SGIP 2.0 Business Sustainment Plan (v1.0)

Roadmap to the Future of Smart Grid Interoperability

The SGIP Governing Board formed the Business Sustainment Plan Working Group ("Plan") to initially develop a proposal for moving the SGIP forward with significantly reduced government financial support. We refer to the new organization as SGIP 2.0. This Plan describes the new organization, the scope of its activity (including continued support of NIST to carry out its EISA mandate), and the potential sources of revenue to support to the new organization.

This working draft of the Plan is being provided to the SGIP stakeholder community for two purposes:

    *a)   **Provide a "preview" of** the Plan that is under development and is being considered as the path forward*

    b)   Solicit feedback and comments on the working draft Plan.

By: SGIP Governing Board - Business Sustainment Working Group
4/13/2012

This WORKING DRAFT document was prepared by the Business Sustainment Plan Work Group ("BSPWG").

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SGIP 2.0 Business Sustainment Plan (Version 1.0)
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5   **FOREWARD** [Get opening quotes from as many of the following as possible]
6   a)   President Obama
7   b)   Sec of DOE
8   c)   Chairperson of FERC
9   d)   Chairperson of NARUC
10 e)   Sec Dept. of Commerce
11 f)   Head of NIST
12 g)   NERC
13 h)   Any of the international organizations with whom SGIP has a LOI
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1)   History

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Under the Energy Independence and Security Act of 2007 (EISA), the National Institute of Standards and Technology (NIST) is assigned the "primary responsibility to coordinate development of a framework that includes protocols and model standards for information management to achieve interoperability of Smart Grid devices and systems…" [EISA Title XIII, Section 1305]. EISA, which designates development of a Smart Grid as a national policy goal, specifies that the interoperability framework should be "flexible, uniform, and technology neutral." The law also instructs that the framework should accommodate "traditional, centralized generation and distribution resources" while also facilitating incorporation of new, innovative Smart Grid technologies, such as distributed renewable energy resources and energy storage.

No appropriation of funds was provided, and NIST co-hosted the November 2008 Grid-Interop meeting with the Gridwise® Architecture Council in order to begin the identification of stakeholders in the Smart Grid community. Five workshops were held in the areas of Home-to-Grid (H2G), Building-to-Grid (B2G), Industry-to-Grid (I2G), Transmission & Distribution (T&D) and Business & Policy (B&P) in order to generate dialogue among existing stakeholders to identify key interoperability standards activities required in order to make the Smart Grid a reality. From these workshops, the respective Domain Expert Working Groups (DEWGs) were formed.

In February of 2009, the American Recovery and Reinvestment Act of 2009 (ARRA) was enacted, which provided funding to NIST to carry out its EISA mandate. ARRA included $4.4 Billion in stimulus funding for Smart Grid investment and demonstration projects.

Recognizing the urgency, NIST developed a three-phase plan for moving forward. In the *first phase*, NIST retained the services of the Electric Power Research Institute (EPRI) to facilitate three public workshops, in April, May and August 2009, in which more than 1,500 individuals representing hundreds of organizations

participated. NIST also consulted with stakeholders through extensive outreach efforts carried out by the Office of the National Coordinator for Smart Grid Interoperability. In May 2009, U.S. Secretary of Commerce Gary Locke and U.S. Secretary of Energy Steven Chu chaired a meeting of nearly 70 executives from the power, information technology, and other industries at which these executives expressed their organizations' commitment to support the plan established by NIST to meet its EISA responsibility. The effort culminated in the *NIST Framework and Roadmap for Smart Grid Interoperability Standards, Release 1.0*. It describes a high-level conceptual reference model for the Smart Grid, identifies 75 existing standards that are applicable (or likely to be applicable) to the ongoing development of the Smart Grid, specifies 15 high-priority gaps and harmonization issues (in addition to cyber security) for which new or revised standards and requirements are needed, documents action plans with aggressive timelines by which designated standards-setting organizations (SSOs) will address these gaps, and describes the strategy to establish requirements and standards to help ensure Smart Grid cyber security.

The *second phase* of the NIST plan was formally launched in November 2009. It involved an ongoing organization and consensus process that was formalized under the Smart Grid Interoperability Panel (SGIP). The SGIP is a public-private partnership that provides an organizational structure to support the continuing evolution of the framework. By mid-December 2009, one month after it was established, the SGIP membership exceeded 400 organizations divided among 22 stakeholder categories, and today more than 700 organizations are members of the SGIP, which we will refer to as SGIP 1.0.

The *third, and final, phase* of the NIST plan is to create a robust, ongoing, "built-in" standards process that supports cycle after cycle of Smart Grid innovation and helps to transform our economy. From the outset, NIST realized that this was a long-term effort and envisioned the transition of the SGIP from a public-private partnership to a self-financed, legal entity that retains partnership with government. The SGIP Governing Board formed the Business Sustainment Plan Working Group to develop a proposal for moving the SGIP forward as a self-sustaining organization, which we will refer to as SGIP 2.0. This proposal describes the new organization, how it will continue to assist NIST to carry out its EISA mandate, and how it will advance interoperability to enable Smart Grid deployments worldwide.

2) SGIP 1.0 (2009-2012)

a) Examples of accomplishments

After being formed at the Grid-Interop meeting in December, 2009, the SGIP matured into a fully functional organization with many activities moving forward in parallel, supported by operational processes and a management structure. Some of the highlights of the past 3 years are included below.

i) The SGIP continues to identify and address standards gaps through a priority action plan (PAP) process, that speeds the pace of standards development. Since its creation, the SGIP has supported 20 PAPs. One priority issue, SEP 1.x to SEP 2.0 Transition and Coexistence, was identified as a critical problem that the SGIP Governing Board determined should be addressed through the PAP process. The resulting work guides implementers with a migration or coexistence path between SEP 1.x and SEP 2.0. The work was completed in just 6 months.

ii) The establishment of the Catalog of Standards (CoS) was a major accomplishment for the SGIP. The CoS will provide a compendium of standards and guides that are relevant to advancing interoperability in Smart Grid deployments. The CoS is being populated by the results of the PAP activities as well as material from the reviews of existing relevant Smart Grid standards that characterize the entries for practitioners, integrators, and other interested parties.

iii) The SGIP's PMO created and refined the Priority Action Plan (PAP) lifecycle process which streamlines the work of the PAP Working Groups into a common methodology and set of deliverables. Common reporting from PAPs allows problems to be caught early and resources to be assigned to manage them. The PMO oversees all SGIP project activities and provides the project discipline and commonality that keep project members focused on the work that needs to be done, and the process to bring entries into the CoS.

iv) In July, 2011, the Federal Electricity Regulatory Commission (FERC) endorsed NIST and the SGIP process stating:
"We believe that the best vehicle for developing Smart Grid interoperability standards is the NIST interoperability framework process, including the work of the SGIP and its committees and working groups. This work includes harmonization and extensions of existing Smart Grid interoperability standards as well as the development of new standards. The SGIP brings together Smart Grid stakeholders from numerous industries and areas of expertise to guide the development of Smart Grid interoperability standards within the context of the NIST interoperability framework process."

v) The SGIP standing committees have set the groundwork for the coordination of issues that cross-cut the PAPs and the Smart Grid stakeholder domains. The Architecture Committee (SGAC) has refined a reference architecture, and developed a conceptual model for organizing Smart Grid interoperability issues. The Testing and Certification Committee (SGTCC) has set the foundation for interoperability testing. This includes an Interoperability Process Reference Manual that brings together the best practices for achieving standards-based, interoperable and conformant Smart Grid technologies. The Cyber Security Working Group (CSWG) developed NISTIR 7628, which presents an analytical framework that organizations can use to develop effective cyber security strategies tailored

1   to their particular combinations of Smart Grid-related characteristics, risks,
2   and vulnerabilities.
3

4   vi)   As part of the SGIP's flexible architecture and evolutionary philosophy, we
5   have established several working groups to address specific Smart Grid
6   interoperability challenges.
7   (1)   The SGIP started with six domain expert working groups (DEWGs):
8   Home to Grid, Building to Grid, Industrial to Grid, Transmission and
9   Distribution, Vehicle to Grid, and Business and Policy. Over the last two
10   years, a Distributed Renewables, Generators, and Storage group was
11   formed in addition to the Electromagnetic Interoperability Issues
12   working group. These groups have developed whitepapers and
13   spawned PAPs, on such topics as wind integration, an energy services
14   interface, and the integration of home appliances.
15

