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November 12, 2002

The Honorable Magalie R. Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Re: *Standardization of Small Generation Interconnection
Agreements and Procedures*
Docket No. RM02-12-000**

Dear Ms. Salas:

Pursuant to the Federal Energy Regulatory Commission's ("FERC" or "Commission") *Standardization of Small Generation Interconnection Agreements and Procedures* Advance Notice of Proposed Rulemaking ("ANOPR")¹ issued on August 16, 2002 in the above captioned docket and the Commission's October 24, 2002 Order extending the date for filing, the Transmission/ Distribution Utilities Coalition, the Small Generators Coalition and the National Association of Regulatory Utility Commissioners (collectively the "Coalition")², hereby file the following documents:

1. Standard Small Resource Interconnection Procedures for Resources No Larger Than 2MW (Attachment A);
2. Standard Small Resource Interconnection Procedures for Resources Over 2MW (Attachment B);

These documents were prepared by representatives of the Coalition. The Coalition meetings were attended by representatives from those companies and/or industry sectors set forth in Appendix 1 hereto. Interim drafts of documents were

¹ *Standardization of Small Generation Interconnection Agreements and Procedures*, Advance Notice of Proposed Rulemaking, 67 Fed. Reg. 54,749 (August 26, 2002), FERC Stats & Regs. ¶ 35,544 (2002).

² A list of Coalition Members is included in Appendix 1.

posted on the Federal Energy Regulatory Commission Small Generator Intranet throughout the drafting process.

There was a reasonable degree of consensus among those participants drafting the provisions for which alternative positions are not presented. Where separate positions are presented in the documents, there was a reasonable degree of consensus among the respective group sponsoring the proposed provisions. At this time, however, no party has endorsed all parts of the interconnection procedures or interconnection agreements, or even all parts of all alternative provisions proposed by the sector to which that party belongs.

The Coalition has not completed its review of the interconnection agreements for small generators no larger than 2MW and over 2MW or the interconnection request application forms. The Coalition intends to continue to work to achieve consensus and file those documents by November 19, 2002.

The Coalition members are confident, though, that the documents will serve to assist the Commission in formulating its proposed small generator interconnection procedures and interconnection agreements to be included as part of its forthcoming Notice of Proposed Rulemaking addressing small generator interconnection.

We thank the Commission for its consideration of this filing.

Very truly yours,

/s/

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Counsel for the Transmission &
Distribution Utilities Coalition

Terry R. Black
Counsel for the Small Generators
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Sharla M. Barklind
Counsel for NARUC

Enclosures

APPENDIX 1

COALITION MEMBERS

American Electric Power Company
Baltimore Gas and Electric Company
Basin Electric Power Cooperative
Central Vermont Public Service Corporation
Consolidated Edison Power Company
FirstEnergy Corp.
National Rural Electric Cooperative Association
Northeast Utilities
OGE Energy Corp.
Orange and Rockland Utilities, Inc.
Pacific Gas and Electric Company
PacifiCorp
Pepco Holding Inc., on behalf of Potomac Electric Power Company and Connecticut
Progress Energy Services Company, on behalf of Carolina Power & Light Company and
Florida Power Corporation
PSEG Services Corporation
Southern California Edison Company
Southern Company
United Illuminating Company
Xcel Energy

American Council for an Energy-Efficient Economy
American Wind Energy Association
Bergey Windpower Co.
Citizens Action Coalition of Indiana
Cummins Power Generation
DTE Energy Technologies, Inc.
E-Cubed Co., LLC
Joint DG Supporters
National Association of Energy Services Companies
NiSource Inc.
North Carolina Solar Center
Pace Energy Project
Plug Power
Project for Sustainable FERC Energy Policy
Real Energy, Inc.
Solar Energy Industries Association
Solar Turbines Incorporated
The Stella Group, Ltd.
United States Combined Heat & Power Association

National Association of Regulatory Utility Commissioners

1 The parties' positions on the matters on which consensus has not been reached are shown
2 as follows:

3		
4	SGC POSITION	Small Generator
5	IP POSITION	Interconnection Provider ¹
6	<i>NARUC Position</i>	National Association of Regulatory Utility Commissioners
7		
8		
9		

10 **Attachment A**

11 **Small Resource² Interconnection Procedures for Resources no Larger than 2MW [NARUC:**
12 **20MW]**

13
14 1. Applicability and Definitions

15
16 a. The following super-expedited interconnection procedures are available to small
17 generation interconnection applicants proposing to interconnect distributed generation
18 (DG) no larger than 2MW [***NARUC Position: 20MW***] if

19
20 i) Applicant submits a Completed Application and states the intention to
21 participate in a FERC regulated market,³ sell power for resale in interstate
22 commerce, or interconnect to a FERC regulated transmission facility;⁴ and

23
24 ii) [**SGC POSITION: APPLICANT'S PROPOSED DG MEETS THE REQUIREMENTS**
25 **OF SECTIONS 2, 3 AND 4, OR OTHERWISE QUALIFIES UNDER THE PROCEDURES**
26 **SET FORTH IN SECTION 5.**]

27
28 ii) [***NARUC Position: Applicant's proposed DG meets the requirements of***
29 ***Sections 2 and 3. Applicant must also meet the requirements of Section 4, or***
30 ***otherwise qualify under the procedures set forth in Section 5c(iv).***]

31
32 ii) [**IP POSITION: APPLICANT'S PROPOSED DG MEETS THE**
33 **REQUIREMENTS OF SECTIONS 2 AND 3 AND COMPLIES WITH**
34 **EITHER SECTION 4 OR 5c(iv).**]

35

¹ Interconnection Provider, as used in small generator interconnection procedures and documents, refers to an ITP, RTO, ISO, Transmission Owner, Distribution utility or other entity responsible under these rules for maintaining the queue or queues for interconnecting resources to the grid, receiving applications for interconnection, and processing or overseeing the processing of small generation interconnection applications.

² The terms "Resource" and "generator" are used interchangeably in this document.

³ [***NARUC Position: Participation in the preparation of this document by representatives of the National Association of Regulatory Utility Commissioners ("NARUC") in no way indicates an agreement on the part of NARUC or its member State regulatory authorities to cede jurisdiction over interconnection to or retail transactions on the distribution company wires facilities over which States exercise ratemaking or other regulatory authority as provided by State statute, rules, regulations and regulatory orders.***]

⁴ Parties to this consensus document do not waive their right to argue against FERC jurisdiction over small generator interconnection requirements and procedures in subsequent filings at the Commission.

1 Proposed DG no larger than 2MW [*NARUC Position: 20MW*] that meets these
2 requirements will be entitled to interconnection approval as provided for in Section 5.

3
4 b. Proposed DG no larger than 2MW [*NARUC Position: 20MW*] that does not meet
5 these requirements will be evaluated under the expedited interconnection procedures as
6 set forth in Attachment B (Small Resource Interconnection Procedures for Resources
7 Larger than 2MW). [*NARUC Position: Strike "Larger than 2MW."*]
8

9 c. Terms used herein shall have the meanings specified in the glossary of terms
10 appended as Appendix A.

11
12 d. Neither these procedures nor the requirements included hereunder apply to small
13 generators or small generation equipment packages interconnected or approved for
14 interconnection with electric power transmission or distribution systems prior to 60
15 business days after the effective date of these procedures.

16
17 2. Codes and Standards

18
19 a. In order to qualify for super-expedited procedures, small generators no larger than 2MW
20 [*NARUC Position: 20MW*] must be certified pursuant to Section 3 [SGC: TO] [IP POSITION:
21 AND] comply with the following codes and standards as applicable:
22

23 IEEE P1547 Standard for Interconnecting Distributed Resources with Electric Power
24 Systems [adopted but not yet promulgated]
25

26 UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems
27

28 IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic
29 (PV) Systems
30

31 NFPA 70 (2002), National Electrical Code
32

33 IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC)
34 Tests for Protective Relays and Relay Systems
35

36 IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to
37 Radiated Electromagnetic Interference from Transceivers
38

39 IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network
40 Transformers
41

42 IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network
43 Protectors
44

45 IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in
46 Low Voltage (1000V and Less) AC Power Circuits
47

1 IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for
2 Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

3
4 ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

5
6 IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

7
8 NEMA MG 1-1998, Motors and Generators, Revision 3

9
10 IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic
11 Control in Electrical Power Systems

- 12
13 b. When any listed version of these codes and standards is superseded by a revision
14 approved by the standards-making organization, then the revision will be applied under Section 3

15
16 **[IP POSITION: OR A NEW CODE OR STANDARD APPLICABLE TO THE**
17 **INTERCONNECTED OPERATION OF A SMALL GENERATOR WITH THE**
18 **ELECTRICITY GRID IS APPROVED THE NEW STANDARD WILL APPLY**
19 **UNDER SECTION 3].**

20
21 **[SGC POSITION: IF A NEW CODE OR STANDARD APPLICABLE TO THE INTERCONNECTED**
22 **OPERATION OF A SMALL GENERATOR WITH THE ELECTRICITY GRID IS APPROVED, A**
23 **PARTY MAY PETITION THE COMMISSION TO ADD THE NEW CODE OR STANDARD TO THE**
24 **LIST OF CODES AND STANDARDS TO BE APPLIED UNDER SECTION 3.]**

25
26 ***[NARUC/SGC POSITION: THE GRANDFATHERING FOR THE CODES WILL ALLOW SIX***
27 ***MONTHS FOR MANUFACTURERS TO ADOPT THE NEW OR REVISED STANDARDS. NARUC***
28 ***Position: Unless an immediate threat to safety and reliability exists, that requires the***
29 ***retrofit of all similarly situated equipment.]***

30
31 3. Certification of Equipment Packages

32
33 a. Certification process

34
35 An equipment package shall be considered certified for interconnected operation if it has been
36 submitted by a manufacturer,⁵ tested and listed by a nationally recognized testing and
37 certification laboratory (NRTL) for continuous utility interactive operation in compliance with
38 the applicable codes and standards listed in Section 2, and included on the Commission’s
39 Registry.⁶ An “equipment package” shall include all interface components including switchgear,
40 inverters, or other interface devices and may include an integrated generator or electric source.
41 If the equipment package has been tested and listed as an integrated package which includes a
42 generator or other electric source, it shall not require further design review, testing or additional
43 equipment to meet the certification requirements of this interconnection procedure. If the
44 equipment package includes only the interface components (switchgear, inverters, or other

⁵ Manufacturer includes an entity that assembles an equipment package for submission for certification.

⁶ Commission Registry is a website hosted by the Commission for the posting of certified equipment.

1 interface devices), then an interconnection Applicant must show that the generator or other
2 electric source being utilized with the equipment package is compatible with the equipment
3 package and consistent with the testing and listing specified for the package. Provided the
4 generator or electric source combined with the equipment package is consistent with the testing
5 and listing performed by the nationally recognized testing and certification laboratory, no further
6 design review, testing or additional equipment shall be required to meet the certification
7 requirements of this interconnection procedure. A certified equipment package does not include
8 equipment provided by the utility.

9
10 b. Registry of certified equipment.

11
12 The Commission or its designee shall maintain and post a Registry in electronic form on the
13 Internet of equipment packages that have been tested and listed by an NRTL pursuant to
14 subsection “a.” A manufacturer may submit an equipment package tested and listed by an NRTL
15 for tentative inclusion on the Registry. The Commission will post on the Registry all equipment
16 packages that have been submitted for tentative listing, along with the NRTL’s testing reports
17 and results regarding the particular equipment package. For a period of six (6) weeks, any party
18 may provide comments to the NRTL regarding the technical merits of the testing or the
19 compliance of the equipment package with the applicable national codes and standards for
20 continuous utility interactive operation. After the expiration of the six-week comment period, a
21 manufacturer may submit an equipment package for final listing on the Registry provided the
22 NRTL has addressed and provided a response to all comments that it deems relevant. The
23 Commission or its designee shall remove from the Registry any equipment package that has been
24 delisted by an NRTL, when it is notified of the delisting by the NRTL.

