**TO:** NAESB Board Retail Structure Review Committee Members

**FROM:** NAESB Board Retail Structure Review Committee Members

**RE:** Draft *Substantive Section* of the Board RSRC Report

**DATE:** November 27, 2018

**COMMITTEE DISCUSSION**

Mission: The NAESB Board Retail Structure Review Committee (Board RSRC) was reconstituted by NAESB Chair Michael Desselle to address concerns around maintaining the 40 member NAESB By-Laws Requirement.

Over the course of # conference calls, the NAESB Board Retail Structure Review Committee (Board RSRC) discussed several options to boost participation in the Retail Markets Quadrant (RMQ). The areas explored are as follows;

* Discussion Concerning Potential Reduction of NAESB RMQ Membership Fees
* Discussion Regarding Modifications to the NAESB IPR Policy
* Discussion on Feedback from State EDI and CBT Working Group Members
* Discussion on Green Button Efforts
* Discussion on OpenFMB Efforts
* Discussion on Merger with WEQ and WGQ
* Discussion on Changing the Name of the RMQ

The following paragraphs describe the discussion regarding options that were considered by the Board RSRC in the making of this proposal to the NAESB Board of Directors.

**Discussion Concerning Potential Reduction of NAESB RMQ Membership Fees**

Based on feedback received from several state Electronic Data Interchange and Commercial Business Transaction working group participants, the cost of a NAESB membership may be perceived as outweighing the value to many retail market participants. The Board RSRC has discussed the possibility of a discounted rate for all RMQ members, a discounted rate for specific RMQ projects, a tiered membership structure, and/or an introductory pilot program that would provide a reduced rate for new members for the period of two years or less. Additionally, the committee agreed that highlighting the value proposition that a NAESB membership provides to retail entities would prove beneficial, especially for those potential members who need to propose the expenditure to others at their organizations.

In examining the pros and cons of a reduced rate, either for all quadrant participants, for specific projects, or on an introductory timeline, several considerations were discussed.

Pros

* Reduced membership fees, for some or all of the RMQ members, may encourage increased membership in the quadrant.
* Reduced membership fees, for some or all of the RMQ members, may increase the participation of new facets of the industry - software vendors, EDI state working groups, suppliers, etc. - which, in turn could generate memberships from those new areas.
* A discounted rate for all members may attract new members and retain current members.
* A discounted rate for only new members may bring in new perspectives to the standards development process.
* A discounted rate for specific subcommittee/task force efforts could result in increased participation and membership.
* A tiered membership structure could allow for payments based on revenue generation and be considered more “fair” to those companies on the bottom end of the revenue spectrum.
* An introductory pilot program would allow nonmembers who were previously wary of the price to realize the value of a NAESB membership first hand.

Cons

* A reduced membership fee, for some or all of the RMQ members, is not guaranteed to increase membership or participation. Currently, individuals who are nonmembers have the opportunity to participate in NAESB meetings for $100 for meetings of 4 hours or less and $300 for meetings lasting more than 4 hours. Alternatively, an individual non-member may pay an annual subcommittee/task force fee of $1000. This nonmember opportunity, initiated to increase participation, is rarely utilized.
* A reduced membership rate, for some or all of the RMQ members, could lead to limitations on access to the NAESB website and work products. Ex: Limitation of access to the website would avoid new members joining the RMQ to gain access to the WEQ or WGQ business practice standards on the website.
* A reduced membership rate, for some or all of the RMQ members, could lead to limitations on eligibility for Board of Directors and Executive Committee seats.
* A reduced membership fee for only new RMQ members may create discord with existing membership and incentivize drops or lapses in membership.
* A reduced membership fee for all RMQ members may result in a slight decrease to NAESB revenue. As of February 2018, the WEQ comprises 45% of the organization with 134 members, the WGQ constitutes 41% of membership with 123 members, and the RMQ makes up 14% of the NAESB membership with 41 members.
* A tiered membership based on revenue may create discord in the existing membership, where members may be saddled with increased fees for the same value received. Also, note that the lowest tier of membership should not be equivalent or close to the current nonmembers participation opportunities offered.
* A tiered membership based on access to Board and Executive Committee seats, standards, and voting, may lead to concerns regarding accreditation by the American National Standards Institute (ANSI).

In light of the considerations above, the Board RSRC proposes that …

**Discussion Regarding Modifications to the NAESB IPR Policy**

During the September 2018 Board of Directors meeting, the Managing Committee announced the adoption of the *NAESB Intellectual Property Rights Policy Concerning Patents*(NAESB Patent Policy).