16   (2)   Green Button – introduced as a challenge by former White House CIO,
17   Aneesh Chopra, and the SGIP took the concept to reality in 5 months.
18   The idea leverages work originally performed in PAP 10, allowing the
19   challenge to be met through implementation of the NAESB Energy
20   Usage Information and ESPI Standard. The idea is already being
21   embraced and utilized by numerous utilities nation-wide and
22   developers are continuing to explore innovative products and services
23   around it, creating jobs and new markets and also enabling consumers
24   to better understand their energy usage and subsequently manage it in
25   a more efficient way. All this was enabled by the platform of
26   interoperability constructed by the SGIP.
27

28   vii)   Since inception the following have been achieved:
29   (1)   12 standards to better facilitate interoperability due to SGIP activity
30   have been added to Catalog of Standards in 12 months from 7 different
31   SSOs
32

33   (2)   63 standards reviewed by the Cyber Security Working Group
34

35   (3)   20 standards reviewed by Smart Grid Architecture Committee
36

37   (4)   20 PAPs initiated; 6 PAPs completed
38

39   (5)   5 international Letters of Intent of Cooperation
40   (a)   European Union
41   (b)   Korea
42   (c)   Japan
43   (d)   Ecuador
44   (e)   Columbia (in process)
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47   **b)**   <u>**Organizational Structure**</u>
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1   i)   The SGIP 1.0 is managed by NIST with day-to-day technical and operational
2   support provided by both a contract Program Administrator and the
3   voluntary Plenary Officers.
4
5   (1)   list of NIST responsibilities
6   (a)   NIST is responsible for monitoring the SGIP Administrator contract
7   resources and contractor performance
8   (b)   NIST has an ex-officio position on the Governing Board, as stated in
9   the bylaws
10   (c)   The chair of the CSWG and the vice-chair of the SGTCC are NIST
11   staff, as stated in the Bylaws
12   (d)   NIST has a representative on the SGIP Plenary Leadership team and
13   on the SGIP PMO, on the CME WG, and on the MarComm
14   Committee.
15   (e)   In most cases, NIST provides a lead for PAP working groups and
16   DEWGs.
17   (f)   NIST reviews all LOIs with other organizations
18   (g)   NIST reviews all marketing and public affairs documents prior to
19   their release
20   (h)   NIST provides the NIST Smart Grid Collaboration Wiki for use by
21   the SGIP and the public.
22
23
24   (2)   list of Program Administrator responsibilities
25   (a)   planning, logistics and support of SGIP Face-to-Face ("F2F")
26   meetings
27   (b)   planning, logistics and support of SGIP Governing Board Face-to-
28   Face ("F2F") meetings
29   (c)   planning, logistics and support of SGIP Voting
30   (d)   planning, logistics and support of SGIP membership services
31   (e)   Enforce Bylaws and Operating procedures
32   (f)   Develop, support and maintain web sites, including the
33   collaborative Twiki and list servers for SGIP membership
34   (g)   Establishes and maintains email list serves for the various groups
35   within the SGIP
36   (h)   Provide administrative support to NIST as required
37   (i)   Facilitate committee and working group operations
38   (j)   arranges technical expert resources to carry out PAPs and other
39   directed activities.
40   (k)   Supports communications and marketing (booths, training material,
41   announcements, handouts, coordination with CME WG).
42
43
44   (3)   Plenary officers operational oversight of Program Administrator
45   (a)   Plans for plenary events and communications
46   (b)   Reviews PAP and WG requests
47   (c)   Helps package material for GB review and approval
48   (d)   Coordinates leadership of committees and working groups
49   (e)   Resolves membership issues

1   (f)   Proposes and enacts operational changes (e.g., CoS, document
2   branding, new WG and committees)
3
4   (4)   SGIP 1.0 receives the full benefits of being federally sponsored while
5   being subject to federal regulations and guidelines
6
7

8   ii)   A Governing Board has been established with certain responsibilities and
9   authority
10   (1)   The SGIP is guided by a Governing Board that approves and
11   prioritizes work programs. The Governing Board's responsibilities
12   include facilitating a dialogue with standards development
13   organizations to ensure that the action plans can be implemented.
14   The SGIPGB provides guidance to the SGIP. This guidance includes a
15   broad perspective of the NIST Interoperability Framework and
16   Roadmap vision. The Administrator reports on progress by
17   maintaining the Smart Grid Roadmap, and ensures all SGIP
18   documents are openly available in an online Interoperability
19   Knowledge Base.
20
21   (2)   Composition:
22   (a)   22 seats elected by each of the membership categories
23   (b)   3 'at large' seats elected by entire membership
24   (c)   6 ex officio seats
25   (i)   1 - NIST
26   (ii)   4 - Membership Committee Chairpersons
27   (iii) 1 – Program Administrator
28   (3)   Created four working groups
29   (a)   Business and Operating Procedures Work Group
30   (b)   Communication, Marketing and Education Working Group
31   (c)   Intellectual Property Rights Working Group
32   (d)   Vision, Mission and Road Map Working Group
33
34   iii) plenary
35   (1)   Chairperson – elected by the Governing Board,
36   (2)   Vice-Chairperson – elected by the membership
37   (3)   Secretary - elected by membership
38
39   iv)   Membership activity organized by:
40   (1)   Four standing committees/working groups
41   (a)   Smart Grid Architecture Committee
42   (b)   Smart Grid Testing and Certification Committee
43   **(c)**   Cyber Security Working Group
44   (d)   Smart Grid Implementation Methods Committee
45   (2)   Domain Expert Working Groups
46   (3)   Priority Action Plans
47
48 c)   Charter and Bylaws – version 1.4 available on SGIP Twiki
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7   ## 3) <u>SGIP 2.0 (2013 and beyond)</u>
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9   a) <u>**Preamble:**</u> why is the transition necessary?
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11   Since the formation of the SGIP in 2009, the activity of the SGIP by NIST
12   personnel and member volunteers has been supported and enabled by the
13   work of a Program Administrator that has been fully funded by NIST in the
14   approximate amount of $5 to 7 million per year; a significant portion of those
15   funds came from the ARRA program. However, NIST always intended that the
16   SGIP would transition from a federally funded organization to a public-private
17   partnership that relies on non-governmental funding.
18
19   At the December 2011 SGIP Governing Board meeting, George Arnold, National
20   Coordinator for Smart Grid Interoperability at NIST, requested the SGIP
21   Governing Board to begin planning for the SGIP's transition into a legal entity
22   funded primarily by the private sector and with a continuing, but reduced
23   level of federal funding beginning January 2013. He emphasized that NIST will
24   continue to be actively engaged as a partner with the private sector in the
25   work of SGIP. To assist the SGIP in the transition, NIST tasked the Program
26   Administrator with preparation of a document that shares thoughts and options for
27   the transition. The current form of the SGIP 1.0 is a *society of members* which
28   really has no formal legal structure, and thus lacks the ability to enter into
29   contracts or raise revenue from any source. While this form is sufficient for SGIP
30   1.0 due to the sponsorship by and relationship with NIST, it is not an adequate
31   form for SGIP 2.0.
32
33
34   **b)** <u>**Mission**</u>
35
36   i) *RECOMMENDATION BY BSPWG* - keep basically the same as SGIP 1.0 (just
37   a few wording changes)
38
39   The mission of the SGIP is to provide a strong framework for coordination of
40   all stakeholders of the Smart Grid to accelerate standards harmonization and
41   development. The SGIP does not write standards, but instead develops and
42   reviews use cases, identifies requirements, identifies gaps and overlaps on
43   existing standards affecting the Smart Grid and proposes action plans for
44   achieving coordination.
45
46   The SGIP has four principal responsibilities:
47

(1) To provide the technical guidance necessary to facilitate standards development and coordination for the Smart Grid

    (a) To identify and specify the necessary testing and certification requirements, including providing the underlying rationale, to assess the achievement of interoperability using Smart Grid Standards

(2) To oversee the performance of these activities to maintain momentum and achievement

(3) To support the acceleration of the deployment of the Smart Grid.

  ii) ***ALTERNATIVES CONSIDERED***

(1) Slightly reduced scope in some areas
(2) Slightly expanded scope in some areas, including, but not limited to:
    (a) adding coordinated membership activity on business/commercial topics
    (b) expanding the international emphasis
(3) Combinations of the above two

c)   <u>Principles</u>

  i)   ***RECOMMENDATION BY BSPWG*** – very similar to SGIP 1.0 but recognizes that SGIP 2.0 is not a fully federally funded organization that provides free access and participation to anyone.

    (1) Openness

    The work of the SGIP 2.0, including the Board of Directors and all Board and Membership working groups and committees, will be open for review by the SGIP 2.0 Membership as follows <u>(but subject to the features and benefits that are defined for each level of Membership)</u>:
    (a) All minutes of all meetings will be posted on the Membership portal.
    (b) All documents and drafts under discussion will be posted on the Membership portal.
    (c) All meetings are open to Membership attendance.