25
26 c. Grandfathered State listed equipment

27
28 The Commission shall include on its Registry for interconnected operation any equipment
29 package approved in a state and listed by that state’s regulatory body for interconnected
30 operation in that state prior to the effective date of these small generation interconnection
31 procedures. The Commission shall, upon notification, remove from the website any
32 grandfathered equipment package subsequently delisted by a state regulatory body unless it has
33 been independently listed by an NRTL. Equipment undergoing testing at an NRTL at the time
34 these procedures become effective that is subsequently approved and listed by a state regulatory
35 body shall also be included on the website for interconnected operation in that state.

36
37 **4. Screening Criteria for Determining Grid Impacts**

38
39 a. Primary Screening Criteria

40
41 **[SGC POSITION: A PROPOSED INTERCONNECTION THAT MEETS THE FOLLOWING**
42 **APPLICABLE SCREENING CRITERIA SHALL BE APPROVED BY THE INTERCONNECTION**
43 **PROVIDER AS PROVIDED IN SECTION 5 IF THE INTERCONNECTION IS PROPOSED ON AN**
44 **EXISTING DISTRIBUTION CIRCUIT THAT WILL NOT REQUIRE ANY MATERIAL CHANGE TO**
45 **CIRCUIT EQUIPMENT (I.E., THE GENERATOR CAN UTILIZE EXISTING SYSTEM**
46 **FACILITIES).]**
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[IP/NARUC POSITION: THE PRIMARY SCREENING CRITERIA AS REQUIRED IN SECTION 5 INCLUDES THE FOLLOWING:]

1. For interconnection of a proposed generator to a radial distribution circuit, the aggregated generation, including the proposed generator, on the circuit will not exceed 5% of the total circuit annual peak load as most recently measured at the substation.

2. For interconnection of a proposed generator to the load side of spot network protectors, the proposed generator must utilize an inverter based equipment package and, together with the aggregated other inverter-based generation, will not exceed the smaller of 5% of a spot network’s maximum load or 50 kW **[IP POSITION: AND MUST COMPLY WITH ALL REQUIREMENTS OF IEEE P1547, SECTION 4 “INTERCONNECTION TECHNICAL SPECIFICATIONS AND REQUIREMENTS”]**.

3. **[SGC POSITION: FOR INTERCONNECTION OF GENERATORS TO THE LOAD-SIDE OF SECONDARY GRID NETWORKS, THE PROPOSED GENERATOR MUST BE AN INDUCTION GENERATOR THAT DOES NOT EXCEED 50% OF THE MINIMUM LOAD OF THE HOST FACILITY OR A GENERATOR WITH AN INVERTER-BASED EQUIPMENT PACKAGE WHICH DOES NOT EXCEED THE GREATER OF 50% OF THE MINIMUM LOAD OF THE HOST FACILITY OR 20 kW NOT EXCEEDING 30% OF PEAK LOAD.]**

- [IP/NARUC POSITION: THE PROPOSED GENERATOR CANNOT BE CONNECTED ON THE LOAD SIDE OF A SECONDARY NETWORK PROTECTOR, EXCEPT AS ALLOWED UNDER SECTION 4.a.2 (SPOT NETWORK) ABOVE.]***

4. The proposed generator, in aggregation with other generation on the distribution circuit, will not contribute more than 10% to the distribution circuit’s maximum fault current at the point on the high voltage (primary) level nearest the proposed point of common coupling.

5. The proposed generator, in aggregate with other generation on the distribution circuit, will not cause any distribution protective devices and equipment (including but not limited to substation breakers, fuse cutouts, and line reclosers), or customer equipment on the system to exceed **[SGC POSITION: 90 PERCENT] [IP POSITION: 85 PERCENT]** of the short circuit interrupting capability; nor is the interconnection proposed for a circuit that already exceeds 85 percent of the short circuit interrupting capability.

6. The proposed generator, in aggregate with other generation interconnected to the distribution low voltage side of the substation transformer feeding the distribution circuit where the generator proposes to interconnect, will not exceed

1 10 MW in an area where there are known or posted transient stability limitations
2 to generating units located in the general electrical vicinity (e.g., 3 or 4
3 transmission voltage level busses from the point of interconnection).
4

5 7. For interconnection of a proposed single-phase generator where the primary
6 distribution system is three-phase, four-wire, the generator will be connected line-
7 to-neutral. For interconnection of a proposed single-phase generator where the
8 primary distribution system is three-phase, three-wire, the generator will be
9 connected line-to-line.
10

11 8. For interconnection of a proposed three-phase generator to a three-phase, four-
12 wire distribution circuit or a distribution circuit having mixed three-wire and four-
13 wire sections, the aggregate generation capacity including the proposed generator
14 will not exceed 10% of line section **[SGC POSITION: CAPACITY] [IP/NARUC**
15 **POSITION: PEAK LOAD]**.
16

17 9. If the proposed generator is to be interconnected on single-phase shared
18 secondary, the aggregate generation capacity on the shared secondary, including
19 the proposed generator, will not exceed 20 kVA.
20

21 10. If the proposed generator is single-phase and is to be interconnected on a
22 center tap neutral of a 240 volt service, its addition will not create an imbalance
23 between the two sides of the 240 volt service of more than 20% of nameplate
24 rating of the service transformer.
25

26 11. The proposed generator's point of common coupling will not be on a
27 transmission line.
28

29 **12. [IP POSITION: NO UTILITY MODIFICATIONS OR NEW**
30 **INTERCONNECTION FACILITIES WILL BE REQUIRED,**
31 **INCLUDING METERING.]**
32
33

34 b. Secondary Screening Criteria
35

36 **[SGC POSITION: IF AN APPLICANT'S PROPOSED INTERCONNECTION MEETS ALL OF**
37 **THE FOLLOWING APPLICABLE CRITERIA, IT WILL BE QUALIFIED FOR SUPER-EXPEDITED**
38 **APPROVAL UNDER SECTION 5.]**
39

40 **[IP/NARUC POSITION: THE SECONDARY SCREENING CRITERIA AS**
41 **REQUIRED IN SECTION 5 INCLUDES THE FOLLOWING:]**
42
43

44 1. For interconnection of a proposed generator to a radial distribution circuit, the
45 new generator's capacity in aggregate with other generation on the circuit will not exceed
46 15% of total circuit peak load as most recently measured at the substation; nor will it
47 exceed 15% of a distribution circuit line section **[SGC POSITION: DESIGN CAPACITY]**

1 ***[IP/NARUC POSITION: ANNUAL PEAK LOAD].*** A line section is defined as that
2 section of the distribution system between two sectionalizing devices in the Area EPS
3 (Electric Power System, as defined in IEEE P1547).
4

5 2. **[SGC POSITION: FOR INTERCONNECTION OF A PROPOSED GENERATOR TO A**
6 **SPOT NETWORK CIRCUIT, THE NEW UNIT IN AGGREGATE WITH OTHER GENERATION**
7 **WILL NOT EXCEED 5% OF THE SPOT NETWORK’S MAXIMUM LOAD.]**
8

9 ***[IP/NARUC POSITION: FOR INTERCONNECTION OF A PROPOSED***
10 ***GENERATOR TO THE LOAD SIDE OF SPOT NETWORK PROTECTORS, THE***
11 ***PROPOSED GENERATOR MUST UTILIZE AN INVERTER BASED EQUIPMENT***
12 ***PACKAGE AND, TOGETHER WITH THE AGGREGATED OTHER INVERTER-***
13 ***BASED GENERATION, WILL NOT EXCEED THE SMALLER OF 5% OF A SPOT***
14 ***NETWORK’S MAXIMUM LOAD OR 50 KW AND MUST COMPLY WITH ALL***
15 ***REQUIREMENTS OF IEEE P1547’S “INTERCONNECTION TECHNICAL***
16 ***SPECIFICATIONS AND REQUIREMENTS”.]***
17

18 3. For the interconnection of a proposed generator to any network, the generator
19 **[SGC POSITION: WILL EITHER UTILIZE] *[IP/NARUC POSITION: MUST UTILIZE A***
20 ***PROTECTIVE SCHEME THAT WILL ENSURE THAT ITS CURRENT FLOW***
21 ***WILL NOT AFFECT THE NETWORK PROTECTIVE DEVICES INCLUDING]***
22 reverse power relays or a comparable function **[SGC POSITION: TO ENSURE THAT ITS**
23 **CURRENT FLOWS CANNOT AFFECT NETWORK PROTECTIVE DEVICES]. *[IP/NARUC***
24 ***POSITION: SYNCHRONOUS GENERATORS CANNOT BE INTERCONNECTED***
25 ***INTO A SECONDARY NETWORK.]***
26

27 4. **[SGC POSITION: NOTWITHSTANDING SUBSECTION B. 3, FOR**
28 **INTERCONNECTION OF A PROPOSED GENERATOR TO A SECONDARY GRID NETWORK**
29 **WHOSE TOTAL NET GENERATING CAPACITY, IN AGGREGATE WITH OTHER EXPORTING**
30 **GENERATORS INTERCONNECTED ON THE LOAD SIDE OF NETWORK PROTECTIVE**
31 **DEVICES, WILL NOT EXCEED THE LESSER OF 10% OF THE MINIMUM ANNUAL LOAD ON**
32 **THE NETWORK OR 500 kW.]**
33

34 ***[NARUC/IP POSITION: FOR INTERCONNECTION OF A PROPOSED***
35 ***GENERATOR THAT IS AN INDUCTION GENERATOR OR THAT UTILIZES***
36 ***INVERTER BASED PROTECTIVE FUNCTIONS, BOTH OF WHICH INCLUDE***
37 ***REVERSE POWER RELAY FUNCTIONS, THE GENERATOR’S TOTAL NET***
38 ***GENERATING CAPACITY, IN AGGREGATE WITH OTHER GENERATORS***
39 ***INTERCONNECTED ON THE LOAD SIDE OF NETWORK PROTECTIVE***
40 ***DEVICES, DOES NOT EXCEED THE LESSER OF 10% OF THE MINIMUM***
41 ***LOAD ON THE NETWORK OR 50 KW. A SMALL GENERATOR DOES NOT***
42 ***EXPORT TO ANY NETWORK.]***
43

44 5. The proposed generator, in aggregation with other generation on the distribution
45 circuit, will not contribute more than **[SGC POSITION: 15%] *[IP/NARUC POSITION:***
46 ***10%]*** to the distribution circuit’s maximum fault current at the point on the high voltage
47 (primary) level nearest the proposed point of common coupling.

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6. The proposed generator in aggregate with other generation on the distribution circuit will not cause any distribution equipment, protective devices (including but not limited to substation breakers, fuse cutouts, and line reclosers), or customer equipment on the system to exceed 90 percent of their short circuit interrupting capability; nor is the interconnection proposed for a circuit that already exceeds the 90 percent short circuit interrupting capability limit.