As a background, the co-chairs of the Open Field Message Bus (OpenFMB) Task Force, Stuart Laval and Larry Lackey, have expressed frustration over the lack of participation by several entities due to concerns regarding the *NAESB Intellectual Property Rights Policy Concerning Contributions and Comments* (NAESB IPR Policy). After outreach to many companies, the co-chairs concluded that a few potential participants believe that the NAESB IPR Policy does not offer sufficient granularity surrounding the treatment of patents within the NAESB standards development process. Generally, patent policies require statements that disclose any patents that are connected to the standards and provide an opportunity for the owners of patents to offer initial assurances that licenses will be given on essential patents to implementers of the standard – either on a royalty-free basis or on terms that are reasonable and nondiscriminatory (RAND). In response to these concerns, the NAESB staff reviewed the current NAESB IPR Policy and researched the treatment of patent claims and letters of assurances with respect to standards development organizations. The members of the Board RSRC considered modifying the current NAESB IPR Policy and/or drafting a separate NAESB Patent Policy.

During its research, the NAESB staff noted that several concerns should be kept in mind if any changes occur to the NAESB IPR Policy:

* The NAESB IPR Policy applies to the organization as a whole and any modifications to the policy should not negatively affect the WGQ or WEQ.
* Section 2.d of the Office of Management and Budget Circular A-119, *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*, defines the characteristics of patent policies that must be used in standards containing patented technology to qualify as a “voluntary consensus standard”. It is important to be mindful of the definition of “voluntary consensus standard” as described in Circular A-119 because there is a continued preference for federal agencies, such as the Federal Energy Regulatory Commission (FERC), to use or incorporate by reference “voluntary consensus standards” in lieu of other options.[[1]](#footnote-2)
* The standards development industry has widely accepted the ANSI Patent Policy as the industry standard. As such, it provides familiarity and predictability to the broadest audience. ANSI is an established nonprofit, privately funded membership organization that coordinates the development of U.S. voluntary national standards and is the U.S. member body to the International Organization for Standardization (ISO) and, via the United States National Committee (USNC), the International Electrotechnical Commission (IEC).*[[2]](#footnote-3)* The *ANSI Essential Requirements: Due Process Requirements for American National Standards[[3]](#footnote-4)* applies “to activities related to the development of consensus for approval, revision, reaffirmation, and withdrawal of American National Standards.”*[[4]](#footnote-5)* The ANSI Patent Policy is widely used and “some ANSI accredited [SDOs] simply incorporate the one page ANSI baseline policy into their bylaws or other governance documents.”*[[5]](#footnote-6)*

The Board RSRC and NAESB staff considered the pros and cons of creating a separate NAESB Patent Policy:

Pros

* The development of a NAESB Patent Policy may clarify the treatment of patents within the NAESB standards development process and allay the concerns that contributors may have, possibly leading to increased participation within the OpenFMB Task Force.
* The development of a NAESB Patent Policy could provide a level of assurance to those who implement the standards, encouraging increased proliferation of the OpenFMB Model Business Practices.
* Patent policies are common within standards development organizations (SDO) and a NAESB Patent Policy would bring NAESB in line with the common industry practices of SDOs regarding the treatment of patents.

Cons

* NAESB WGQ and WEQ members may not find an incentive to adopt a NAESB Patent Policy, as the impetus to do so does not come from within their quadrants.
* The NAESB IPR Policy applies to all of the quadrants and any modifications to the document could potentially lead to unintended consequences within the WGQ or WEQ.
* There may be a possibility of confusion as to how the NAESB IPR Policy and the NAESB Patent Policy interact.

The Board RSRC noted that any changes made to the NAESB administrative documents, such as the approval of the creation of a NAESB Patent Policy, would involve parties outside of the Board RSRC, such as the Board of Directors or the Managing Committee.

Ultimately, as stated above, a separate NAESB Patent Policy was drafted and approved by the Managing Committee. The NAESB Patent Policy was drafted to be as close to verbatim with the ANSI Patent Policy as possible. As such, the Board RSRC recommends that any future revisions to the ANSI Patent Policy should trigger a review of the NAESB Patent Policy as well.

**Discussion on Feedback from State EDI and CBT Working Group Members**

As you may know, Electronic Data Interchange (EDI) is the machine-to-machine exchange of standard business information between companies. For example, exchanges of invoices and purchase orders are orchestrated through EDI. Several active state EDI working groups currently hold free meetings to develop their business practices surrounding EDI; however, the NAESB Model Business Practices are often utilized as the foundational work for this development of state-specific practices. These efforts result in numerous practices, rather than a standardized practice that could be utilized across the industry. In several instances, industry subject matter experts, usually vendors, may need to attend multiple meetings a month to cover each of the different states. Last July, the NAESB staff began a series of outreach efforts to several EDI state working groups. The feedback received from the leaders of the groups, and from staff sitting in on several state EDI working group calls, led to valuable information for the Board RSRC’s consideration.