    (2) Balance

    The SGIP 2.0 will be organized on the principle of balancing representation across multiple industry segments related to electric energy and the technology necessary to effectively manage it. The design of the organization will enable it to:
    (a) Carry out its mission effectively,
    (b) Provide leadership throughout the Smart Grid Stakeholder community.

1   (c)   In an attempt to encourage continued broad participation, any fee
2   assessments/dues of the Membership will attempt to properly
3   recognize the differences in the ability of various organizations to
4   pay for membership
5

6   **{NOTE TO DRAFT: other than changes to voting created by the**
7   **newly defined membership categories and the privileges**
8   **associated with each category (see the "Membership Dues" section**
9   **below), no other changes to voting have been included to bring**
10   **further "balance" as described herein}**
11

12   (3) Consensus
13

14   Consensus is a core value of the SGIP 2.0. For purposes of the SGIP 2.0,
15   consensus means the general agreement by all of the Members. The
16   process of the SGIP 2.0, including the SGIP 2.0 Board of Directors and all
17   Board and Membership Working Groups and Committees, requires the
18   respective Chairs to ensure consideration of all views, proposals and
19   objections, and to endeavor to reconcile them. Where consensus is not
20   possible, the SGIP 2.0 will strive to make decisions that are supported
21   by the available information and to document opposing views or
22   abstentions.
23

24   The achievement of consensus will be based on thorough examination of
25   issues, including the discussion of dissenting opinions and the
26   attempted resolution of disagreements. Consensus will be preferred to
27   resolve all issues brought before the SGIP 2.0.
28

29   However, achieving the goals of SGIP 2.0 in a timely fashion will not
30   always allow consensus to be achieved. Accordingly, when a
31   disagreement exists that cannot be resolved; a vote will be taken to
32   reach a timely decision.
33

34   **{NOTE TO DRAFT: no changes to voting have been included to**
35   **ensure "balance" is achieved across the membership for every vote**
36   **taken. It has also been pointed out that the BOPWG has done some**
37   **work on this topic as well. }**
38
39
40

41   (4) Harmonization
42   The SGIP process encourages harmonization among standards.
43   Decisions are relevant and effectively respond to regulatory and market
44   needs, as well as technological developments to achieve essential
45   interoperability characteristics.
46

47   For any standard gap, interested SDOs will prepare a justification to
48   present to the SGIP relative to how the standard fits into their
49   organization, and how they will position their work to support
50   interoperability and integrate with other NIST-identified standards for

1   Smart Grid. The SGIP, or working group thereof, can then select from
2   these offerings to identify a work project.
3
4   ii)   ***ALTERNATIVES CONSIDERED***: the main theme of discussions was a range of
5   keeping everything open to the public (as in SGIP 1.0) versus more limited
6   access and participation for various levels of membership.
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11   **d)   Newly Defined "SGIP 2.0 Positioning Statement & Value Proposition"**
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13   A vital SGIP role is to successfully transition from public sector funding to
14   private sector revenue support, in order to do so the BSPWG believes that it will
15   be necessary to rely on membership fees for the majority of that support, at
16   least initially.   Accordingly, it will be essential to design a membership
17   structure that clearly provides value to those that will be asked to join and pay
18   annual fees to the SGIP 2.0, while at the same time protecting the principles
19   listed above. The following describes the proposed value proposition that the
20   BSPWG suggests SGIP 2.0 should present to the marketplace.
21
22   **[NOTE TO DRAFT: from the effort being led by David Milenthal and**
23   **supported by the Administrator and the CMEWG]**
24
25   Our electric industry is now investing $400 billion to revamp and modernize our
26   electric system and develop a digital security blanket to protect our nation from
27   cyber terrorism. Federal and state governments and industry are looking to the
28   Smart Grid Interoperability Panel (SGIP) to identify key standards by which
29   components of the system can work together - from generation, to transmission,
30   to distribution, to the electric end user. To truly develop a seamlessly
31   interoperating Smart Grid, the Members of the SGIP assume the ultimate
32   responsibility to resolve standards issues and gaps between different
33   organizations. By focusing on standard identification and their interoperability,
34   the SGIP accelerates the digital modernization of the grid and expands
35   dependent markets. As a Member organization, you have an equal seat and
36   valued voice in shaping the standards that directly impact your organization's
37   ultimate success and your career.
38
39   Though there are many informal gatherings and alliances involved in
40   modernizing America's new energy infrastructure efforts, the SGIP is the
41   central organization that the government and industry are looking to ensure
42   there is a robust interoperable foundation. In addition, advancing the
43   integration of the Smart Grid technologies for the betterment of the electric
44   systems is a global issue. All stakeholders who wish to play a role in building,
45   operating or using Smart Grid technologies will find it important to participate.

45   • SGIP is the central organization that Federal and state governments and
46   industry look to in order to identify, shape and close the gaps in
47   standards so that a seamless interoperable Grid can be put in place.
48

- SGIP is cited by the <u>Federal Energy Regulatory Commission (FERC) as the venue that all stakeholders should look to for guidance on the standards to be used</u> in developing the modern grid. It is the place with the ultimate information across all segments of the power system and will provide members the knowledge to compete effectively in the marketplace.

- SGIP is the only organization with <u>the full spectrum of industry group members</u> that meet together to build <u>an official consensus</u> around interoperable standards. All seven integrated domains of the power system---customers, markets, service providers, operations, bulk generation, transmission and distribution are represented by a total of 22 different industry segments that must work together to build a modern, efficient grid.

- SGIP is the primary organization <u>that brings federal and state regulators and the industry together</u> to informally discuss all aspects of Smart Grid development and the appropriate economics to make the Smart Grid a reality. A special Advisory Council of State Regulators will be formed to work closely with the industry to accelerate the affordable implementation of the Smart Grid.

- SGIP is the authority in identifying standards for the Smart Grid through its <u>Catalogue of Standards</u>; the definitive guide to the standards that are embraced by the overall SGIP industry in order to achieve interoperability.

- SGIP is the only organization with the member capacity to build a credible <u>peer-to-peer certification</u> process that assures the effectiveness and capability of products and services to be truly interoperable.

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i) ***ALTERNATIVE CONSIDERED –*** none

e) Legal Structure

i) ***RECOMMENDATION BY THE BSPWG*** – the BSPWG retained the services of an attorney with many years of experience with over a hundred standards setting organizations and industry trade groups to assist in evaluating available legal structures and selecting the one that appears to be most suited for achieving success.

SGIP 2.0 will be formed as a not–for-profit membership organization under Delaware law that will apply for tax exemption under IRS Code Section 501(c)(6). A 501(c)(6) organization is a business league, including trade associations and professional associations, devoted to the improvement of business conditions of one or more lines of business of a common interest.

The key elements of an entity of the type recommended, annotated to reflect the current situation, are as follows:

(a) A short Membership Application, which serves as a data collection tool, and as a legal contract binding the applicant to pay dues and abide by the Bylaws and policies of the organization.

(b) The Certificate of Incorporation, which is a document of several pages length that includes those governance and other terms that must be contained in this (publicly available) document.

(c) The Bylaws, which in this case would represent a melding of the existing SGIP Bylaws, various statutory-compliance sections (e.g., designation of fiscal year, principal office and registered agent in the state of incorporation) and additional, beneficial terms made possible by incorporation (e.g., indemnification of officers and directors). The Bylaws would also contain the text establishing the member classes, and the privileges and obligations of each class.

Additional documentation necessary to govern and guide the organization would traditionally be included in a variety of policies and other documents that are not legally required to exist at the time that an entity of the kind contemplated is launched. However, it would be advisable, if possible, to have these documents in place at the time that memberships are solicited. Each would be adopted, and could be amended, by the Governing Board, unless decided otherwise:

(a) Intellectual Property Rights Policy
(b) Antitrust Policy
(c) Various policies that the IRS now expects tax-exempt entities to adopt (Conflict of Interest, Whistleblower, Document Retention, Financial Oversight, Compensation Policy and Joint Venture Participation)
(d) Rules of Procedure for the Committee process

ii) ***ALTERNATIVES CONSIDERED*** – given the current expected scope of activity within the SGIP 2.0, the following were deemed not necessary at this time but may be necessary in the future if conditions arise that warrant their creation

(1) subsidiary foundation: the 501(c)(6) should be qualified to receive donations or grants from most organizations; however if the internal rules of an entity require a different structure from SGIP 2.0, we can decide upon the formation of a foundation or other suitable entity at that time.