7. The proposed generator’s point of common coupling will not be on a transmission line.

5. Process for Super Expedited Approval of Generators 2MW *[NARUC: 20MW]* or Smaller

a. Pre-Application: To assist small generators in the interconnection process the Interconnection Provider will designate an employee or office from which basic information on the application can be obtained through an informal process. On request, the Interconnection Provider will provide Applicant with all relevant forms, documents, and technical requirements for filing a Complete Application for interconnection of generators 2 MW or smaller *[NARUC: 20MW]* to the Interconnection Provider’s electric power system and/or meet with Applicant. *[NARUC Position: This paragraph should be replaced by Section 1.01a from Attachment B.]*

b. Application: Applicant shall submit an application in the form of Appendix __ to the Interconnection Provider responsible for maintaining the interconnection queue and may, at the same time, submit an Interconnection Agreement executed by the Applicant. Applicants proposing interconnection of generation 2MW or smaller *[NARUC: 20MW]* will be notified by the Interconnection Provider within 3 business days of its receipt of an interconnection application. The Interconnection Provider will notify Applicant within 10 business days of its receipt of the application whether it is complete or incomplete. If the application is incomplete, the Interconnection Provider will at the same time provide Applicant a written list detailing all information that must be provided to complete the application. Applicant will have 10 business days to submit the listed information following receipt of the notice. If Applicant does not submit the listed information to Interconnection Provider within the 10 business days, the application shall be deemed withdrawn. An application will be complete upon Applicant’s submission of the information identified in Interconnection Provider’s written list.

c. Initial Review: Within 15 business days after Interconnection Provider notifies Applicant it received a Complete Application the Interconnection Provider shall perform an Initial Review using the primary and secondary screening criteria set forth in Section 4 and shall notify Applicant of the results, providing copies of the analysis and data underlying the Interconnection Provider’s determinations under the screens.

(i) If the Initial Review determines that the proposed interconnection passes the Primary Screens the interconnection application will be approved and the Interconnection Provider will provide Applicant an executable Interconnection Agreement within 5 business days after the determination.

1 (ii) If the Initial Review determines that the proposed interconnection passes the
2 Secondary Screens and fails one or more of the Primary Screens, but the
3 Interconnection Provider determines through the Initial Review that the small
4 generator may nevertheless be interconnected consistent with safety, reliability,
5 and power quality, the Interconnection Provider will provide Applicant an
6 executable Interconnection Agreement within 5 business days after the
7 determination.

8 (iii) If the Initial Review determines that the proposed interconnection fails one or
9 more of the Primary Screens and passes all of the Secondary Screens, but IP does
10 not or cannot determine from the Initial Review that the small generator may
11 nevertheless be interconnected consistent with safety, reliability, and power
12 quality standards, then upon receipt of fees specified in Section 5.d, within the
13 following 10 business days, the Interconnection Provider will conduct additional
14 review (i.e., a limited interconnection study [**IP POSITION: , NOT TO
15 EXCEED THREE HOURS OF ENGINEERING TIME**]) and consider minor
16 system modifications (**[IP POSITION: WITH COSTS NOT TO EXCEED
17 \$1,000 IN MATERIAL AND LABOR,**] e.g., changing meters, fuses, relay
18 settings) to allow the interconnection application to be approved. [**IP
19 POSITION: IF APPLICANT OPTS NOT TO APPROVE THIS
20 ADDITIONAL REVIEW, THEN INTERCONNECTION PROVIDER
21 WILL REVIEW THE APPLICATION PURSUANT TO THE EXPEDITED
22 PROCEDURES UNDER ATTACHMENT B.**]

23
24 During this review period, the Interconnection Provider may conduct [**SGC
25 POSITION: AT ITS OWN EXPENSE**] any additional studies or tests it deems
26 necessary to evaluate the proposed interconnection. Interconnection Provider will
27 provide Applicant an executable IA within 5 business days after the additional
28 review unless the Interconnection Provider determines that the interconnection
29 would create a material safety, reliability, or power quality problem, impose
30 significant cost on the Interconnection Provider, or require additional studies to
31 determine its circuit impacts.

32
33 If Interconnection Provider determines the Application cannot be approved
34 without additional studies, actions or significant cost to address safety, reliability,
35 or power quality problems, within the 5-day period after review the
36 Interconnection Provider shall notify Applicant, and provide copies of all data and
37 analyses underlying its conclusion

38
39 [**SGC POSITION: , INCLUDING ALL RELEVANT APPENDIX C DATA, AND PROPOSE
40 ADDITIONAL STEPS AND COSTS NECESSARY TO APPROVE THE
41 INTERCONNECTION. IF APPLICANT DOES NOT AGREE TO THE PROPOSED
42 ADDITIONAL STEPS OR COSTS, APPLICANT MUST NOTIFY THE
43 INTERCONNECTION PROVIDER WITHIN 5 BUSINESS DAYS, AND THE
44 INTERCONNECTION PROVIDER MUST INITIATE DISPUTE RESOLUTION WITHIN 5
45 BUSINESS DAYS OF THE NOTIFICATION.**]

1 ***]/P/NARUC POSITION: WITHIN 10 BUSINESS DAYS OF***
2 ***INTERCONNECTION PROVIDER'S DETERMINATION THE***
3 ***INTERCONNECTION PROVIDER SHALL OFFER TO CONVENE A***
4 ***MEETING WITH APPLICANT TO REVIEW THE SECONDARY SCREEN***
5 ***ANALYSIS AND RELATED RESULTS TO DETERMINE WHAT FURTHER***
6 ***STEPS OR APPLICANT FACILITY MODIFICATIONS MAY BE NEEDED***
7 ***TO PERMIT THE GENERATOR TO BE INTERCONNECTED SAFELY***
8 ***AND RELIABLY UNDER THE SUPER-EXPEDITED PROCEDURES. AT***
9 ***THE TIME OF NOTIFICATION OF THE INTERCONNECTION***
10 ***PROVIDER'S DETERMINATION, OR AT THE MEETING THE***
11 ***INTERCONNECTION PROVIDER SHALL:***

12
13 ***(A) OBTAIN APPLICANT'S AGREEMENT TO SUPPLEMENTAL***
14 ***REVIEW, MINOR INTERCONNECTION PROVIDER COMPONENT***
15 ***CHANGES, OR FACILITY MODIFICATIONS AND WHATEVER***
16 ***AGREEMENTS ARE REQUIRED TO IDENTIFY AND RECOVER COSTS***
17 ***ASSOCIATED WITH SUCH STEPS OR MODIFICATIONS; OR***

18
19 ***(B) OBTAIN APPLICANT'S AGREEMENT TO MOVE THE***
20 ***APPLICATION INTO THE EXPEDITED PROCEDURES UNDER***
21 ***ATTACHMENT B.***

22
23 ***IF PARTIES CANNOT AGREE TO (A) OR (B), APPLICANT MAY PURSUE***
24 ***RESOLUTION THROUGH THE DISPUTE RESOLUTION PROCEDURES***
25 ***DESCRIBED IN SECTION 6 BELOW. IF APPLICANT DOES NOT AGREE***
26 ***TO (A) OR (B) WITHIN 5 BUSINESS DAYS FOLLOWING NOTIFICATION***
27 ***OF THE INTERCONNECTION PROVIDER'S DETERMINATION, OR IF***
28 ***THE PARTIES HOLD A MEETING, WITHIN 5 BUSINESS DAYS***
29 ***FOLLOWING THE MEETING, AND THE APPLICANT DOES NOT***
30 ***PURSUE DISPUTE RESOLUTION WITHIN THE SAME TIME FRAMES,***
31 ***THE APPLICATION WILL BE DEEMED WITHDRAWN.]***

- 32
33 (iv) If the Initial Review determines that the proposed interconnection fails both
34 Screens, but the Interconnection Provider determines through the Initial Review
35 that the small generator may nevertheless be interconnected consistent with
36 safety, reliability, and power quality, the Interconnection Provider will provide
37 Applicant an executable Interconnection Agreement within 5 business days after
38 the determination.
39
40 (v) If the Initial Review determines that the proposed interconnection fails both
41 Section 4 screens, and Interconnection Provider does not or cannot determine
42 from the Initial Review that the small generator may nevertheless be
43 interconnected consistent with safety, reliability, and power quality, then the
44 Interconnection Provider will notify Applicant of the results, and provide
45 Applicant a full explanation of the reasons, including the results of any studies or
46 tests conducted to assess the safety and reliability of the proposed DG
47 interconnection [SGC POSITION: AND ALL RELEVANT APPENDIX C DATA]. In

1 response to the Interconnection Provider’s determination, the Interconnection
2 Provider may:

- 3
- 4 (a) Offer to perform Supplemental Review if the Interconnection Provider
5 concludes that supplemental review might determine that the small generator
6 could qualify for interconnection pursuant to super-expedited procedures, and
7 provide a good faith estimate of the costs of such review; or
8
- 9 (b) Obtain Applicant’s agreement to move the application into the expedited
10 procedures under Attachment B.

11

12 If Applicant agrees to Supplemental Review, Applicant shall agree in writing within
13 15 business days of the offer, and submit a deposit for the estimated costs. The
14 Applicant shall be responsible for the actual costs of the Supplemental Review.
15

16 If parties cannot agree to (a) or (b), the Applicant may pursue resolution through the
17 Dispute Resolution procedures described in Section 6 below. **[IP POSITION: IF
18 APPLICANT DOES NOT AGREE TO (A) OR (B) WITHIN 15 BUSINESS
19 DAYS FOLLOWING NOTIFICATION OF THE INTERCONNECTION
20 PROVIDER’S DETERMINATION, OR IF THE PARTIES HOLD A
21 MEETING, WITHIN 5 BUSINESS DAYS FOLLOWING THE MEETING,
22 AND THE APPLICANT DOES NOT PURSUE DISPUTE RESOLUTION
23 WITHIN THE SAME TIME FRAMES, THE APPLICATION WILL BE
24 DEEMED WITHDRAWN.]**

25

26

27 During a Supplemental Review the Interconnection Provider will, within 10
28 business days following receipt of the deposit **[SGC POSITION: OR
29 SUPPLEMENTAL REVIEW AGREEMENT,] [IP POSITION: , COMPLETE THE
30 SUPPLEMENTAL REVIEW AND NOTIFY APPLICANT OF THE
31 RESULTS. THE SUPPLEMENTAL REVIEW WILL]** determine if the facility
32 can be interconnected safely and reliably under super-expedited procedures.
33

- 34 a) If so, **[IP POSITION: AND THERE ARE NO MODIFICATIONS TO
35 EITHER PARTIES’ SYSTEM REQUIRED,]** the Interconnection
36 Provider shall forward an executable Interconnection Agreement to
37 Applicant within 5 business days.
38
- 39 b) If so, and Applicant Facility modifications are required to allow the
40 facility to be interconnected consistent with safety, reliability, and power
41 quality under super-expedited procedures, the Interconnection Provider
42 shall forward an executable Interconnection Agreement to Applicant
43 within 5 business days after confirmation that Applicant has agreed to
44 make the necessary changes at Applicant’s cost.
45
- 46 c) If so, and **[SGC POSITION: MINOR SYSTEM MODIFICATIONS] [IP
47 POSITION: ONLY MINOR INTERCONNECTION PROVIDER**

1 **SYSTEM COMPONENT CHANGES, WITH COSTS NOT TO**
2 **EXCEED \$1,000 IN MATERIAL AND LABOR]** are required to allow
3 the facility to be interconnected consistent with safety, reliability, and
4 power quality under super-expedited procedures, the Interconnection
5 Provider shall forward an executable Interconnection Agreement to
6 Applicant within 10 business days **[SGC POSITION: THAT REQUIRES**
7 **APPLICANT TO PAY THE COSTS OF SUCH MODIFICATIONS PRIOR TO**
8 **INTERCONNECTION.] [IP POSITION: AFTER CONFIRMATION**
9 **THAT APPLICANT HAS AGREED TO PAY FOR THE MINOR**
10 **INTERCONNECTION PROVIDER P SYSTEM COMPONENT**
11 **CHANGES.]**

12
13 d) If not, the Application will be processed as provided in Attachment B
14 *[NARUC Position: and the Interconnection Provider will notify the*
15 *appropriate independent transmission provider (ITP) of this review in*
16 *accordance with the ITP's interconnection protocols].*