The feedback from state EDI and commercial business practices working groups included:

* NAESB membership fees may be considered prohibitive;
* Some participants within the state working groups are third parties who have not yet found other business reasons to join NAESB;
* The structure of participation during NAESB meetings and the standards development process could be confusing for nonmembers. A frequent example given was that, in a NAESB meeting, a participant from California could provide input on New Jersey practices; and/or
* The voting structure of NAESB may be perceived as overly broad. The feedback received highlighted that each state has its own system and processes that the groups did not want to be affected by business interests outside of their state.

The Board RSRC views this feedback as a lack of value add by NAESB to the individual state working groups The individual state working groups do need a potential “repository” of state standards that could prove some value.

During these outreach efforts, NAESB also sought permission from state working group to provide links to their practices on one page on the NAESB website. Several of the groups granted NAESB permission to provide a link to their state practices. Ironically, a couple subject matter experts who participate in multiple state working groups pointed out that finding the state EDI practices on one page would increase efficiency, as it would reduce the time spent searching multiple state websites for information.

The Board RSRC discussed the benefits and downsides of creating a NAESB page that would provide links to each of the state’s practices.

Pros

* The page would provide one convenient online destination that service providers and vendors may use to find information, resulting in efficiency for certain segments of the retail industry,
* If the page is well-utilized by nonmembers in the industry, it could be an avenue to reach out to those entities who are most likely to become members.
* The page could also include information about the value of standardization in retail markets, how to become a member, or serve as a tool to make the industry more aware of NAESB’s presence.,
* The creation of the page may encourage its users (service providers and vendors) to request that state groups contact NAESB to be included on the page, leading to an introductory relationship between NAESB and that state,
* As the page would include links to state practices, rather than actual documents, the NAESB staff would not have the administrative burden of updating documents each time they are revised by the various EDI groups, and
* Once the page is created, NAESB staff has the opportunity to contact retail entities through a press release or other means to announce its creation.

Cons

* The creation and set up of the page will utilize NAESB resources with no guarantee of a return on the time investment.
* Requires NAESB resources to maintain the current guidelines on the page when updates are made at the state level.

The Board RSRC determined that the maintenance of a NAESB page to find links to individual state’s practices… would/would not be…

**Discussion on Green Button Efforts**

The NAESB REQ.21 Energy Services Provider Interface Model Business Practices (ESPI) is the Green Button Standard. Through utilities and third-party usage of the Green Button Standard, customers are able to download their detailed energy usage with a simple click of a “Green Button” on utility websites. To date, more than 150 service providers and utilities provide more than 60 million U.S. households with their Green Button energy data. Recently, the Ontario Ministry of Energy proposed to further implement two Green Button Standard applications – the Green Button Download My Data and Connect My Data within its province.

Last year, NAESB and the Green Button Alliance (GBA) signed a memorandum of understanding (MOU) to define the relationship the organizations will share regarding the ESPI Green Button Standard and the Green Button Certified Download My Data® (DMD) and Green Button Certified Connect My Data® (CMD) programs. NAESB is currently negotiating a similar MOU with the Korea Smart Grid Association. “Download My Data” allows an individual to download their energy usage data to a file that can be opened by software and applications. “Connect My Data” allows the authorization of a third party to gather the data usage directly from the data custodian without requiring the sharing of login credentials with that third party. In return for the GBA support and participation on the ESPI Task Force to revise the ESPI Green Button Standard and requiring the purchase of the ESPI Green Button Standard as part of each of their certification programs, the NAESB Managing Committee has made a one-time exception to regular NAESB protocol by agreeing to license the ESPI schema to the industry through the open source Apache 2.0 license.[[6]](#footnote-7)

The Board RSRC notes that, if a request to create open source standards or schema arises in the future, it will be necessary to weigh several factors.