Many people believe a 501(c)3 structure is required to receive donations; these folks also argue that even if it only perception, it may be enough reason to form the foundation at the be inception of SGIP 2.0. However, 501(c)(3) organizations are subject to greater oversight at the

state level, which would result in additional compliance and filing obligations not required of trade associations.

(2)   wholly owned "for profit" taxable subsidiary to sell products and services created by SGIP 2.0, or enter into joint ventures with other companies for the ultimate economic benefit of the SGIP members.

The reason for creating such an additional entity would be that under IRS rules, the new activities either could not be undertaken without jeopardizing SGIP's tax exempt status (because they would be activities ordinarily undertaken for profit) and/or because they would generate too much taxable income relative to the membership-fee derived income (which needs to be over 50%). Such an organization is not expected to be needed in the initial phase of SGIP 2.0's existence, but may be easily put in place when and if the need later arises.

f)   Management Structure

i)   *RECOMMENDATION BY THE BSPWG* –

(1)   The day-to-day leadership provided by NIST and its contractor, the SGIP 1.0 Program Administrator, will be transferred in SGIP 2.0 to a full time dedicated Executive Director under the supervision and guidance of the SGIP 2.0 Board of Directors.

This person will ideally be a recognized and well respected senior executive with relevant experience in the Smart Grid industry. An additional value would be someone that is currently involved with the SGIP 1.0.

There has been much discussion about whether this position should be an "outward facing" public relations role or an "inward facing" managerial role. The SGIP 2.0 needs a senior spokesperson to advocate the merits of interoperability across the industry, to create a compelling position (and role) for SGIP 2.0 within the industry and thus provide, and deliver, a compelling value proposition to the SGIP 2.0 membership. This spokesperson will most likely be the Executive Director. If it is the Executive Director, then additional program management is needed to help manage the day-to-day operational aspects of the SGIP 2.0.

To conduct the day-to-day activities of the SGIP 2.0, it is contemplated that the Executive Director will select and manage both a small full time staff and a larger set of outsourced resources. The decision between the amount of staff and the amount of outsourced resources will be based on several factors:

(a)   the amount of revenue ,
(b)   the certainly/predictability of revenue ,

(c) the base level of effort required and the variable level of effort required,

(d) a cost comparison of alternatives including the more subjective assessment of pros/cons of alternatives.

The list of functional areas that must be resourced, managed and coordinated (including both employees and outsourced resources) are:

(a) technical champions(see Section 2.h).(4) for a detailed explanation), and/or technical experts and/or other suitable liaisons with organizations;

(b) administrative support for Board and Membership Committees, Work Groups, Task Forces and related activities

(c) accounting/finance/legal

(d) document/artifact management

(e) membership recruitment, retention, engagement

(f) public relations, communications and education

(g) meetings/conferences logistical planning, support and execution

{NOTE TO DRAFT: because of the size of the SGIP 2.0 membership, can we cost effectively align the dates/locations of the SGIP 2.0 Face-to-face meetings with other existing other conferences rather than our own conferences, such as: industry organizations, NARUC, user groups, other Smart Grid or power industry related conferences, etc.; SGIP 2.0 management will be encouraged to work directly with other organizations in an attempt to secure the best arrangements with conference planning organizations, facilities, etc.}

(2) Because SGIP 2.0 will be pursuing ambitious goals on an ambitious schedule, it will need top-quality staff. Because it will not be able to provide equity incentives (as in for-profit companies), it will need to offer very competitive salary, bonus and benefits to senior staff hires in order to ensure that it can access the talent that it will need.

(3) One advantage to using an out-sourced management company will be the ability to utilize their own back office staff to service many functions, and also their benefit packages, which staff dedicated to SGIP 2.0, will have access to.

ii) *ALTERNATIVES CONSIDERED:*

(1) Total outsourcing: while this remains a viable option, the Board of Directors would need to be convinced that substantial cost savings were immediately achievable to offset:

(a) the enhanced performance that may be achieved by a focused/dedicated effort of a small staff selected with skills directly aligned with SGIP 2.0 activities, and

(b)   any conflicts, perceived or real, that may accompany an outsourced option and jeopardize the 'feel' of independence or neutrality of the operations management function.

(2)   Full time staff only: this may be a viable option for the future, once a stable level of both funding and resource requirements are known, but is believed to not be a practical solution at this phase of the transition.

g)   Governance Structure

i)   *RECOMMENDATION BY THE BSPWG* –

(1)   Although day-to-day activities will be conducted and managed by the Executive Director, the new legal structure requires a Board of Directors that needs to perform all of the roles traditionally associated with such an organization; these roles are essentially being covered by a combination by NIST and/or the SGIP 1.0 Program Administrator. At the same time, the current roles of the SGIP 1.0 Governing Board will also need to be performed.

Normally, a large board is not considered an asset. In order to most efficiently manage the new responsibilities that must be assumed, while preserving the broad representation of stakeholders that is an important virtue of the SGIP, a variety of Board Committees will be formed. In addition, the SGIP 1.0 Plenary Officer positions will be assumed by the officers selected by the Board.

(a)   The number of board seats remains roughly the same to help support/maintain the desired broad representation of membership

(i)   Nominations are submitted from the Membership to Nominating & Governance Committee
(ii)   22 membership categories: each category elects its own
(iii)   3 at-large: elected by full Membership
(iv)   1 Executive Director
(v)   Ex officio
1.   Chairpersons of the following:
a.   Smart Grid Architecture Committee
b.   Smart Grid Testing and Certification Committee
c.   Smart Grid Cyber Security Committee {NOTE name change}
d.   Smart Grid Implementation Methods Committee
2.   2 government:
a.   NIST
b.   DOE

(b)   Responsibilities: **[NOTE TO DRAFT: most of these are a direct lift form the existing SGIP 1.0 documents]**

(i)   Guide the SGIP in executing its mission of developing standards-based interoperability technology and best practices by integrating the needs, ideas and priorities expressed by a broad Stakeholder base;

(ii)   Approve work program for the SGIP, including formation of Priority Action Plans (PAPs);

(iii)   Provide guidance for SGIP to recommend standards based on SGIP activities;

{NOTE TO DRAFT: this is a direct lift from existing SGIP charter/bylaws, but it is somewhat unclear}

(iv)   Ensure SGIP effectively maintains and evolves the NIST/SGIP Smart Grid Conceptual Model to provide more detail and depth so it can serve as a reference model for implementation architectures

(v)   Engage and encourage Stakeholders to agree on a common path toward achieving standards-based interoperability using the conceptual and reference models;

(vi)   Engage Stakeholders to encourage growth in the use of standards-based architectures and implementation designs;

(vii) Oversee the activity of the standing Membership Committees:
1.   Smart Grid Architecture Committee
2.   Smart Grid Cyber Security Committee   {NOTE name change}
3.   Smart Grid Implementation Methods Committee
4.   SGIP Testing and Certification Committee and framework.

(viii) Elects from the Board members:
1.   Chairperson,
2.   Vice-Chairperson & President (formerly Plenary President),
3.   Vice-Chairperson (formerly the Plenary Vice Chairperson),
4.   Secretary
5.   Treasurer

(ix)   approves annual SGIP 2.0 business plan

(x)   review, modify if needed and approve recommendations from Board Committees as defined below

1   (xi) Board of Director members should sit on at least one Board
2   Committee but not more than two.

(2)   Executive Committee of the Board

        (a)   Members are elected by the majority of the Board

        (b)   [5] voting seats plus Executive Director
               (i)   Must include the Chairperson
               (ii)   Eligibility:
                      1.   Board members only
                      2.   Other qualifications: <TBD>

        (c)   list of responsibilities
               (i)   Oversees development of the detailed annual SGIP 2.0 Business Plan, including:
                      1.   Long range strategic plan,
                      2.   [5] year financial forecast
                      3.   1 year detailed operating budget, and
               (ii)   Oversees the overall operations of SGIP 2.0
              (iii) Hosts an annual face-to-face meeting with the following to present the Business Plan and receive feedback:
                      a.   NIST (and the NIST Smart Grid Federal Advisory Committee that will provide NIST with its perspective)
                      b.   An open meeting for each stakeholder category (or some combination thereof) led by the Executive Director and the Board Member representing that stakeholder category.
                      c.   Other organizations as deemed appropriate by the committee

              (iv) Monitor SGIP 2.0 financial performance
              (v)   Executive Director performance review and compensation
              (vi) Review proposals for new revenue sources
              (vii) Review and approve the annual report to members
              (viii)Responsible for international Smart Grid affiliations {formerly the International TF}

(3)   Technical Committee of the Board

        (a)   Members are elected by the majority of the Board

        (b)   [10] voting seats
               (i)   one must be the Vice Chairperson & President

               (ii)   one must be the category 5 Board member- Electric Utilities, both IOU and publicly owned