17
18 d. **[SGC POSITION: NO APPLICATION FEES MAY BE IMPOSED ON APPLICANTS**
19 **PROPOSING INTERCONNECTION OF DG NO LARGER THAN 2 MW EXCEPT AS FOLLOWS:**
20 **AN APPLICATION FEE MAY NOT EXCEED THE LESSER OF \$1.00 PER KILOWATT OR**
21 **\$100.00; HOWEVER, NO APPLICATION CHARGES MAY BE IMPOSED FOR UNITS WITH A**
22 **GENERATING CAPACITY OF 20 kW OR LESS. IN THE CASE OF APPLICANTS THAT FAIL**
23 **THE PRIMARY SCREEN BUT PASS THE SECONDARY SCREEN, ADDITIONAL REVIEW**
24 **CHARGES WILL NOT EXCEED THE LESSER OF \$100.00 PLUS \$0.50 PER kW OR \$500.00.**
25 **ADDITIONAL COSTS MAY ONLY BE IMPOSED ON AN APPLICANT WHOSE PROPOSED**
26 **INTERCONNECTION QUALIFIES FOR SUPER-EXPEDITED INTERCONNECTION IF THE**
27 **APPLICANT AGREES TO PAY SUCH COSTS OR, AFTER A DISPUTE RESOLUTION IS**
28 **INITIATED, A CONCLUSION IS REACHED THAT THE INTERCONNECTION PROVIDER HAS**
29 **MET ITS BURDEN TO SHOW THAT THE PROPOSED INTERCONNECTION WOULD CREATE A**
30 **MATERIAL SAFETY OR RELIABILITY PROBLEM OR THAT THE INTERCONNECTION WOULD**
31 **IMPOSE SIGNIFICANT INTERCONNECTION COSTS ON THE INTERCONNECTION PROVIDER.**
32 **NO COSTS MAY BE IMPOSED ON APPLICANTS PROPOSING INTERCONNECTION OF DG NO**
33 **LARGER THAN 2 MW OTHER THAN AS SPECIFIED IN THIS SECTION.]**

34
35 **[IP POSITION: APPLICATION FEE ENTITLES APPLICANT TO THE**
36 **INITIAL SCREEN. APPLICATION FEE SHALL BE THE GREATER OF:**

- 37
38 **A. \$1.00/NAMEPLATE KVA RATING, OR**
39 **B. \$250 FOR SINGLE PHASE GENERATORS UP TO AND**
40 **INCLUDING 25 KVA OR**
41 **C. \$1000 FOR THREE PHASE GENERATORS AND**
42 **SINGLE PHASE GENERATORS GREATER THAN 25**
43 **KVA**

44
45 **APPLICANTS ARE RESPONSIBLE FOR ALL ACTUAL COSTS FOR**
46 **ANY FURTHER REVIEWS (ADDITIONAL AND SUPPLEMENTAL), SYSTEM**
47 **MODIFICATIONS, OR OTHER UTILITY WORK.]**

1
2 e. Interconnection Provider shall make reasonable efforts to meet all time frames
3 provided in this section unless the Interconnection Provider and Applicant agree to a
4 different schedule. If an Interconnection Provider cannot meet a deadline provided
5 herein, it shall notify the Applicant, explain the reason for the failure to meet the
6 deadline, and provide an estimated time by which it will complete the applicable
7 interconnection step. **[SGC POSITION: UNLESS A DELAY IS DUE TO CIRCUMSTANCES
8 BEYOND THE INTERCONNECTION PROVIDER’S CONTROL OR FORCE MAJEURE,
9 INTERCONNECTION PROVIDER SHALL FILE A WRITTEN REPORT OF THE DELAY WITH
10 THE COMMISSION AND FILE A SUPPLEMENTAL REPORT WITH THE COMMISSION EVERY
11 WEEK UNTIL THE REQUIRED ACTION IS TAKEN. IN ADDITION,] [SCG/NARUC
12 POSITION: INTERCONNECTION PROVIDER SHALL MAINTAIN RECORDS OF ALL SMALL
13 GENERATION APPLICATIONS RECEIVED, THE TIMES REQUIRED TO COMPLETE APPLICATION
14 APPROVALS AND DISAPPROVALS, AND JUSTIFICATION FOR THE ACTIONS TAKEN ON THE
15 APPLICATIONS, AND THEY SHALL FILE QUARTERLY REPORTS OF THIS INFORMATION WITH
16 THE COMMISSION.]**

17
18 f. **[IP POSITION: IF NEW REVIEW OF THE INTERCONNECTION
19 UNDER THE PRIMARY AND SECONDARY SCREENS OR STUDIES IS
20 REQUIRED DUE TO THE WITHDRAWAL OR A MODIFICATION OF A
21 PRIOR APPLICATION, INTERCONNECTION PROVIDER SHALL NOTIFY
22 SMALL GENERATOR IN WRITING. SUCH NEW REVIEW SHALL NOT
23 TAKE LONGER THAN 15 BUSINESS DAYS FROM THE DATE OF THE
24 NOTICE. ANY COST OF THE NEW REVIEW SHALL BE BORNE BY THE
25 SMALL GENERATOR BEING RE-REVIEWED.]**

26
27 g. **[IP POSITION: ANY MODIFICATION TO AN APPLICATION OR TO A
28 SMALL GENERATOR THAT REQUIRES A NEW INITIAL REVIEW SHALL
29 BE DEEMED A WITHDRAWAL AND SHALL REQUIRE SUBMISSION OF A
30 NEW APPLICATION.]**

31
32
33 6. Dispute Resolution

34
35 a. If a dispute arises during the Application of these super-expedited procedures,
36 either the Applicant or Interconnection Provider may seek immediate resolution through
37 the Commission’s alternative dispute resolution process, by providing written notice to
38 the Commission and the other party stating the issues in dispute. Pursuit of dispute
39 resolution will not affect an Applicant’s position in the queue. At the outset, either party
40 may require that such dispute resolution will be binding. Dispute resolution will be
41 conducted in an informal, expeditious manner in order to reach resolution with minimal
42 costs and delay. When appropriate, the dispute resolution may be conducted by phone or
43 through Internet communications. A dispute resolution will be completed within two
44 weeks after a party notifies the Commission of the dispute unless the Commission or the
45 Commission’s designee extends the time for good cause.
46

1 b. In addition to its own or other dispute resolution resources, the Commission will
2 arrange to make available to the parties at no or minimal cost the services of one or more
3 technical masters to resolve technical disputes arising under these procedures. The
4 technical masters designated by the Commission will be engineers with expertise in
5 electric power transmission and distribution interconnection requirements who are
6 qualified and independent.

7
8 **c. [SGC POSITION: IN A DISPUTE INITIATED UNDER SECTION 5 C (III) OR 5 C (V),**
9 **THE INTERCONNECTION PROVIDER HAS THE BURDEN TO DEMONSTRATE THE**
10 **CORRECTNESS OF ITS DETERMINATION. IN THE CASE OF A TECHNICAL DISPUTE UNDER**
11 **SECTION 5 C (III) OR 5 C (V), THE INTERCONNECTION PROVIDER MUST DEMONSTRATE**
12 **TO A TECHNICAL MASTER THE CORRECTNESS OF ITS DETERMINATION THAT THE**
13 **PROPOSED INTERCONNECTION SHOULD NOT BE APPROVED UNDER SUPER-EXPEDITED**
14 **PROCEDURES BECAUSE IT IS NOT CONSISTENT WITH SAFETY, RELIABILITY, OR POWER**
15 **QUALITY ON THE SYSTEM.]**

16
17 **[IP POSITION: IN THE CASE OF A TECHNICAL DISPUTE UNDER**
18 **SECTION 5 C III, THE INTERCONNECTION PROVIDER WILL**
19 **DEMONSTRATE TO A TECHNICAL MASTER THE CORRECTNESS OF ITS**
20 **DETERMINATION THAT THE PROPOSED INTERCONNECTION SHOULD**
21 **NOT BE APPROVED IN A SUPER-EXPEDITED MANNER, I.E., THAT**
22 **ADDITIONAL REQUIREMENTS OR COSTS SHALL BE IMPOSED ON THE**
23 **APPLICANT IN ORDER TO ALLOW THE APPLICANT TO INTERCONNECT**
24 **SAFELY AND RELIABLY.]**

25
26 7. Interconnection Metering and Data Acquisition

27
28 **[SGC POSITION: METERING SHALL BE INSTALLED AS NEEDED TO PARTICIPATE IN**
29 **VARIOUS WHOLESALE MARKETS. METERING MAY BE INSTALLED SUBSEQUENT TO**
30 **INTERCONNECTION APPROVAL IF APPLICANT DECIDES TO PARTICIPATE AS PART OF AN**
31 **AGGREGATED BLOCK OF SMALL GENERATORS IN A MARKET THAT PERMITS**
32 **AGGREGATION OR TO PARTICIPATE IN A MARKET THAT IS PLANNED BUT NOT YET**
33 **AVAILABLE.]**

34
35 **[IP POSITION: THIS PROVISION IS COVERED IN THE INTERCONNECTION**
36 **AGREEMENT AND NOT NECESSARY HERE.]**

37
38 ***[NARUC Position: Nothing in this section shall preempt existing customer metering***
39 ***programs adopted pursuant to state law or approved under state regulation.]***

40
41 8. Commissioning

42
43 Commissioning tests of an Applicant's installed equipment will be performed pursuant to
44 the ***[IP/NARUC POSITION: APPLICABLE CODES AND STANDARDS]*** ***[SGC***
45 ***POSITION: APPLICABLE PROVISIONS OF IEEE 1547]***. Except as otherwise
46 mutually agreed to by the Parties, the Interconnection Provider must be given 5 business
47 days written notice of the tests and may be present to witness the commissioning tests.

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9. Confidentiality

Each Party shall hold in confidence and shall not disclose Confidential Information to any person (except employees, officers, representatives and agents that agree to be bound by this provision), except as required by law. Confidential Information shall mean any confidential and/or proprietary information provided by one Party (“Disclosing Party”) to the other Party (“Receiving Party”) that is clearly marked or otherwise designated “Confidential.” For purposes of procedures all design, operating specifications and metering data provided by Generator shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such. Confidential Information shall not include information that the Receiving Party can demonstrate: (a) is generally available to the public other than as a result of a disclosure by the Receiving Party; (b) was in the lawful possession of the Receiving Party on a non-confidential basis before receiving it from the Disclosing Party; (c) was supplied to the Receiving Party without restriction by a third party, who, to the knowledge of the Receiving Party, was under no obligation to the Disclosing Party to keep such information confidential; (d) was independently developed by the Receiving Party without reference to Confidential Information of the Disclosing Party; or (e) was disclosed with the prior written approval of the Disclosing Party. If a Party believes it is required by law to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of these procedures.

