	Page 31. (3) The Public Utility must prepare and submit…	What is the value of providing detailed reports to the Commission? If information is retained as required in paragraph (1) details may be provided if necessary for dispute resolution.	Montana-Dakota Utilities Co.

Other Issues & Comments

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
5	What effect does the PUC proposed Policy have within Indian Reservations, if any?	- Left Blank-	InterTribal Economic Alliance
1	Uniform procedures, applications, and contracts for multi-state utilities	MidAmerican has territory in South Dakota, Iowa, and Illinois. All states are in the process of developing generator interconnection procedures and agreements. To the extent practicable, we would like to use uniform procedures.	Mid-American Energy Co.
1	Self-Sustain Fuel Cell energy centers	- Left Blank-	InterTribal Economic Alliance

Wind Issues

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
1	Wind power regional development and interconnection limitations.	All five areas need addressing	Senator Frank Kloucek
2	Potential peaking power ability enhancement by wind power in specific locations?	All five areas need addressing	Senator Frank Kloucek
3	Maintenance of grid reliability with enhanced wind power development and increased interconnection enhancement	All five areas need addressing	Senator Frank Kloucek
4	Role of smaller wind generation and access of any such excess power production to grids/ need for greater access to metropoliton areas	All five areas need addressing	Senator Frank Kloucek
2	Size	What is considered a commercial wind farm and what is considered a small wind farm or producer?	Black Hills Electric Coop

Other: General Comment

Priority	Area	Comments and Suggestions Regarding Area of Priority	Source
2	South Dakota Straw man appears to be based on Oregon Small Generator Interconnection Rules	Would it make sense to see what others in this area are doing rather than rely on something out of Oregon? (We would prefer to see this document largely based on what is being done in MN.) Is it reasonable to consider a distributed generation size of up to 20 MW on the distribution system? 10 MW seems large enough.	Otter Tail Power Co.
3	Entire document	The Proposed rules are apparently all done in bold type with no indentation or special separations making the document very hard to read and find things efficiently. Why not subdivide, bold areas needed, etc. like the applications and agreements are in the back?	Tom Hurd
3	Since Rural Electric Co-ops not part of discussion, What is left to inter-connect to?	Could find a map of utility transmission and distribution lines useful.	Dave Staub