* The current NAESB revenue model, and most other SDO models, relies upon sales of the standards and model business practices. For this reason, the copyright in NAESB work products have been closely guarded.
* The decision, by the Board of Directors or the Managing Committee, to deviate from this established revenue model and develop an open source standard or code should be decided on a case-by-case basis, and, if possible, be supported by an agreement that provides, in writing, a means of acquiring a return on the investment made to develop the standard. For example, in the GBA/NAESB Memorandum of Understanding, the GBA requires the purchase of the standard for those who seek GBA certification.
* Providing open access to any standard or code developed by NAESB may lead to the use of derivative standards that could potentially decrease the incentive that was negotiated and relied upon to develop the standards in the first place. This occurrence could be mitigated by ensuring that the task force and user group include enough subject matter experts, implementors, and overall participant levels to deter those adopting or using the standard early on from moving to another standard.
* Open source standards and code are preferred by developers because of the heightened security provided. The ability for the general public to see the source code leads to the almost immediate fix of any bug. Contrast this to the closed code of companies like Microsoft which may take months to release a patch.
* The federal government is moving towards a preference for open source code. On August 8, 2016, the Office of Management and Budget (OMB) confirmed its policy to prefer open source code for federal agencies in a new federal source code policy.[[7]](#footnote-8)

As the NAESB standards development efforts continue to follow the industry’s shift to innovative technology, the demand for open source standards will increase…

**Discussion on OpenFMB Efforts**

The NAESB RMQ.26 Open Field Message Bus Model Business Practices (OpenFMB) define a framework for power systems field devices to leverage a non-proprietary and standards-based reference architecture, which consists of internet protocol (IP) networking and Internet of Things (IoT) messaging protocols. Simply put, it enables grid devices – such as meters, reclosers, and inverters – to efficiently speak to each other. Last March, the OpenFMB Model Business Practices were included in the Version 3.1 publication of the NAESB RMQ Model Business Practices.

During the development of OpenFMB, the Smart Grid Interoperability Panel (SGIP) worked to develop additional use cases concerning seamless microgrid reconnection, microgrid unscheduled islanding, circuit segment optimization, and DER circuit segment management. The SGIP merger into the Smart Electric Power Alliance (SEPA) necessitated discussion between NAESB and SEPA to attempt to clarify the roles between the standards development within NAESB and the documents beginning to be developed within the new SEPA structure. After several conference calls and meetings between NAESB and SEPA staff, SEPA communicated four goals that it would like to achieve:

1. ***Maintaining the OpenFMB User Group,***
2. Host the OpenFMB website (OpenFMB.io),
3. Own a certification mark for OpenFMB, and
4. Convene meetings to further develop OpenFMB.

In this writing, we will focus on SEPA’s first goal of maintaining the OpenFMB User Group which stirred continuous dialog between the NAESB and SEPA staff. Of outmost concern to the NAESB staff was that the standards development process occurs within the NAESB setting, rather than so-called “requirements” or “best practices” being discussed and drafted within the user group and passed onto NAESB with the expectation of a rubber stamp. According to SEPA, about 74 OpenFMB meetings occurred in 2015 over 63 days compared to the 17 OpenFMB meetings that occurred at NAESB that same year. Often membership fees within user groups are less expensive than those of an SDO, resulting in the *Siphoned Standards Phenomenon* – where multiple entities modify the standard within a user group and, subsequently, select one or two participants to participate at the SDO level to “siphon” those changes into the work product. Needless to say, this phenomenon results in a loss of subject matter expertise and negatively impacts SDO membership levels while increasing participation within the user group. These concerns remain, even today, with SEPA’s recent withdrawal from the OpenFMB activities and the willingness of the UCA International Users Group (UCAIug) to act as the new OpenFMB User Group. Establishing a bright yellow line – between what activities constitute standards development and what activities are appropriate within a user group – will continue to be an ongoing conversation between NAESB and any user groups associated with the NAESB Business Practice Standards or Model Business Practices.

During the Board RSRC discussions, the participants considered whether NAESB should host the user groups for its own standards. In general, user groups seek to convene experts and provide the industry with frequent meetings, informational and networking conferences, an online presence, a repository for software, etc. For example, SEPA sought to produce the following working group products for its members: use cases, requirements, case studies, conceptual models & roadmaps, research and white papers, webinars, workshops, blog posts, market intelligence, best practices, implementation guidelines, open source code/templates, and standards evaluations.

The pros and cons of establishing NAESB User Groups for NAESB standards were considered:

Pros

* A user group within NAESB could encourage subject matter experts to become NAESB members rather than just participating peripheral through a user group, as both the standards development and the network of users would convene under the umbrella of NAESB.
* The development of a user group may result in increased awareness of NAESB in segments of the industry that
* As the page would include links to state practices, rather than actual documents, the NAESB staff would not have the administrative burden of updating documents each time they are revised by the various EDI groups, and
* Once the page is created, NAESB staff has the opportunity to contact retail entities through a press release or other means to announce its creation.