1 [SGC PROPOSAL: APPENDIX C IN ITS ENTIRETY IS A SGC PROPOSAL
2
3

4 **APPENDIX C – ELECTRIC UTILITY INFORMATION REQUIRED BY A**
5 **SMALL GENERATION INTERCONNECTION APPLICANT**
6

7 **A. LIST OF SITE SPECIFIC SYSTEM PROTECTION REQUIREMENTS.**
8

9 **B. SOURCE IMPEDANCE AND AVAILABLE SYSTEM FAULT CURRENT**
10

11 **1. MINIMUM AND MAXIMUM 60 Hz POSITIVE, NEGATIVE AND ZERO SEQUENCE**
12 **IMPEDANCE AT THE POINT OF INTERCONNECTION (SEE FIGURE 1.) WITHOUT**
13 **GENERATION.**
14

15 **2. PRESENT AND FUTURE SYSTEM FAULT CURRENTS**
16

17 **3. SETTINGS AND CHARACTERISTICS FOR PROTECTION DEVICES**
18

19 **4. CLEARING AND RECLOSING TIMES FOR SINGLE PHASE AND MULTIPLE PHASES**
20 **FAULTS FOR VARIOUS PROTECTION AND INTERRUPTING DEVICES.**
21

22 **C. ONE LINE DIAGRAMS FOR TYPICAL DR INSTALLATION.**
23

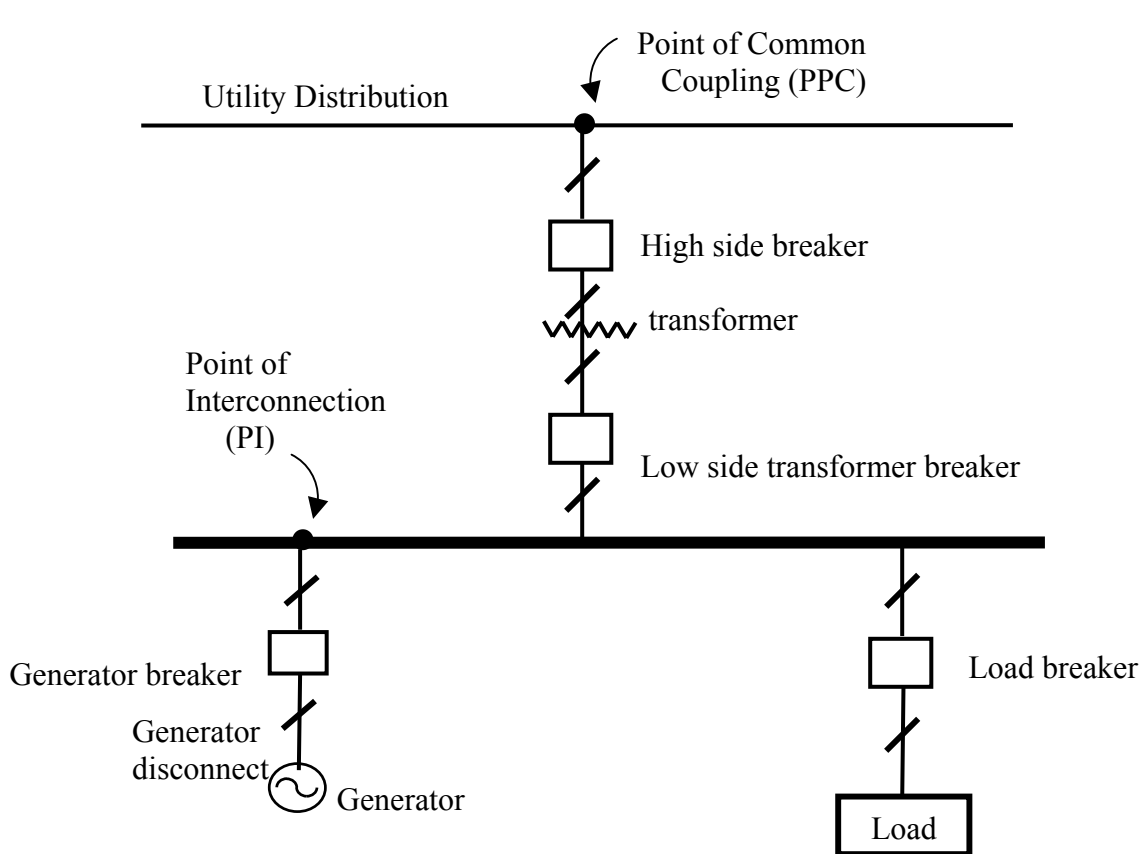


Figure 1.

D. MAXIMUM AND MINIMUM OPERATING VOLTAGES FOR NORMAL AND EMERGENCY.

E. EXISTING HARMONICS PROFILE AT POINT OF COMMON COUPLING (IF HARMONICS ARE IDENTIFIED AS A CONCERN).

F. AVAILABILITY OF SYSTEM CAPACITY.

G. RELIABILITY, PLANNING AND OPERATING CRITERIA.

H. TECHNICAL REQUIREMENTS FOR INTERCONNECTING (PROTECTION DEVICES, TRANSFORMER CONNECTIONS, ETC).

I. SAFETY AND GROUNDING REQUIREMENTS FOR INTERCONNECTING.

J. COST OF STUDIES AND COST OF CHANGES NEEDED TO THE SYSTEM TO INTERCONNECT, AND SCHEDULE.

K. PLANNED FUTURE SYSTEM MODIFICATIONS (IF AVAILABLE).]

Attachment B
Small Resource Interconnection Procedures For Resources Over 2 MW

Requests for the interconnection of new generation resources over 2 MW *[NARUC Position: strike “over 2 MW”]* up to and including, in the aggregate at the Point of Interconnection, 20 **[IP POSITION: 10]** MegaWatts (MW); requests for up to **[SGC: 20 MW] [IP: 10 MW]** in increased capability of an existing generation resource; and requests for interconnection of new generation resources up to and including 2 MW *[NARUC Position: strike “up to and including 2 MW”]* that do not meet the criteria as set forth in Sections 2-4 of Attachment A Small Resource Interconnection Procedures (“super-expedited”) shall be processed, pursuant to the following expedited procedures.

Neither these procedures nor the requirements included hereunder apply to small generators or small generation equipment packages interconnected or approved for interconnection with electric power transmission or distribution systems prior to 60 business days after the effective date of these procedures.

Terms used herein shall have the meanings specified in the glossary of terms appended as Appendix ____.

Section 1.01 Application and Information Availability

a. To assist Small Resources in the interconnection process, the Interconnection Provider will designate an employee or office from which information on the application process and on the affected Transmission and/or Distribution System can be obtained through informal requests from a prospective Small Resource presenting a proposed project at a specific site. Such information should include relevant and appropriate **[IP: PUBLICLY AVAILABLE]** system studies, interconnection studies, and other materials useful to an understanding of the feasibility of an interconnection at a particular point on its system, except to the extent providing such materials would violate confidentiality provisions of prior agreements, or be contrary to law. Interconnection Provider shall comply with reasonable requests for access to or copies of such studies. *[NARUC Position: This paragraph should be substituted for Section 5.a., “Pre-application” in Attachment A Procedures.]*

b. The Applicant desiring the interconnection of a new resource must submit an interconnection application in the form of Appendix [] **[SGC POSITION: INDICATING WHETHER THE RESOURCE WILL SEEK SERVICE AS A NETWORK RESOURCE, AS AN ENERGY-ONLY RESOURCE, OR AS A NON-EXPORTING RESOURCE PARTICIPATING IN A WHOLESALE MARKET] [IP POSITION: WITH THE APPROPRIATE PROCESSING FEE] [NARUC Position: with a cost-based processing fee] [SGC POSITION: WITH AN APPLICATION FEE OF \$500].** Any Applicant who has previously paid an application fee under Attachment A will not be required to pay a separate fee. Applications will be date- and time-stamped upon receipt. *[NARUC/SGC POSITION: THE ORIGINAL DATE-AND TIME-STAMP APPLIED TO THE APPLICATION AT THE TIME OF ITS ORIGINAL SUBMISSION FOR INTERCONNECTION SHALL BE ACCEPTED AS THE QUALIFYING DATE-AND TIME-STAMP FOR THE PURPOSES OF ATTACHMENT B.]*

1 c. Applicants will be notified by the Interconnection Provider within three (3) business days
2 of its receipt of an Application. Interconnection Provider will notify the Applicant within ten
3 (10) business days of receipt of the Application whether the Application is complete or
4 incomplete. If complete, the IP shall notify, as appropriate, third parties, which may include
5 independent transmission provider (“ITP”), in accordance with ITP’s interconnection protocols
6 provided in the ITP Open Access Transmission Tariff (“OATT”) on file at the Federal Energy
7 Regulatory Commission (“Commission”). If the Application is incomplete, the Interconnection
8 Provider will at the same time provide Applicant a written list detailing all information that must
9 be provided to complete the Application. Applicant will have ten (10) business days to submit
10 the listed information following receipt of the notice. If Applicant does not timely submit the
11 listed information, the Application shall be deemed withdrawn.

12
13 **Section 1.02 Queuing Priority**

14
15 The Interconnection Provider shall assign a queue position based upon the date and time of
16 receipt of an Application, provided that any deficiencies in the Application are cured within the
17 specified time. Any **[SGC POSITION: MATERIAL]** modification to machine data, equipment
18 configuration, or the site of the Small Resource shall be deemed a withdrawal and shall require
19 submission of a new Application. The queue position of each Interconnection Request will be
20 used to determine the order of performing any necessary Interconnection Studies ***[IP/NARUC***
21 ***POSITION: AND DETERMINATION OF THE COST RESPONSIBILITY FOR THE***
22 ***FACILITIES NECESSARY TO ACCOMMODATE THE INTERCONNECTION***
23 ***REQUEST]. [SGC POSITION: HOWEVER, A PROJECT THAT CAN AVOID A FEASIBILITY,***
24 ***IMPACT, OR FACILITIES STUDY MAY MOVE AHEAD IN PRIORITY FOR RECEIPT OF AN***
25 ***INTERCONNECTION AGREEMENT RELATIVE TO A PROJECT THAT REQUIRES SUCH STUDIES.***
26 ***EACH NECESSARY STUDY WILL BE UNDERTAKEN BASED ON SYSTEM CONDITIONS AS THEY EXIST***
27 ***AT THE TIME OF THE STUDY TAKING INTO ACCOUNT KNOWN OR ANTICIPATED CHANGES TO THE***
28 ***SYSTEM THAT WILL OCCUR BETWEEN THE TIME OF THE STUDY AND THE ESTIMATED DATE OF***
29 ***INTERCONNECTION.]***

30
31 **Section 1.03 Site Control**

32
33 Documentation of site control must be submitted for small resource additions with the Complete
34 Application. Site control may be demonstrated through (i) ownership of, a leasehold interest in,
35 or a right to develop a site for the purpose of constructing a Facility; (ii) an option to purchase or
36 acquire a leasehold site for such purpose; or (iii) an exclusivity or other business relationship
37 between Generator and the entity having the right to sell, lease or grant Generator the right to
38 possess or occupy a site for such purpose.

39
40 **Section 1.04 Scoping Meeting**

41
42 a. At the request of either Party, a Scoping Meeting will be held within ten (10) business
43 days, or as otherwise mutually agreed to by the Parties, after the Interconnection Provider has
44 notified the Applicant that a Complete Application has been received. Interconnection Provider
45 and Applicant will bring to the meeting personnel, including system engineers, and other
46 resources as may be reasonably required to accomplish the purpose of the meeting.

1 b. The purpose of the Scoping Meeting shall be to discuss the Applicant’s interconnection
2 request, and review existing studies relevant to the Applicant’s interconnection request **[SGC**
3 **POSITION: AND REVIEW THE APPLICATION INFORMALLY AGAINST THE SCREENS LISTED IN**
4 **APPENDIX 1 AND APPENDIX 2]**. The Parties shall further discuss whether the Interconnection
5 Provider should perform a Feasibility Study or proceed directly to a System Impact Study, a
6 Facilities Study, or an Interconnection Agreement. If the parties agree that a Feasibility Study
7 should be performed, the Interconnection Provider will provide Applicant, as soon as possible,
8 but not later than **[IP POSITION: 5 BUSINESS DAYS] [SGC POSITION: 3 BUSINESS DAYS]**
9 after the scoping meeting, a Feasibility Study Agreement including an outline of the scope of the
10 study and a good faith estimate of the cost to perform the study.

11
12 c. The Scoping Meeting may be omitted by mutual agreement, and the reasonable cost of a
13 Scoping Meeting will be credited from the Application Fee toward the cost of the Feasibility
14 Study. In order to remain in the interconnection queue, the Interconnection Customer who has
15 requested a Feasibility Study must return the executed Feasibility Study Agreement within 15
16 business days. If the Parties agree not to perform a Feasibility Study, the procedures of the
17 appropriate sections below will apply.

18
19 d. Where applicable, the Parties will discuss in the Scoping Meeting those applications
20 submitted but not approved under Attachment A.