               (iii) one must be either the category 6 (MUNI) or category 7 (REA) Board member

               (iv) Eligibility:
                   1.   At least 2 others must be Board members
                   2.   Platinum Members only
                   3.   <TBD>

        (c)   Ex officio:
               (i)   NIST representative
               (ii)   DOE representative

        (d)   List of responsibilities:
               (i)   Routinely, and in a timely manner, prioritize and allocate the use of the technical expertise funded in the annual budget based on requests from PAPs, DEWGs, etc.
               (ii)   Oversight of the entire PAP process
               (iii) Oversight of the PMO function
               (iv) Oversee the operation of the Membership Committees and subcommittees:
                   1.   Smart Grid Architecture Committee
                   2.   Smart Grid Testing and Certification Committee
                   3.   Smart Grid Implementation Methods Committee
                   4.   Smart Grid Cyber Security Committee {NOTE name change}
                   5.   Electromagnetic Interoperability Issues Work Group
                   6.   DEWGs

    (4)   Audit Committee of the Board

        (a)   Members are elected by the majority of the Board

        (b)   [5] voting seats – Board members only
               (i)   Must include the Treasurer
               (ii)   Eligibility: <TBD>

        (c)   List of responsibilities:
               (i)   select external auditor review and
               (ii)   approve quarterly financial statements
               (iii) review/approve annual financial report
               (iv) selection of D&O insurance

    (5)   Nominating & Governance Committee of the Board

        (a)   Members are elected by the majority of the Board

        (b)   [5] voting seats – Board Members only
               (i)   Eligibility: <TBD>

(c) [5] non-voting seats
  (i) Platinum Members only
  (ii) Eligibility: <TBD>

(d) List of responsibilities:
  (i) Assumes the work performed by the SGIP 1.0 Bylaws and Operating Plan Work Group
  (ii) Reviews slate of nominees for various positions and develops slate of candidates to fill open positions
  (iii) Assumes the work performed by the SGIP 1.0 Intellectual Property Rights Work Group

(6) Membership & Marketing Committee of the Board

(a) Members are elected by the majority of the Board

(b) [5] voting seats – Board Members
  (i) Eligibility: <TBD>

(c) [5] non-voting seats
  (i) Platinum Members only
  (ii) Eligibility: <TBD>

(d) List of responsibilities (assumes expanded roles of CMEWG):
  (i) Oversees the membership recruitment, retention and engagement function
  (ii) Oversees the marketing, communication and education function
  (iii) Oversees the F2F meeting plan and execution

In summary, the Board of Directors and the Board Committees provide oversight and guidance to the organization managed by the Executive Director, and for clarity, they do NOT have day-to-day operational responsibility. Day-to-day operations are managed by the Executive Director using a combination of hired staff, outsourced resources and/or member volunteers.

ii) **ALTERNATIVES CONSIDERED** –
  (1) utilize the existing structure of SGIP 1.0

  (2) not all supported the identified "required" members of the Technical Committee, alternatively supported the "required" membership of manufacturing firms or IT companies.

h) **Membership Activity**

i) *RECOMMENDATION BY THE BSPWG –*

  (1) Same as SGIP 1.0 (except for any impacts of item (4) below):

1   (a)   Smart Grid Architecture Committee
2   (b)   Smart Grid Testing and Certification Committee
3   (c)   Smart Grid Implementation Methods Committee
4   (d)   Smart Grid Cyber Security Committee {NOTE new name}
5   (e)   Electromagnetic Interoperability Issues Work Group

6

7   (2)   Domain Expert Working Groups (DEWGs) will transition to the 'industry
8   norm' of being self-led and self-managed multi-stakeholder networking
9   communities on specific topics – H2G, B2G, etc. The common
10   community aspect could lead to separate meetings/events, special topic
11   sponsorships, etc. Outputs from these communities could be position
12   papers, standards gaps for the Technical Committee of the Board to
13   consider, etc.
14   (a)   SGIP 1.0 had either NIST or the Program Administrator providing a
15   technical expert to lead and/ or facilitate each DEWG

16   (b)   In SGIP 2.0, each DEWG will elect a Chairperson, vice-chairperson
17   and Secretary from its Membership (eligibility requirements defined
18   by membership level); these positions will lead the activities of each
19   DEWG. The selection of well-qualified chairmen, whose employers
20   have committed to allow them to dedicate the time these positions will
21   demand will ensure that the DEWGs will continue to function
22   efficiently. NIST expects it will continue to be able to provide a similar
23   level of direct support from NIST personnel for leadership and
24   facilitation roles as it does in SGIP 1.0.

25
26
27   **{NOTE TO DRAFT: is there work product that can be produced**
28   **by a DEWG that has value to the industry, the regulatory**
29   **community, and others such as: white papers, lessons learned,**
30   **open forum to ask questions/get answers from experts? Are**
31   **there any potential revenue sources?}**

32
33   (3)   Priority Action Plans (PAPs)
34   (a)   PAP Proposal Process remains the same except:
35   (i)   Board of Directors replaces the Governing Board
36   (ii)   Technical Committee of the Board replaces the Plenary
37   Officers
38   (iii)   [NOTE TO DRAFT: what is the role of the Executive Director?]
39   (b)   PAP Lifecycle Process remains the same except:
40   (i)   Board of Directors replaces the Governing Board
41   (ii)   Technical Committee of the Board replaces the Plenary
42   Officers
43   (iii)   [NOTE TO DRAFT: what is the role of the Executive Director?]

44
45
46   (4)   Technical Champions:
47   (a)   in SGIP 1.0, NIST has provided, either directly with its own staff or
48   through its Program Administrator, up to [15?] Technical Champions at

any single point in time to accelerate SGIP activities and provide the
following levels of support to SGIP activities:

(i) Subject Matter Experts – technical writing, specification development, etc.

(ii) Responsible for all the day-to-day activities of the PAPs and other subprojects

    1. Follow Project Management Office processes developed for managing SGIP projects

    2. Provide current status of SGIP projects on Tike pages

    3. Manage/chair technical working groups, tiger teams, task teams, and ad-hoc teams

    4. Develop plans and presentation materials for meetings

    5. Execute the project objectives

    6. Identify, communicate, and escalate issues and concerns when necessary

    7. Coordinate with chairs and NIST leads regularly

(iii) Provide technical expertise and specialized, targeted skills to support specific activities within the SGIP

(iv) Coordination and embedded resources for SSOs/SDOs on standards development efforts

(v) Develop technical reports, white papers, and reviews for standards-related efforts

(b) In SGIP 2.0,

(i) NIST expects it will continue to be able to provide a similar level of direct support from NIST personnel for leadership and facilitation roles as it does in SGIP 1.0

(ii) SGIP 2.0 will encourage its Members to provide "volunteer" Technical Champions as needed

(iii) The Board of Directors will determine the level of funding available to hire (directly or through contract) Technical Champions

(iv) Based on recommendations from the Executive Director (or the Executive Director's staff), the Technical Committee of the Board will prioritize the use of the funds available for Technical Champions based on requests from the various SGIP activities

(v) Supplemental funding for specific areas/topics -

If the Technical Committee of the Board has not provided funding for use of a Technical Champion on a specific project, a single Member (or Group of Members) may provide supplemental funding earmarked for a specific area/topic provided that ALL OTHER ASPECTS OF THE SGIP PAP PROPOSAL AND LIFECYCLE

PROCESSES ARE FOLLOWED (AND NO ADVANTAGE IS GIVEN TO THOSE FUNDING THE CHAMPION). In the appropriate case, the Technical Committee will consider accepting dedicated employees (at least ½ time) in lieu of membership fees.

{NOTE TO DRAFT: details for the process to accept and allocate the supplemental need further definition; examples are: OpenSG acceleration projects funding (like ASAP) or EPRI's supplemental funding concept.}

(5) Business dialogue/activity – the membership of SGIP is very unique in that it encompasses a very broad set of stakeholders across the entire Smart Grid value chain. SGIP 2.0 should explore the interest of the members to broaden the membership activity to include items that are more "business and/or market oriented", such things as:

    (i) Sharing of "lessons learned" from the implementation of Smart Grid projects;

    (ii) Sharing/development of business cases for Smart Grid implementation;

    (iii) Shared promotion of Smart Grid [Interoperability] (including common definitions, generic benefits, etc.) through such activities as creation of a speakers bureau, creation of common marketing materials for use by members, etc.

    (iv) Shared education on the value of the Smart Grid for consumers and other stakeholder groups;

    (v) And other activities typically conducted by other consortia that is of specific benefit to its membership.

ii) ALTERNATIVES CONSIDERED –

(1) A level of Technical Champion support similar to SGIP 1.0 was discussed and deemed too costly, at least until further clarity of the level of revenue is achieved.