Cons

* The creation and set up of the page will utilize NAESB resources with no guarantee of a return on the time investment.
* …

In light of the considerations above, the Board RSRC proposes that …

**Discussion on Forums, Webinars, and CLEs**

Currently, NAESB hosts webinars – *Understanding the NAESB WGQ Contracts*, *NAESB 101 Webinar*, *WGQ Business Practice Standards: Updates and Changes Version 3.0* – and, in the future, NAESB may offer a webinar addressing modifications to the WEQ Business Practice Standards. These webinars are priced at $250 for individual employees of member companies and $750 for nonmembers. They are well-attended and could be expanded to include developments and issues within the retail markets, increasing the value proposition for becoming an RMQ member.

Further, the Board RSRC has recognized a revenue generating opportunity for NAESB. Specifically, NAESB may be undercharging for its courses and webinars.

The following is a pricelist for NAESB-related courses from just three organizations:

* Energy Seminars, Inc. - NAESB Gas Contracts 101 [$898]
* Energy Seminars, Inc. - NAESB Gas Contracts 202 [$898]
* Oak Leaf Energy Training, Inc. – Fundamentals of the NAESB Documentation [945 CAD]
* PGS Energy Training - Understanding the NAESB Master Agreement for Natural Gas & NGLs [$1,795]

**Discussion on Merger with WEQ and WGQ**

During the Board RSRC meetings, the committee also discussed merging the RMQ with the WGQ and WEQ. This proposal would eliminate the ongoing concern of meeting the segment threshold stated in the NAESB Bylaws. The NAESB Bylaws specify that a quadrant should have at least forty members and at least four segments with five members per segment. The brief discussion within the Board RSRC meetings and the October 2018 RMQ Executive Meeting reflected the participants disinclination to merge the RMQ with the WGQ and WEQ. The reasons cited included a loss of retail members altogether due to the merger, the necessity to update the RMQ EDI Model Business Practices, and the loss of other standards development efforts, such as OpenFMB and ESPI.

**Discussion on Changing the Name of the RMQ**

1. National Technology Transfer and Advancement Act of 1995. 15 U.S.C. §3701 et seq. (1996); Office of Mgmt. & Budget, Executive Office of the President, OMB Cir. A-119 Revised, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities (1998). [↑](#footnote-ref-2)
2. Guidelines for Implementation of the ANSI Patent Policy, An Aid to More Efficient and Effective Standards Development in Fields That May Involve Patented Technology, January 2016 (Guidelines).[https://connect.ansi.org/pcc/ipr/Lists/ANSI%20Patent%20Policy%20and%20Guidelines%20Document/Attachments/9/ANSI%20Patent%20Policy%20Guidelines%202016.pdf](https://connect.ansi.org/pcc/ipr/Lists/ANSI%2520Patent%2520Policy%2520and%2520Guidelines%2520Document/Attachments/9/ANSI%2520Patent%2520Policy%2520Guidelines%25202016.pdf). [↑](#footnote-ref-3)
3. *ANSI Essential Requirements: Due Process Requirements for American National Standards*, January 2018 edition. <http://www.ansi.org/essentialrequirements> (ER). [↑](#footnote-ref-4)
4. ER at Section 1.0. [↑](#footnote-ref-5)
5. IPR Policies and Practices of a Representative Group of Standards-Setting Organizations Worldwide, [https://www.nap.edu/resource/18510/Bekkers-Updegrove%20Paper\_092013.pdf](https://www.nap.edu/resource/18510/Bekkers-Updegrove%2520Paper_092013.pdf) [↑](#footnote-ref-6)
6. <https://www.apache.org/licenses/LICENSE-2.0>. In the Apache license, Version 2.0 contributions that are added to the original work become a part of the licensed work and will be governed under the license. Redistributions are allowed with four conditions that are intended to provide notice to future users. First, the redistributor must give any other recipients of the work or derivative work a copy of the license. Next, any modifications must contain prominent notices of the change. Third, the source form of any derivative works must contain all copyright, patent, trademark, and attrition notices that are in the original source form of the work. The fourth condition is that any Notice text file that is included in the original work as part of its distribution must be included. Derivative works are also restricted in that they can only utilized licenses that do not conflict with the Apache License, Version 2.0. The license has a disclaimer of warranty that is common to open source licenses and notes that any contributor who chooses to accept liability in any form does on their own behalf and is solely responsible. [↑](#footnote-ref-7)
7. The *Federal Source Code Policy: Achieving Efficiency, Transparency, and Innovation through Reusable and Open Source Software* (M-16-21) is available at the following link: <https://sourcecode.cio.gov/>. The policy supports improved access to custom software code developed by or for the Federal Government. [↑](#footnote-ref-8)