21
22 **Section 1.05 Feasibility Study**

23
24 a. A Feasibility Study will include the following analyses for the purpose of identifying any
25 potential Violations that would result from the interconnection of the small resource as proposed:

- 26
27 i) initial identification of any circuit breaker short circuit capability limits exceeded
28 as a result of the interconnection;
29
30 ii) initial identification of any thermal overload or voltage limit violations resulting
31 from the interconnection **[SGC POSITION: BASED ON A LIMITED CONTINGENCY SET**
32 **(ONE BUS CONTINGENCY [N-1] MODELED WITH FIRM GENERATION OPERATING) EXCEPT**
33 **AS REQUIRED BY THE APPLICABLE REGIONAL RELIABILITY ORGANIZATION]**;
34
35 iii) initial review of grounding requirements and system protection; and
36
37 iv) description and non-binding estimated cost of facilities required to interconnect
38 the facility to the Transmission System and to address the identified short circuit and
39 power flow issues.

40
41 b. **[SGC POSITION: A FEASIBILITY STUDY WILL MODEL THE IMPACT OF THE SMALL**
42 **RESOURCE IN ACCORDANCE WITH THE TYPE OF SERVICE INDICATED BY THE APPLICANT,**
43 **INCLUDING NETWORK SERVICE, ENERGY SERVICE, AND NON-EXPORTING SERVICE**
44 **PARTICIPATING IN A WHOLESALE MARKET. ANY LATER DECISION BY THE SMALL RESOURCE**
45 **APPLICANT TO CHANGE THE DESIGNATED TYPE OF SERVICE MAY REQUIRE REEXAMINATION OF**
46 **FEASIBILITY AND IMPACTS.]**

1 c. A Feasibility Study will include the feasibility of any interconnection at a proposed
2 project site where there could be multiple potential Point of Interconnection, as requested by the
3 Applicant and at Applicant's cost.
4

5
6 d. **[SGC POSITION: THE RESULTS OF SUCH ANALYSES WILL BE REVIEWED AGAINST THE
7 SCREENS LISTED IN APPENDIX 1 TO DETERMINE FEASIBILITY OF THE INTERCONNECTION ON
8 THE TRANSMISSION SYSTEM.**

9
10 **i) IF THE SMALL RESOURCE FAILS TO SATISFY THE SCREENS IN APPENDIX 1, A
11 TRANSMISSION IMPACT STUDY IS REQUIRED.**

12
13 **ii) IF THE SMALL RESOURCE SATISFIES THE SCREENS IN APPENDIX 1, AND IS NOT
14 INTERCONNECTED TO THE DISTRIBUTION SYSTEM, THEN NO IMPACT STUDY WILL BE
15 REQUIRED AND, BARRING EXCEPTIONAL CIRCUMSTANCES, THE PROJECT WILL
16 PROCEED DIRECTLY TO THE FACILITIES STUDY IF REQUIRED.**

17
18 **iii) IF THE SMALL RESOURCE SATISFIES THE SCREENS IN APPENDIX 1, BUT IS
19 INTERCONNECTED TO A DISTRIBUTION SYSTEM, THE RESULTS OF SUCH ANALYSES WILL
20 BE REVIEWED AGAINST THE SCREENS LISTED IN APPENDIX 2 TO DETERMINE THE
21 FEASIBILITY OF THE INTERCONNECTION ON THE DISTRIBUTION SYSTEM. IF THE
22 PROJECT SATISFIES THE SCREENS LISTED IN APPENDIX 2, THEN, BARRING EXCEPTIONAL
23 CIRCUMSTANCES, THE PROJECT WILL PROCEED DIRECTLY TO A FACILITIES STUDY OR
24 AN INTERCONNECTION AGREEMENT, AS APPLICABLE.**

25
26 **iv) IF THE PROJECT FAILS ONE OR MORE SCREENS IN APPENDIX 2, THE PROJECT WILL
27 BE SUBJECTED TO A DISTRIBUTION IMPACT STUDY.**

28
29 **v) IF AN INTERCONNECTION PROVIDER DECLINES TO PROCEED TO A FACILITIES
30 STUDY AND/OR INTERCONNECTION AGREEMENT FOR A SMALL RESOURCE THAT
31 SATISFIES THE RELEVANT SCREENS, THE DISPUTE MAY BE SUBMITTED FOR DISPUTE
32 RESOLUTION PURSUANT TO SECTION 1.11(C) OF THESE PROCEDURES.]**
33

34 *[NARUC Position: If the project, regardless of size, satisfies the screens listed in Attachment
35 A, and is interconnected to a distribution system, then the project will proceed directly to an
36 Interconnection Agreement.]*
37

38 e. A deposit of the equivalent of fifty percent of estimated Feasibility Study costs up to but
39 not more than \$1,000 may **[IP POSITION: SHALL]** be required from the Applicant. Any
40 study costs *[NARUC Position: shall be based on actual costs and]* will be invoiced to the
41 Applicant after the study is completed and delivered and will include **[IP POSITION: A
42 SUMMARY OF PROFESSIONAL TIME] [SGC PROPOSAL: THE COSTS OF ACTUAL
43 HOURS EXPENDED, BUT NOT MORE THAN EIGHT HOURS, AT SPECIFIED REASONABLE RATES,
44 PLUS MATERIALS REQUIRED]**. Interconnection Customers must pay any Study Costs that exceed
45 the deposit within 20 business days of receipt of the invoice or resolution of any dispute. If the
46 deposit exceeds the invoiced costs, IP will return such excess within 20 business days of the
47 invoice without interest. In performing the Feasibility Study, the Interconnection Provider shall

1 rely, to the extent reasonably practicable, on existing studies. Applicant will not be charged for
2 such existing studies; however, the Applicant will be responsible for charges associated with any
3 new study or modifications to existing studies that are reasonably necessary to perform the
4 Feasibility Study.

5
6 f. Once the Feasibility Study is completed, a Feasibility Study report will be prepared and
7 transmitted to the Interconnection Customer. Barring unusual circumstances, a Feasibility Study
8 must be completed and the Feasibility Study Report transmitted within **[SGC POSITION:
9 FIFTEEN] [IP POSITION: THIRTY]** business days of the Applicant’s agreement to conduct a
10 Feasibility Study.

11
12 g. If the Feasibility Study shows no potential for transmission or distribution Violations, the
13 Interconnection Provider will send the Applicant a Facilities Study Agreement, including an
14 outline of the scope of the study and a good faith estimate of the cost to perform the study,
15 pursuant to Section 1.07 below. If no additional facilities are required, the Interconnection
16 Provider will send the Applicant an Interconnection Agreement, pursuant to Section 1.10 below.

17
18 **Section 1.06 Impact Study Procedures and Criteria**

19
20 a. The purpose of an Impact Study is to identify and detail the system impacts that would
21 result if the proposed unit were interconnected without project modifications or system
22 modifications, focusing on the Violations identified in the feasibility study, or to study potential
23 impacts, including but not limited to those identified in the Scoping Meeting. The Impact Study
24 shall evaluate the impact of the proposed interconnection on the reliability of the transmission
25 and/or distribution system. The Impact Study will consider all generating facilities (and with
26 respect to (iii) below, any identified Network Upgrades associated with such higher queued
27 interconnection) that, on the date the Impact Study is commenced:

- 28
29 i) are directly interconnected to the transmission and/or distribution System;
30
31 ii) are interconnected to Affected Systems and may have an impact on the
32 Interconnection Request; and
33
34 iii) have a pending higher queued Interconnection Request to interconnect to the
35 transmission and/or distribution system.

36
37 b. The Impact Study will consist of a short circuit analysis, a stability analysis, a power flow
38 analysis, voltage drop and flicker studies, protection and set point coordination studies, and
39 grounding reviews **[SGC POSITION: , AS NECESSARY]**. The Impact Study will state the
40 assumptions upon which it is based; state the results of the analyses; and provide the requirement
41 or potential impediments to providing the requested interconnection service, including a
42 preliminary indication of the cost and length of time that would be necessary to correct any
43 problems identified in those analyses and implement the interconnection. The Impact Study will
44 provide a list of facilities that are required as a result of the Interconnection Request and a non-
45 binding good faith estimate of cost responsibility and a non-binding good faith estimated time to
46 construct. **[SGC POSITION: IMPACT STUDY WILL TAKE INTO CONSIDERATION ALL ELEMENTS
47 OF ANY ADOPTED REGIONAL RELIABILITY PLAN, TO ENSURE THAT CIRCUIT BREAKER**

1 CAPABILITIES ARE NOT EXCEEDED. FOR NETWORK RESOURCE ADDITIONS, LOAD
 2 DELIVERABILITY WILL BE EVALUATED, BUT ONLY FOR SUB-AREAS WHERE MARGINS ARE
 3 KNOWN TO BE LIMITED. WHERE SUB-AREA MARGINS ARE KNOWN TO BE LIMITED, THE IMPACT
 4 OF THE NEW NETWORK RESOURCE WILL BE EVALUATED BASED ON ITS IMPACT ON THE
 5 CONTINGENCIES LIMITING EMERGENCY IMPORTS TO THE SUB-AREA.]

6
 7 c. Transmission Impact Study. In instances where a Feasibility Study [*NARUC Position:*
 8 *or a Distribution Impact Study*] shows potential for Transmission Violations, within
 9 [*SGC/NARUC POSITION: FIVE*] [*IP POSITION: TEN*] business days following transmittal of
 10 the Feasibility Study Report, the Interconnection Provider [*NARUC Position: Interconnection*
 11 *Provider will notify the appropriate Independent Transmission Provider in accordance with*
 12 *the ITP's interconnection protocols provided in the ITP Open Access Transmission Tariff on*
 13 *file at the Commission and*] will send Applicant a Transmission Impact Study Agreement,
 14 including an outline of the scope of the study and a good faith estimate of the cost to perform the
 15 study, if such a study is required. If a Transmission System Impact Study is not required, but
 16 distribution system Violations are shown by the Feasibility Study to be possible, the
 17 Interconnection Provider will send Applicant a Distribution Impact Study Agreement. If the
 18 Feasibility Study shows no potential for transmission or distribution Violations, the
 19 Interconnection Provider will send the Applicant either a Facilities Study Agreement, including
 20 an outline of the scope of the study and a good faith estimate of the cost to perform the study, or
 21 an Interconnection Agreement, as applicable.

22
 23 In order to remain in the interconnection queue, the Interconnection Customer must return an
 24 executed Transmission Impact Study Agreement, if applicable, within 30 business days. A
 25 deposit of the equivalent of [*SGC POSITION: UP TO TWENTY HOURS OF PROFESSIONAL TIME*
 26 *MAY BE REQUIRED FROM THE APPLICANT*] [*IP/NARUC POSITION: HALF THE*
 27 *ESTIMATED COST OF THE IMPACT STUDY*]. Interconnection Customers must pay any
 28 Study Costs that exceed the deposit within 20 business days of receipt of the invoice or
 29 resolution of any dispute. If the deposit exceeds the invoiced costs, TP will return such excess
 30 within 20 business days of the invoice without interest. Any Impact Study required should be
 31 completed within [*SGC POSITION: 15 BUSINESS DAYS*] [*IP/NARUC POSITION: 45*
 32 *BUSINESS DAYS*] of the receipt of the Transmission Impact Study Agreement. Any increase
 33 of Transmission Impact Study costs above the good-faith estimate provided may be subject to
 34 dispute resolution, as provided for in Section 1.11, Dispute Resolution.