(2) The "supplemental funding" concept is still a very open topic. The concern centered on the ability for specific members to have undue advantage in promoting activity specific to themselves. However, the requirement to adhere to the existing proposal and lifecycle processes is deemed as an adequate counterbalance.

(3) Some believe that work products from the DEWGs should be available to all members without charge.

i) SGIP & the Standards Organizations

i) RECOMMENDATION BY THE BSPWG –

(1) SGIP does not currently set standards; the work of the SGIP results in the "shaping" of standards that are created, or need to be created, by many other existing organizations.

(2) SGIP identifies important applications or activities within the Smart Grid (e.g. Electric Vehicle car charging) then conducts a detailed assessment of how that application/activity is performed, including: what existing standards, whether there are technological gaps that need to be filled by a new standard or an extension to an existing standard (or are there complementary standards involved that handle requirements differently)., In either situation new requirements and all relevant stakeholders are identified with the sole purpose of collaborating to ensure interoperability of all of the devices being used,;

(3) In SGIP 1.0, the network of Technical Champions serves as a primary conduit of information to the standards organizations by virtue of their pre-existing relationships with those organizations. This informal, but effective, communication method has served SGIP well and is credited by NIST as being a true catalyst in getting the SGIP message across to the impacted standard setting organizations;

(4) If SGIP 2.0 does not retain the services of the same Technical Champions as in SGIP 1.0, then SGIP 2.0 will need to develop a method for effectively working with the affected standards organizations to ensure that the requirements developed by the SGIP are adequately addressed and implemented..

ii) ***ALTERNATIVES CONSIDERED -***

(1) SGIP 2.0 should proactively identify personnel within its membership organizations who have a strong pre-existing relationship with one or more of the relevant standards organizations; and determine a mutually beneficial arrangement for the use of those personnel to provide the needed "linkage" between that organization and SGIP 2.0 on an "as needed" basis.

(2) Creation of formal relationships, including official Memorandums of Understanding, between SGIP and each standards organization was discussed but considered as likely to not be effective by many. However, if Technical Champions are not or cannot be funded, entering into liaison MOUs with selected SDOs may be a reasonable alternative.

j) **Regulatory Advisory Council {NOTE: this section was prepared by Paul Centolella}**

i) ***RECOMMENDATION FROM THE BSPWG:*** modeled after the EPRI Advisory Council, created in part to help enhance the value proposition for SGIP 2.0 members

{NOTE TO DRAFT: Paul Centolella has already discussed the concept with NARUC leadership and has received a favorable first impression and encouragement to craft a detailed proposal for both groups – SGIP and NARUC – to consider}

(1) Purpose: provide direct access to and increased involvement by electric industry regulators. The creation of this Regulatory Advisory Council will lead to increased involvement by utility regulatory commissioners and commission staff.

(2) Membership
  (a) NARUC appoints ten state regulatory commissioners and/or senior state regulatory commission Staff members
  (b) Others: <TBD, including FERC>

(3) What do we use this group to do? Provide regulatory and economic policy advice and direction to the SGIP. Ensure that regulators are informed regarding the development, status, and benefits of standards based approaches to modernizing the power grid.
  (a) Interaction with the Board of Directors: details <TBD>
  (b) Interaction with the Business and Policy Domain Expert Working Group and other Working Groups addressing policy related issues: details <TBD>
  (c) Interaction with the broader Membership: details <TBD>

(4) To enable/facilitate participation, SGIP will pay all travel expenses for state commissioners and staff who are NARUC appointed members of the Regulatory Advisory Council and/or elected members of Standing Committees for attendance at SGIP F2F meetings

ii) *ALTERNATIVES CONSIDERED* -
  (1) do not form such a council
  (2) wait to form such a council under after SGIP 2.0 is formed and is operational

k) **2013 Budget**

i) *RECOMMENDATION BY THE BSPWG –*

The 2013 SGIP 2.0 operating budget is very difficult to estimate at this time. Work will continue on this throughout the BSP formation process.

(1) The following table was prepared using information from the SGIP 1.0 Program Administrator. The BSPWG discussed whether tasks were:
  (a) High , medium or low priority
  (b) Whether the expected level of effort should be more, less or the same as compared to 2011
  (c) Recommended primary provider of that support
    (i) SGIP –either staff of contractors

1   (ii) NIST personnel
2   (iii) Member volunteers
3

4   (2) The BSPWG will continue to assess the draft budget. It should be
5   realized that forecast expense will continue to evolve until the
6   implementation phase of the transition is underway; however, major
7   elements will begin to gel in the very early stages of implementation.
8
9
10
11

Major SGIP Activities Areas	2013 Priority (High, Medium, Low)	2013 Estimated level of effort relative to 2012	Recommended Support Resources (SGIP-funded, volunteer, NIST)	Estimated 2013 $$	Comments
Governing Board Activities					
GB Meetings	high	same	SGIP		important
GB Working Group Support	medium	less	SGIP		CMEWG funded in line 8
GB Planning & officers' support	high	same	SGIP		need to fund leadership
Operations Activities					
Executive Management - Officers					
SGIP Executive Leadership: CEO type, VPs, Secretary, Treasurer	high	more	SGIP/Volunteer		need to fund leadership
Legal: contracts management, agreements	high	more	SGIP		important
Financial: funds management	high	more	SGIP		important
Travel management	low	same	Volunteer		may be source of savings at some point
Membership Services					Includes $250k from CMEWG recommendation
Promotion/PR/Marketing to expand SGIP	high	more	SGIP		drives funding
Information Services: member portal, voting services, document management	high	more	SGIP		basic level of integrated service
Dues collection	high	more	SGIP		important
Event Management					
Event planning and logistics	high	same	SGIP		minimum of two F2F/annually
SGIP Plenary meetings support	high	less	SGIP		minimum of two F2F/annually
Program Management					
Program Coordination	High	Less	SGIP		
CSWG technical support	high	same	NIST/Volunteers		important functions
SGAC technical support	high	same	NIST/SGIP/Volunteers		
IMC Support	high	same	NIST/SGIP/Volunteers		
Testing & Certification Services (IPRM etc.)	high	same	NIST/SGIP/Volunteers		important for future (funding, value proposition likely)
PAPs Lifecycle support	high	less	NIST/SGIP/Volunteers		scott
Working Group Support (DEWGs etc.)	low	less	NIST/SGIP/Volunteers		reset number with SGIP 2.0, regulate the number of WGs supported going forward, consider them as "forum" - dialogue among like-minded stakeholders
International presence and coordination	high	more	NIST/Volunteers		needs attention, but not dire
AUDIT					
D&O Insurance					
Advisory Board Travel					
Legal					
Total				$ 5,375,500	

12
13

26

1 ii) ***ALTERNATIVES CONSIDERED*** – although it is acknowledged that the initial
2   base level budget will evolve over time, some recommend that the initial
3   target budget that is supported solely by the membership fees be in the $2-3
4   million range.
5
6
7 **l) Revenue Opportunities**
8
9 *i) RECOMMENDATION BY THE BSPWG –*
10
11 (1) General thinking:
      Several sources of revenue have been considered. Many revenue
12   options are still under evaluation. In part due to the SGIP mission and
13   principals identified earlier in this document, there is a strong desire by
14   some to minimize the amount of dues charged to all members. However,
15   dues are a common practice across the industry for organizations such
16   as SGIP 2.0, and it is believed that membership dues are a likely source
17   of substantial revenue in the near term.
18
19
20   The concept is to initially set dues at a level sufficient to cover a base
21   level of work output by SGIP 2.0. As additional sources of revenue
22   materialize, then
23
24 (a) first allow for an increased level of work product until it reaches a
25   level determined acceptable by the Board;
26
27 (b) additional revenue is next applied to build a capital reserve equal
28   to [6] months of operating expenses at an "acceptable level of
29   operation", or some other level as determined by the Board;
30
31 (c) additional revenue can next be applied to reducing membership
32   dues if this would be deemed to result in increased participation
33   without financial consequence to the organization;
34
35 (d) additional revenue is next applied to an increased level of work
36   output by SGIP; and
37
38 **(e)** additional revenue is next applied to reducing membership
39   meeting fees until fees are zero (or at a level deemed satisfactory
40   by the Board).
41
42   **{NOTE TO DRAFT: to maintain a 501(c)6 status, membership**
43   **fees must represent more than 50% of total revenue}**
44
45
46
47

(2) A variety of funding sources are shown in the following a table. The sources have variety of different characteristics.

(a) Desirability: how attractive is this source of revenue? WIN:WIN is rated high, the more a revenue source compromises the mission & culture the lower the rating.
   (i)   ● - WIN:WIN – best case
   (ii)   ◉ - high interest
   (iii) ◉ - medium interest
   (iv)   ○ - low interest

(b) Predictability:
   (i)   Near term – how well can a revenue level be forecasted for commencing Jan 2013?
   (ii)   Long term – how well can annual revenue be forecasted once the source has been developed and is in "maintenance mode"?
   (iii) ● - best predictability
   (iv)   ◉ - high predictability
   (v)   ◉ - medium predictability
   (vi)   ○ - no predictability

(c) Time Frame: this represents how long it will take to commence meaningful revenue from the respective source. A high rating is soon, a low rating is measured in years
   (i)   ● - almost immediate
   (ii)   ◉ - 3 to 6 months
   (iii) ◉ - 6 to 12 months
   (iv)   ○ - > 12 months (maybe years)

   (v)
(d) Potential level: what is the potential funding level from this source:
   (i)   ● - $5,000,000+ per year
   (ii)   ◉ - measured in millions of dollars
   (iii) ◉ - measured in hundreds of thousands of dollars
   (iv)   ○ - unknown

Revenue Type	Desirability	Predictability Near term	Predictability Long term	Time Frame	Potential Level
Membership dues	○	◉	◉	●	◉
Advertising/Sponsorships	●	◉	◉	◉	◉
Grants	●	◉	◉	◉	◉
Document Access	◉	○	◉	◉	○
Electricity Surcharge	◉	○	●	○	●

Testing & Certification	◉	○	◉	○	○
Fee per device	◉	○	◉	○	●
SGIP Services	◉	○	◉	◉	◉

(3)   Membership Dues

(a)   It is felt that to support the culture that has been established in SGIP 1.0, namely to enable and facilitate broad participation across the entire Smart Grid Eco-system, that a tiered annual dues structure based on type and size organization, is appropriate. Furthermore, it is believed that three membership categories, with various levels of privileges is both appropriate and supported by industry practices of other similarly situated organizations

Member Category	Global Revenue	Platinum	Gold	Silver
For profit	>$1 billion	$30,000	$15,000	$7,500
For profit	$500M to $1B	$20,000	$10,000	$5,000
For profit	$100M to $500M	$15,000	$ 7,500	$2,750
For profit	$ 50M to $100M	$10,000	$ 5,000	$2,500
For profit	$ 10M to $ 50M	$ 4,000	$ 2,000	$1,000
For profit	$ 500K to $ 10M	$ 2,000	$ 1,000	$ 500
For profit	<$500,000	$ 1,000	$ 500	$ 250
Non-Profit	>$10 million	$ 4,000	$ 2,000	$1,000
Non-Profit	$500K to $10M	$ 2,000	$ 1,000	$ 500
Non-Profit	<$500K	$ 1,000	$ 500	$ 250
Universities	ALL	$ 4,000	$ 2,000	$1,000
Foreign Gov't	n/a	$ 4,000	$ 2,000	$1,000
Federal Gov't	n/a	$ 4,000	$ 2,000	$1,000
State Gov't	n/a	$ 2,000	$ 1,000	$ 500
Municipal Gov't	n/a	$ 1,000	$ 500	$ 250

(b)   Membership Levels – the following table shows the different levels of features and benefits in three categories:
(i)   Voting & Governance
(ii)   Participation
(iii)   Marketing & Materials

A= Platinum
B= Gold
C= Silver

Category	Privileges	A	B	C
Voting & Governance				

	Right to stand for Board of Directors	X		
	Vote for Board of Directors	X	X	
	Nominate Board of Directors	X	X	
	Observe Board of Directors Meetings	X		
	Access to Board materials	X		
	Representatives per membership (but only one vote)	∞	5	2
	Vote on technical issues in committees, work groups and the general membership	X	X	
	Vote on general issues presented to the membership	X	X	X
Participation				
	Right to stand for membership committee chair election	X	X	
	Right to stand for membership committee vice chair election	X	X	
	Right to stand for membership committee secretary election	X	X	X
	Right to participate in membership committees	X	X	X
	Right to propose creation of subcommittees (e.g., DEWGs/PAPs)	X	X	
	Right to stand for membership of Board Committees: Technical and Marketing & Membership, and Nominating & Governance Board Committees	X		
	Eligible for invitation to participate in Technical, Marketing & Membership, and Nominating & Governance Board Committees	X	X	
	Eligible to be a full member in Board Committee working groups or task forces	X	X	
	Right to serve as liaison to SDOs/alliances	X	X	
	SGIPortal Online Account	X	X	X
Marketing & Materials				
	Complimentary Membership meeting registration	X		
	Discounted Membership meeting registration	X	X	
	Right to sponsor at membership meetings	X	X	
	Discounted booth space at Membership meetings	X	X	X
	Complimentary publications	X		
	Discounted publications		X	X
	Receive regulatory updates	X	X	
	Participation in monthly analyst briefing	X	X	
	Relevant press release inclusion on SGIPortal	X	X	
	Logo inclusion on SGIPortal	X	X	
	Membership recognition on SGIPortal	X	X	X
	Use of SGIP member logo (within guidelines)	X	X	X
	Right to advertise on SGIPortal (both public and member only websites)	X	X	X
	Priority rights to provide sponsorships at meetings	X		
	Free inclusion in SGIPortal online solutions source (product/service listings)	X	X	
	Right to be billed as "Founding Member" (if joining at	X	X	X

				inception)				
				Receive twice monthly SGIP newsletter			X	X	X

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14   (c)   Comparison – the following table provides a comparison with
15   other "similarly situated" organizations as SGIP
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SGIP 2.0	The Green Grid	UPVI Alliance	EnOcean Alliance	Near Field Communication Forum	ZigBee Alliance	OASIS (1)	Object Management Group (OMG)
Platinum $30,000	Contributor Membership: $25,000	Sponsor Membership: $25,000	Promoter Membership: $35,000	Sponsor Membership: $50,000	Promoter Membership: $50,000	Foundational Membership: $46,000 - $50,000	Contributing Membership: $11,000 - $75,000 (2)
Gold $20,000	General Membership: $5,000	Contributor Membership: $7,500	Participant Membership: $6,000	Principal Membership: $25,000	Participant Membership: $9,500	Sponsor Membership: $9,500 - $16,000	Domain Membership: $5,500 - $37,500 (2)
Silver $10,000	Associate Membership: $950	Supporting Membership: $1,000	Associate Membership: $500	Associate Membership: $10,000	Adopter Membership: $3,500	Contributor Membership: $3,200 - $8,000	Platform Membership: $5,500 - $37,500 (2)
	Individual Membership: $400	N/A	N/A	Implementer Membership: $5,000	N/A	N/A	Influencing Membership: $3,000 - $21,500 (2)
	N/A	N/A	N/A	Non-profit Membership: $1,500	N/A	Academia and Governmental Membership: $1,000 - $44,000	Flat Fee Memberships: $550 - $12,850 (3)

17   **(1)** Membership fee related to number of company employees. Academic and government fees range from $1,000 - $44,000

18   (2) Membership fee related to annual gross revenue of the company

19   (3) Flat fee memberships are for Government, University and trial memberships

20   (d) Implementation: (initial thoughts)
21   (i)   the existing Governing Board member in each category
22   should serve as a "campaign chairperson" to help each
23   existing member in their category build a case for their
24   respective company and seek approval of participation in
25   SGIP 2.0. Resources from BSPWG and CME should be
26   available to help with the "pitch" development.
27   (ii) A more general and broad membership campaign also needs
28   to be design and launched.

(4) Sponsorships/Advertising Revenue –

    (a) General Thinking: this a common and readily available source of revenue. Suppliers, vendors and professional service providers routinely pay to enhance the visibility of their firm to industry professionals such as those that make up the SGIP.

    There are several different approaches an organization such as SGIP 2.0 can take: web site advertising (both on the public and "member only" portion of the site; conference "sponsorships", either a general event sponsorship (which would include a listing on all media used and/or for particular aspects or services for the event: "reception sponsored by: ABC company"; "internet access provided by: ABC company"; "dial-in & GoToMeeting services provide by: ABC company".