35
 36 d. Distribution Impact Study. If no Transmission Impact Study is required, but potential
 37 distribution system Violations are identified in the Scoping Meeting, shown in the Feasibility
 38 Study, or the small resource failed to meet the requirements of Attachment A, a Distribution
 39 Impact Study must be performed. The Interconnection Provider will send Applicant a
 40 Distribution Impact Study Agreement within [*SGC POSITION: 5*] [*IP/NARUC POSITION: 15*]
 41 business days of transmittal of a Feasibility Study Report, including an outline of the scope of
 42 the study and a good faith estimate of the cost to perform the study, or following the Scoping
 43 Meeting if no Feasibility Study is to be performed. The Distribution Impact Study will
 44 incorporate a distribution load flow study, an analysis of equipment interrupting ratings,
 45 protection coordination Study, voltage drop and flicker studies, protection and set point
 46 coordination studies, and grounding reviews, and the impact on system operation [*SGC*
 47 *POSITION: , AS NECESSARY*]. A deposit of the equivalent of [*SGC POSITION: UP TO 10 HOURS*

1 OF PROFESSIONAL TIME] **[IP POSITION: THE ESTIMATED COST OF THE STUDY]** may
2 be required from the applicant. A Distribution Impact Study should be completed within **[SGC**
3 **POSITION: 15]** **[IP/NARUC POSITION: 30]** business days from receipt of the Impact Study
4 agreement and deposit. Any increase of Distribution Impact Study costs above the good-faith
5 estimate provided may be subject to dispute resolution.

6
7 **[SGC POSITION: SOME SMALL RESOURCE ADDITIONS MAY CONSTITUTE A “TURN KEY”**
8 **INSTALLATION, AN INSTALLATION OF EQUIPMENT PREVIOUSLY USED IN THE SAME MANNER IN**
9 **SIMILAR INSTALLATIONS TO THE POINT THAT SUFFICIENT EXPERIENCE EXISTS TO ASSURE ITS**
10 **FEASIBILITY. IN SUCH INSTANCES, THE UNIT DESIGN REVIEW SHOULD BE LIMITED. IN**
11 **INSTANCES WHERE THE EQUIPMENT PACKAGE IS CERTIFIED, NO REVIEW OF THE DESIGN OF**
12 **THE PROTECTION EQUIPMENT IS NECESSARY.]**

13
14 **[SGC POSITION: WHERE THE SMALL RESOURCE MEETS THE SYSTEM IMPACT CRITERIA IN**
15 **APPENDIX 2, NO FURTHER REVIEW OF SYSTEM IMPACTS IS NECESSARY. FOR ALL OTHERS, THE**
16 **INITIAL EVALUATION WILL TAKE INTO ACCOUNT THE TYPE OF DISTRIBUTION CIRCUIT TO**
17 **WHICH THE GENERATOR WILL BE INTERCONNECTED.]**

18
19 e. Where transmission and distribution facilities have separate owners, and no single entity
20 is in a position to prepare an Impact Study covering both transmission system and distribution
21 system Violations, **[IP POSITION: THE INTERCONNECTION PROVIDER WILL**
22 **COORDINATE BUT NOT BE RESPONSIBLE FOR THE TIMING OF ANY STUDIES**
23 **REQUIRED TO DETERMINE THE IMPACT OF THE INTERCONNECTION**
24 **REQUEST ON OTHER POTENTIALLY AFFECTED SYSTEMS. THE APPLICANT**
25 **WILL BE DIRECTLY RESPONSIBLE TO THE AFFECTED SYSTEM OPERATORS**
26 **FOR ALL COSTS OF ANY ADDITIONAL STUDIES REQUIRED TO EVALUATE THE**
27 **IMPACT OF THE INTERCONNECTION REQUEST ON THE AFFECTED SYSTEM.]**

28
29 **[SGC POSITION: THE TRANSMISSION SYSTEM OWNER OR OPERATOR, AS APPLICABLE, SHALL**
30 **TAKE THE LEAD ROLE IN PREPARING THE IMPACT STUDY CONSISTENT WITH THE COSTS AND**
31 **DATES PROVIDED HEREIN, AND ALL OTHER AFFECTED SYSTEMS SHALL COOPERATE AND**
32 **PROVIDE ALL NECESSARY INFORMATION FOR PURPOSES OF PREPARATION OF THE IMPACT**
33 **STUDY.]**

34
35 **[SGC POSITION: OTHER ENTITIES MAY PARTICIPATE IN THE PREPARATION OF THE IMPACT**
36 **STUDY, WITH A DIVISION OF IMPACT STUDY PAYMENTS AMONG SUCH ENTITIES AS THEY MAY**
37 **AGREE AMONG THEMSELVES IN ACCORDANCE WITH THEIR CONTRIBUTIONS. ALL AFFECTED**
38 **ENTITIES SHALL BE AFFORDED AN OPPORTUNITY TO REVIEW AND COMMENT UPON AN IMPACT**
39 **STUDY THAT COVERS POTENTIAL VIOLATIONS ON THEIR SYSTEMS, AND THE TRANSMISSION**
40 **SYSTEM OWNER OR OPERATOR MAY HAVE UP TO FIFTEEN ADDITIONAL BUSINESS DAYS TO**
41 **FINALIZE AN IMPACT STUDY REQUIRING REVIEW BY OTHER AFFECTED SYSTEMS. WHERE**
42 **BOTH TRANSMISSION SYSTEM VIOLATIONS AND DISTRIBUTION SYSTEM VIOLATIONS ARE**
43 **INDICATED BY THE FEASIBILITY STUDY, THE IMPACT STUDY WILL BE COMPLETED IN**
44 **ACCORDANCE WITH TRANSMISSION IMPACT STUDY DATES AND DEPOSITS.]**

45
46 **Section 1.07 Facilities Study Agreement**
47

1 Once a Transmission and/or Distribution Impact Study is completed, or if one or both Impact
2 Studies are not necessary, an Impact Study report or notice of the fact that no report is necessary
3 will be prepared and transmitted to the Interconnection Customer along with a Facilities Study
4 Agreement within **[SGC/NARUC POSITION: FIVE] [IP POSITION: TEN]** business days,
5 including an outline of the scope of the study and a good faith estimate of the cost to perform the
6 study. In order to remain in the interconnection queue, the Interconnection Customer must return
7 the executed Facilities Study Agreement within 30 business days. A deposit of the equivalent of
8 **[SGC POSITION: UP TO FOUR HOURS OF PROFESSIONAL TIME] [IP POSITION: THE**
9 **ESTIMATED COST OF THE STUDY]** may be required from the applicant. If no transmission
10 system or distribution system facilities are required, the Facilities Study will not be required and
11 the project will proceed directly to the execution of an Interconnection Agreement.

12
13 **Section 1.08 Facilities Study Preparation**

14
15 a. Transmission and/or distribution facilities design for any required Interconnection
16 Facilities and/or System Upgrades will be performed under a Facilities Study Agreement
17 between the Interconnection Customer and Interconnection Provider. **[SGC POSITION: THE**
18 **FACILITIES AGREEMENT SHALL PROVIDE A FIXED-COST PROPOSAL TO CONSTRUCT THE**
19 **FACILITIES NECESSARY.]** The Interconnection Provider may contract with consultants, including
20 the transmission owners, or contractors acting on their behalf, to perform the bulk of the
21 activities required under the Facilities Study Agreement. In some cases, the Interconnection
22 Customer and the Interconnection Provider may reach agreement allowing the Interconnection
23 Customer to separately arrange for the design of some of the required transmission or
24 distribution facilities. In such cases, facilities design will be reviewed and accepted, under the
25 Facilities Study Agreement, by the Interconnection Provider. If the Parties agree to separately
26 arrange for design and construction and provided security and confidentiality requirements can
27 be met, Interconnection Providers shall make sufficient information available to Applicant to
28 permit Applicant to obtain an independent design and cost estimate for any necessary facilities.

29
30 b. In cases where System Upgrades are required, the Facilities Study must be completed
31 within **[IP POSITION: 60] [SGC POSITION: 45]** business days of the receipt of the Facilities
32 Study Agreement. In cases where no System Upgrades are necessary, and the required facilities
33 are limited to Interconnection Facilities, the Facilities Study must be completed in **[SGC**
34 **POSITION: 15] [IP POSITION: 30]** business days.

35
36 **Section 1.09 Costs of Facilities and Cost Responsibility**

37
38 a. Where additional facilities are required to permit the interconnection of a small resource,
39 **[SGC POSITION: AND OFFER NO BENEFIT TO THE SYSTEM CAPACITY, THE]** Applicant will bear
40 the entire **[SGC POSITION: REASONABLE]** cost of such facilities **[NARUC Position: as**
41 **determined by the Facilities Study and]** **[SGC POSITION: AT THE FIXED COST PROVIDED IN THE**
42 **FACILITIES AGREEMENT, BUT WILL NOT BE SUBJECT TO RETROACTIVE INCREASES OR**
43 **DECREASES IN SUCH COSTS, [NARUC Position: unless determined by credits or refunds**
44 **provided by mutual agreement with subsequent interconnection customers]. [SGC POSITION:**
45 **IN INSTANCES WHERE FACILITIES CONSTRUCTION IS SOLELY PERFORMED BY**
46 **INTERCONNECTION PROVIDER, AND WHERE APPLICANT HAS OBTAINED AN INDEPENDENT**
47 **ESTIMATE OF COSTS LOWER THAN THE COSTS CHARGED TO APPLICANT BY INTERCONNECTION**

1 **PROVIDER, RESPONSIBILITY FOR COSTS EXCEEDING THE INDEPENDENT ESTIMATE MAY BE**
2 **SUBJECT TO DISPUTE RESOLUTION.]**
3

4 b. An Interconnection Provider may propose to group facilities required for more than one
5 Applicant addition in order to minimize facilities costs through economies of scale, but any
6 Applicant may require the installation of facilities required for its own system if it is willing to
7 pay the costs of those facilities.
8

9 **[SGC POSITION: WHERE THE SMALL RESOURCE CREATES A BENEFIT TO THE SYSTEM, COSTS**
10 **CHARGED TO THE APPLICANT WILL BE REDUCED COMMENSURATE WITH SUCH BENEFIT.**
11 **WHERE MULTIPLE INTERCONNECTION REQUESTS REQUIRE SYSTEM FACILITIES, APPLICANTS**
12 **WILL BE ASSIGNED COSTS OR BENEFITS SEPARATELY WHERE IMPACTS CAN BE SEPARATELY**
13 **ATTRIBUTED TO RESPECTIVE PROJECTS; WHERE SUCH ATTRIBUTION IS NOT POSSIBLE,**
14 **APPLICANTS WILL SHARE COSTS OR BENEFITS IN PROPORTION TO THEIR PROJECTED FACILITY**
15 **CAPACITIES.]**
16

17 **Section 1.10 Small Resource Interconnection Agreement**

18

19 a. A Small Resource Interconnection Agreement must be executed and filed with the FERC
20 prior to undertaking the actual interconnection. The Small Resource Interconnection Agreement
21 identifies the Interconnection Customer's obligations to pay for transmission facilities, if any,
22 necessary to facilitate the interconnection.
23

24 **[b. SGC POSITION: IF A NEW RESOURCE CAN BE QUICKLY CONNECTED TO THE SYSTEM, A**
25 **SMALL RESOURCE INTERCONNECTION AGREEMENT WILL BE EXECUTED WITHOUT DELAY,**
26 **AND INTERCONNECTION MAY PROCEED WITHOUT REGARD TO OTHER RESOURCES IN THE**
27 **QUEUE FOR INTERCONNECTION STUDIES. A SMALL RESOURCE INTERCONNECTION**
28 **AGREEMENT WILL BE EXECUTED REFLECTING APPROVAL TO INTERCONNECT FOR PURPOSES**
29 **OF THE TYPE OF SERVICE INDICATED BY THE APPLICANT, INCLUDING:**
30

- 31 i) **NETWORK SERVICE;**
- 32 ii) **ENERGY-ONLY SERVICE; OR**
- 33 iii) **SERVICE TO NON-EXPORTING RESOURCES PARTICIPATING IN WHOLESALE**
34 **MARKETS.]**
35

36 **Section 1.11 Dispute Resolution**

37

38 a. If a dispute arises during the Application of these expedited procedures, either the
39 Applicant or Interconnection Provider may seek immediate resolution through the Commission's
40 alternative dispute resolution process, by providing written notice to the Commission and the
41 other party stating the issues in dispute. Pursuit of dispute resolution will not affect an
42 Applicant's position in the queue. At the outset, either party may require that such dispute
43 resolution will be binding. Dispute resolution will be conducted in an informal, expeditious
44 manner in order to reach resolution with minimal costs and delay. When appropriate, the dispute
45 resolution may be conducted by phone or through Internet communications. A dispute resolution
46 will be completed within two weeks after a party notifies the Commission of the dispute unless
47 the Commission or the Commission's designee extends the time for good cause.