    Until we have better visibility on everything pertaining to SGIP 2.0, the initial thought is to sell simple "quarterly" sponsorships

    (b) use of proceeds: general purpose funds, not dedicated to any specific purpose

    (c) suggested sponsorship categories:
        (i) Level A: 2@$50 k/qtr = $400k/yr
        (ii) Level B: 4@$25k/qtr = $400k/yr
        (iii) Level C: 6@$15k/qtr = $360k/yr
        (iv) Level D: 8@$10K/qtr = $320k/yr

        {NOTE TO DRAFT: the above price per level and number of sponsors in each level was derived from two conferences with attendees ranging from 150 to 250 people}

        (v) benefits in each sponsorship category
            1. web site placement
            2. placement on written materials
            3. placement on correspondence to members
            4. conference advertising
            5. [?] ability to address membership at the conference with an "approved" and relevant topic

    {NOTE TO DRAFT: more work needs to be done to define the details}

    (d) implementation: TBD

(5) Grants – the SGIP's work will lead to societal benefit. Many foundations and endowments provide funding to programs that result in one or more

of the following: environmental benefit; energy independence; improved energy efficiency; education of consumer or regulators; etc.

    (a) Sources;
        (i)   Primary target: endowments & foundations
        (ii)   Secondary target: federal government
    (b) use of proceeds: proceeds will likely need to be directed toward specific activities, such as:
        (i)   educational material,
        (ii)   funds to enable discounts for specific membership categories, such as:
            1.   municipal utilities or cooperatives
            2.   universities
        (iii) support the involvement of the regulators
        (iv) international expansion
    (c) it is believed there are numerous potential sources of this funding; success in this category requires use of expertise with demonstrated experience:
        (i)   identification of sources that match the SGIP mission or activities,
        (ii)   proposal writing, and
        (iii) ability to close.
    (d) Implementation:
        (i)   Find a professional that has connections to the grant process of many large endowments and foundations
        (ii)   <TBD>

{NOTE TO DRAFT: SBU has already been in contact with a person that used to lead grant programs for several large foundations. There was both keen interest, and an optimistic outlook on the prospects of success.}

(6) Document Access fees –many industry and professional organizations require additional fees to obtain access to various work product and/or documents. Because SGIP 1.0 was Federally funded, SGIP 1.0 provides free public access to all of the work product and documentation.

An assessment should be undertaken to determine the scope of the work product and documentation generated by SGIP 2.0 to determine the revenue stream potential from this source.

[NOTE TO DRAFT: some SGIP members at the Charlotte F2F meeting stated they would find it extremely valuable if membership in SGIP provided them access to standards materials for either reduced fees or free. Could a more formal relationship between SGIP 2.0 and each relevant standard organization include a mutually beneficial "bulk" payment that would provide SGIP 2.0 members "cost advantaged" access to select materials?]

(7) Electricity Surcharge

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2   (a)   General thinking –
3   (i)   the ultimate beneficiary of interoperability is the customers
4   that use electricity. This benefit will result from a variety of
5   areas:
6   1.   Reduced cost of some equipment deployed in the
7   electric system due to an increased number of options to:
8   a.   solve a problem in the grid, and/or
9   b.   enable a service, and/or
10   c.   source the device
11   2.   Due to increased grid efficiency, reduced cost due to
12   decreased near term need for new power plants and/or
13   new transmission and/or distribution lines
14   3.   Due to increased connectivity and increased information
15   exchange the grid, reduced costs due to an improved
16   ability to:
17   a.   self-manage energy usage and costs; and
18   b.   sell electricity to the grid, and/or
19   4.   receive payments for a grid operator to utilize customer
20   premise equipment to help support grid operations
21   a.   demand response
22   b.   frequency regulation
23   (ii) Many believe that current regulations do not properly
24   incentive utilities to make Smart Grid investments, including
25   participation in SGIP
26   (iii) A surcharge on electricity would put the cost of SGIP support
27   directly on those that will ultimately benefit from its existence
28   (iv) Potentially relevant precedence exists;
29   1.   FERC funded the former Gas Research Institute with a
30   surcharge on interstate natural gas in the amount of
31   several hundred millions of dollars annually.
32   2.   Many state regulators allow the recovery of EPRI dues in
33   electricity rates; total EPRI dues are several hundred
34   millions of dollars annually
35
36   (b)   Use of proceeds:
37   (i)   If federal –
38   1.   General purpose funds, and/or
39   2.   A specific purpose negotiated with FERC
40   (ii) If state –
41   1.   General purpose funds, and/or
42   2.   A specific purpose negotiated with FERC
43
44   (c)   A surcharge of .000155 ¢ per Kwh on all of the US electric
45   consumption would produce $6 million annually {based on 2010
46   total sales of electricity in the US as reported by the EIA}
47
48   (d)   Implementation:
49   1.   Initiate a discussion with FERC
50   2.   Initiate a discussion with NARUC

(8)   Testing & Certification:

(a)   General thinking:
The SGIP has developed Testing and Certification program recommendations that provide guidance and best practices for the operation of testing/verification programs. The SGIP's Interoperability Process Reference Manual (IPRM) provides this guidance. These recommendations are based on best practices as well as identified gaps in current industry programs supporting Smart Grid standards, as well as practices used in other high technology industries. The SGIP believes that implementation of these recommendations in industry test programs will result in higher quality and more robust testing programs that provide end user confidence through rigorously tested products and accelerated availability of products that have demonstrated interoperability.

A proliferation of IPRM-based programs will lead to efficiency in product testing, and resultant cost savings via the use of 3rd party independent test labs and certification bodies that have achieved accreditation through commercially available industry services as is common in many other industries. The SGIP is not planning to perform product conformance and interoperability testing itself, but will rely on a network of qualified Interoperability Testing and Certification Authorities (ITCAs). The SGIP has the opportunity to take a leadership and coordination role in oversight and direction of this network of ITCAs to help assure that their programs are meeting the expectations of utilities and end users deploying Smart Grid technologies.

A SGIP Approved ITCA Program business model is based on the fact that with broad acceptance and demand by utilities and end users for IPRM-based programs, the supporting ITCAs, labs, certifiers and others in the testing and certification ecosystem stand to derive a strong revenue stream as a result of the SGIP's efforts. The SGIP can provide a "watchdog" or oversight role in assuring that these benefiting organizations are indeed providing the expected services and maintaining the required qualifications to carry the designation as an "SGIP Approved Program". A defined set of criteria, documented assessment process, and a schedule of participation fees can be developed by the SGIP. These should be developed in close consultation with the end customers that will benefit from such a program. Depending on the ITCA/lab/certifier scope of services, participation fees can range from $5,000 to $50,000 annually. A fee schedule should be graduated so that those

ITCA programs that benefit most incur a higher participation fee, while smaller, low-cost programs incur fees scaled to their programs.

SGIP SGTCC is currently working with approximately six ITCAs. Over the long term, it is likely that SGIP SGTCC may work with 20-25 ITCAs with a likely maximum number of ITCAs around 50.

    (b) Use of proceeds: general purpose funds
    (c) A fee of $10,000 per year could produce $60k to $500k per year.
    (d) Implementation: <TBD>

  (9) Fee per device

    (a) General thinking – set a fee for every device that is SGIP "Interoperability Certified" ("IC").

The concept is that devices that Smart Grid devices that are IC should be more attractive to the market place, and if more attractive then these devices can attract an improved price (than without the label). The increased market attractiveness may be derived from:
    (i) The label indicates the device complies with SGIP approved standards; thus reducing the need for testing and compliance by the purchaser
    (ii) SGIP approved standards deliver the benefits of interoperability.

    (b) Use of proceeds: general purpose funds
    (c) Suggested level of fee per device: <TBD>
    (d) Implementation: <TBD>

  (10) SGIP Services

    (a) General thinking – the SGIP brings together a substantial amount of skilled talent within the Smart Grid industry. That talent and knowledge could possibly be harnessed into a variety of professional services (ranging from professional education to consulting services) and product offerings (subscriptions for newly formed "hot topic" reports from industry insiders to ??).
    (b) Use of proceeds: general purpose funds
    (c) Suggested revenue levels:
    (i) Member contributors could receive credits toward purchases and/or conference attendance
    (ii) <TBD>
    (d) Implementation: <TBD>

  ii) ***ALTERNATIVES CONSIDERED:***
    (1) Some believe that membership dues should be substantial and not reduced in any scenario (i.e. not be reduced by additional revenue

1   sources) and that SGIP 2.0 should strive to be a truly valuable
2   organization that is worthy of a meaningful annual fee from its members.
3

4   (2)   Some believe there is a revenue opportunity associated with SGIP 2.0
5   "logo items" made available thru an on-line store, such as: caps, golf
6   shirts, coffee mugs, ties, button down shirts, etc.
7

8   (3)   Some believe that attempting to create revenue streams from testing &
9   certification activities and/or devices may have a negative effect on the
10   pace of deployment by the industry, and may not realistically produce
11   any meaningful revenue in the near term.
12

13   (4)   Some believe that all work product from SGIP 2.0 should be free to all
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19   6)   IMPLEMENTATION PLAN
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21   ***** *more to come later in the process* *****

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