1
2 b. In addition to its own or other dispute resolution resources, the Commission will arrange
3 to make available to the parties at no or minimal cost the services or one or more technical
4 masters to resolve technical disputes arising under these procedures. The technical masters
5 designated by the Commission will be engineers with expertise in electric power transmission
6 and distribution interconnection requirements who are qualified and independent.

7
8 [c. **SGC POSITION: IN A DISPUTE INITIATED UNDER SECTION 1.05 WHERE A RESOURCE**
9 **HAS BEEN DETERMINED TO CREATE TRANSMISSION OR DISTRIBUTION SYSTEM VIOLATIONS**
10 **ALTHOUGH THE RESOURCE MEETS THE STANDARDS OF APPENDIX 1 AND/OR APPENDIX 2, THE**
11 **INTERCONNECTION PROVIDER HAS THE BURDEN TO DEMONSTRATE THE CORRECTNESS OF ITS**
12 **DETERMINATION. IN THE CASE OF A TECHNICAL DISPUTE, THE IP MUST DEMONSTRATE TO A**
13 **TECHNICAL MASTER THE CORRECTNESS OF ITS DETERMINATION THAT THE PROPOSED**
14 **INTERCONNECTION SHOULD NOT BE APPROVED IN AN EXPEDITED MANNER — I.E., THAT**
15 **ADDITIONAL REQUIREMENTS OR COSTS SHOULD BE IMPOSED ON THE APPLICANT TO SAFELY**
16 **AND RELIABLY INTERCONNECT, THAT THE PROPOSED INTERCONNECTION WOULD BE UNSAFE**
17 **OR UNRELIABLE, OR THAT THE INTERCONNECTION WOULD INTERFERE WITH THE QUALITY OF**
18 **ELECTRIC SERVICE TO OTHER CUSTOMERS.]**

19 1.

20 **2. Section 1.12 Interconnection Metering**

21 3.

22 Metering shall be installed as needed to participate in various wholesale markets. Metering may
23 be installed subsequent to interconnection approval if Applicant decides to participate as part of
24 an aggregated block of small generators in a market that permits aggregation or to participate in a
25 market that is planned but not yet available.

26
27 **Section 1.13 Commissioning**

28
29 Commissioning tests of an Applicant’s installed equipment will be performed pursuant to the [IP
30 **POSITION: APPLICABLE CODES AND STANDARDS] [SGC POSITION: IEEE P1547**
31 **REQUIREMENTS AS APPLICABLE]. The Interconnection Provider must be given 5 business days**
32 **written notice, or as otherwise mutually agreed to by the Parties, of the tests and may be present**
33 **to witness the commissioning tests.**

34
35 **Section 1.14 Confidentiality**

36
37 Each Party shall hold in confidence and shall not disclose Confidential Information to any person
38 (except employees, officers, representatives and agents that agree to be bound by this provision),
39 except as required by law. Confidential Information shall mean any confidential and/or
40 proprietary information provided by one Party (“Disclosing Party”) to the other Party
41 (“Receiving Party”) that is clearly marked or otherwise designated “Confidential.” For purposes
42 of procedures all design, operating specifications and metering data provided by Generator shall
43 be deemed Confidential Information regardless of whether it is clearly marked or otherwise
44 designated as such. Confidential Information shall not include information that the Receiving
45 Party can demonstrate: (a) is generally available to the public other than as a result of a
46 disclosure by the Receiving Party; (b) was in the lawful possession of the Receiving Party on a
47 non-confidential basis before receiving it from the Disclosing Party; (c) was supplied to the

Attachment B Procedures

1 Receiving Party without restriction by a third party, who, to the knowledge of the Receiving
2 Party, was under no obligation to the Disclosing Party to keep such information confidential; (d)
3 was independently developed by the Receiving Party without reference to Confidential
4 Information of the Disclosing Party; or (e) was disclosed with the prior written approval of the
5 Disclosing Party. If a Party believes it is required by law to disclose Confidential Information,
6 that Party shall provide the other Party with prompt notice of such requirement(s) so that the
7 other Party may seek an appropriate protective order or waive compliance with the terms of these
8 procedures.
9

1 **[SGC PROPOSAL: APPENDIX 1 IN ITS ENTIRETY IS A SGC PROPOSAL**

2
3 **APPENDIX 1**

4
5 **TRANSMISSION IMPACT SCREENS**

6
7 **TRANSMISSION SCREENS**

8
9 **SCREEN #1. THE AGGREGATED SELF-GENERATION WILL NOT RESULT IN EXPORTED POWER IN**
10 **EXCESS OF 15% OF THE PEAK DAY LOAD ON A RADIAL LINE, DETERMINED BY PERFORMING A**
11 **ZERO-CONTINGENCY LOAD FLOW ANALYSIS AT MINIMUM AND MAXIMUM LOAD CONDITIONS FOR**
12 **THE LOCAL AREA AT THE POINT OF REQUESTED INTERCONNECTION.**

13
14 **SCREEN #2. THE PROPOSED GENERATION WILL NOT RESULT IN AN INCREASE TO THE**
15 **PREDOMINANT FLOW OF A NETWORK LINE IN EXCESS OF 1 MW OR 1% OF THE APPLICABLE**
16 **EQUIPMENT RATING, WHICHEVER IS GREATER, DETERMINED PERFORMING A LOAD FLOW**
17 **ANALYSIS CONSIDERING ALL APPLICABLE CONDITIONS (BOTH NORMAL AND CONTINGENCY).**

18
19 **SCREEN 2A: FOR PROJECTS THAT DO NOT PASS SCREEN 2, THE FOLLOWING CRITERIA**
20 **SHALL BE APPLIED: COMPLETE LOAD FLOW ANALYSIS INCLUDING ALL APPLICABLE**
21 **NORMAL AND CONTINGENCY CONDITIONS AND IF NO CIRCUIT EXCEEDS 95% OF**
22 **APPLICABLE RATING AND IF NO OTHER PROPOSED GENERATION IS IN THE LOCAL AREA**
23 **OF THE GENERATOR UNDER STUDY, THEN THE PROPOSED PROJECT PASSES THE SCREEN.**

24
25 **SCREEN #3. THE PROPOSED GENERATOR IN AGGREGATION WITH OTHER EXISTING AND**
26 **PROPOSED SELF GENERATION WILL NOT RESULT IN ANY FACILITY EXCEEDING ITS'**
27 **INTERRUPTING OR FAULT DUTY RATING DUE TO THE PROPOSED PROJECT'S CONTRIBUTION TO**
28 **THE FAULT CURRENT.**

29
30 **SCREEN #4. THE PROPOSED GENERATOR IN AGGREGATION WITH OTHER EXISTING AND**
31 **PROPOSED SELF-GENERATION WILL NOT BE CONNECTED TO THE TRANSMISSION SYSTEM**
32 **WHERE THERE ARE KNOWN OR POSTED TRANSIENT STABILITY LIMITATIONS FOR EXISTING**
33 **GENERATING UNITS LOCATED IN THE LOCAL AREA, SUCH LIMITATIONS HAVING BEEN**
34 **DOCUMENTED TO THE GOVERNING RELIABILITY COUNCIL WITHIN THE PREVIOUS 6 YEARS.**

35
36 **SCREEN #5. THE PROPOSED GENERATOR AND ITS INTERCONNECTION SYSTEM MUST BE**
37 **COMPATIBLE WITH THE TRANSMISSION SYSTEM PROTECTION AND GROUNDING REQUIREMENTS**
38 **AS DEFINED IN THE TO'S PUBLISHED INTERCONNECTION STANDARDS.**

39
40 **BARRING UNUSUAL CIRCUMSTANCES, THE LOCAL AREA SHALL BE DEFINED AS UP TO TWO**
41 **BUSSES REMOVED FROM THE INTERCONNECTING BUSS.]**

1 **[SGC PROPOSAL: APPENDIX 2 IN ITS ENTIRETY IS A SGC PROPOSAL**

2
3 **APPENDIX 2**

4
5 **DISTRIBUTION IMPACT SCREENS**

6
7 **1. FOR INTERCONNECTION OF A PROPOSED GENERATOR TO A RADIAL**
8 **DISTRIBUTION CIRCUIT, THE NEW GENERATOR'S CAPACITY IN AGGREGATE WITH**
9 **OTHER GENERATION ON THE CIRCUIT WILL NOT EXCEED 15% OF TOTAL CIRCUIT**
10 **ANNUAL PEAK LOAD AS MOST RECENTLY MEASURED AT THE SUBSTATION; NOR WILL IT**
11 **EXCEED 15% OF A DISTRIBUTION CIRCUIT LINE SECTION DESIGN CAPACITY. A LINE**
12 **SECTION IS DEFINED AS THAT SECTION OF THE DISTRIBUTION SYSTEM BETWEEN TWO**
13 **SECTIONALIZING DEVICES IN THE AREA EPS (ELECTRIC POWER SYSTEM, AS DEFINED**
14 **IN IEEE P1547).**

15
16 **2. THE PROPOSED GENERATOR, IN AGGREGATION WITH OTHER GENERATION ON**
17 **THE DISTRIBUTION CIRCUIT, WILL NOT CONTRIBUTE MORE THAN 15% TO THE**
18 **DISTRIBUTION CIRCUIT'S MAXIMUM FAULT CURRENT AT THE POINT ON THE HIGH**
19 **VOLTAGE (PRIMARY) LEVEL NEAREST THE PROPOSED POINT OF COMMON COUPLING.**

20
21 **3. INTERCONNECTION OF THE PROPOSED GENERATOR IN AGGREGATE WITH OTHER**
22 **GENERATION ON THE DISTRIBUTION CIRCUIT WILL NOT CAUSE ANY DISTRIBUTION**
23 **EQUIPMENT, PROTECTIVE DEVICES (INCLUDING BUT NOT LIMITED TO SUBSTATION**
24 **BREAKERS, FUSE CUTOUPS, AND LINE RECLOSERS), OR CUSTOMER EQUIPMENT ON THE**
25 **SYSTEM TO EXCEED 90 PERCENT OF THEIR SHORT CIRCUIT INTERRUPTING CAPABILITY;**
26 **NOR IS THE INTERCONNECTION PROPOSED FOR A CIRCUIT THAT ALREADY EXCEEDS THE**
27 **90 PERCENT CAPABILITY LIMIT.**

28
29 **4. THE PROPOSED GENERATOR'S POINT OF COMMON COUPLING WILL NOT BE ON A**
30 **DISTRIBUTION SECONDARY OR SPOT NETWORK.**

31
32 **5. THE PROPOSED GENERATOR, IN AGGREGATE WITH OTHER GENERATION**
33 **INTERCONNECTED TO THE DISTRIBUTION LOW VOLTAGE SIDE OF THE SUBSTATION**
34 **TRANSFORMER FEEDING THE DISTRIBUTION CIRCUIT WHERE THE GENERATOR**
35 **PROPOSES TO INTERCONNECT, WILL NOT EXCEED 10 MW IN AN AREA WHERE THERE**
36 **ARE KNOWN OR POSTED TRANSIENT STABILITY LIMITATIONS TO GENERATING UNITS**
37 **LOCATED IN THE GENERAL ELECTRICAL VICINITY (E.G., 3 OR 4 TRANSMISSION**
38 **VOLTAGE LEVEL BUSES FROM THE POINT OF INTERCONNECTION).]**