Winneshiek Energy District (WED) provides the following comments to the Iowa Utilities Board pursuant to the Board’s Order Regarding Policy Statement, Rate Design Presentations, and Net-Metering Generation Pilots, issued October 30th, 2015.
Contents Of This Submission

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E. TERM SHEET, Winneshiek Solar Collaborative Distributed Generation Pilot Project, October 21, 2015

Part 1. The “Winneshiek Shared Solar” Pilot Project History and Re-Submission

The Winneshiek Shared Solar collaborative efforts did not begin with the request for pilot projects within this DG docket. Interest in and implementation of customer-owned and/or sited solar has been growing rapidly in Winneshiek County since 2010 among all customer classes, and this interest has included public entities and their representatives. The Iowa Supreme Court’s 2014 Eagle Point decision improved the economic viability for non-taxable entities by allowing for third party power purchase agreements (3P-PPA) and thus partial tax benefit pass-through for public and nonprofit entities.
By early 2015, most local public entities had been studying solar, and were already running up against significant challenges beyond the “non-taxable entity” economic limitations. These included, principally, space limitations for on-site arrays, and the apparent ineligibility of large general service (LGS) meters for net energy metering (NEM). As these challenges became clear, Winneshiek Energy District (WED) began facilitation of conversations among entities regarding shared approaches, and these conversations evolved into the Winneshiek Shared Solar collaborative proposal submitted to Alliant/IPL Energy and within the DG docket on June 15, 2015 (Exhibit B).

The pilot proposal identifies the following six key terms:

1. That multiple meters pertaining to a single entity and under similar rate structures may be virtually aggregated for the purpose of retail net meter calculation, balancing, and crediting

2. That monthly production for each entity, as reported to Alliant/IPL in an acceptable electronic format and timing, be net metered in the same manner as would happen if production were interconnected behind the physical meter/s

3. That surplus monthly and annual production for each entity be credited on a kWh basis and continuously rolled over for future availability, as long as the surplus at the end of a given calendar year does not exceed 50% of average annual consumption

4. That both outright entity ownership, and entity participation in a PPA arrangement within the NTE solar array, be treated equally at the point of interconnection
5. That renewable energy credits remain with customer/entities, the current norm in Iowa.

6. That the array be sited and planned with the understanding of potential future expansion.

Implicit in the proposal is that all meters (including LGS) of participating entities are eligible for participation and for some form or approximation of NEM, because three of the five signatories’ energy use is primarily via an LGS meter. This issue was spelled out in greater detail early in the discussion process with Alliant/IPL, and explicitly in the term sheet (Exhibit E) submitted later in the process.

WED/WSS and Alliant/IPL engaged in communication and a pair of meetings through the latter half of 2016. The Community Foundation of Northeast Iowa (based in Cedar Falls and covering 20 NEIA counties) awarded WED a grant for WSS, allowing the engagement of Tom Wind for a preliminary engineering study, and Sheila Tipton of BrownWinick for general counsel and development of the term sheet. The term sheet was presented to Alliant/IPL in October, and details include:

- Five participating entities and Alliant/IPL customers participate in single shared array, each entering into PPA with local investor/s for 500KW, with array totaling 2.5MW (with potential for larger initial amounts, and expansion)
- Customers receive monthly “net billing” credit based on relevant production and current retail kWh meter rate, exactly as “on-site” NEM currently functions
- LGS meter accounts receive monthly credit based on combination of demand and energy components, excluding basic monthly charge and energy efficiency cost recovery charges
• Net bill credits roll over monthly up to an agreed upon maximum percentage of annual consumption, beyond which surplus becomes property of the utility

• Renewable Energy Credits remain the property of the customers

• The parties will cooperate to develop a tariff for the Pilot Project (the “Pilot Project Tariff”) consistent with this Term Sheet. The parties will also cooperate to file a joint application for approval of the Pilot Project Tariff by the IUB, to be submitted to the IUB not later than December 1, 2015. The Pilot Project shall include a requirement that annual reports on the project will be filed with the IUB and shall cover:

1. how virtual net metering is working and needed modifications, if any

2. system and environmental impacts of the Solar Facility

3. system constraints impacted positively or negatively by the Solar Facility

4. effect of the Solar Facility on the Utility’s system peak

5. how experience with the Pilot Project can inform future distributed generation and virtual net metering projects

6. impact of the Solar Facility and the net metering arrangement on other customers

7. any other issues identified by the parties

The parties shall agree that the neither the proposal of the Pilot Project by the parties nor the approval of the terms of the Pilot Project by the IUB shall be argued to, or be deemed to, have precedential effect in any future proceeding brought before the IUB relating to net metering or billing, virtual net metering or
billing, the applicability of net metering to Large General Service customers or
the applicability of net metering to energy and demand customers.

Unfortunately we have not yet come to agreement with Alliant/IPL. The company
appears to feel their hands are tied by 1) the potential precedent-setting nature of
working with WSS on an approximation of NEM for the proposed off-site, shared array,
2) the pending Eagle Point case involving LGS meters, and 3) an apparent aversion to
local ownership of DG generation resources and power.

WED, the five WSS signatory entities, and Northeast Iowa Renewables LLC are
disappointed in the process we’ve been through and the outcome temporarily arrived at.
We understand the Board’s emphasis on giving utilities flexibility in designing pilots, yet
respectfully request that the Board order – or at least strongly encourage – Alliant/IPL to
reconsider its rejection of the WSS pilot proposal and term sheet. In support of this
request, we provide the following list of issues critical to WSS, and elaborate upon them
and the future of NEM and DG in Iowa in Part 2.

1. Local ownership of renewable DG is critical to the growth of renewable energy in
Iowa. After a century of a one-way grid, customers and communities want to
participate. The grid is a shared resource we have all paid for, and the more
customers and communities are locked out or feel penalized, the more rapidly both
load and grid defection will accelerate over the coming decade.

2. Shared renewables are not only relevant to the roughly 50% of homes and
businesses that don’t have a suitable site for behind-the-meter DG with NEM, as
many public entities face similar challenges. The five signatory entities making up
the WSS collaborative represent all the citizens of Decorah and Winneshiek County,
and to the degree renewables are good for their bottom line, ALL citizens benefit equally – including and especially lower income households.

3. Shared renewables need not be technically or administratively difficult – in fact it should be much more efficient and cost-effective for a utility to manage one “door” onto the grid, at a location of their own choosing, than dozens or even hundreds of “behind-the-meter” connections. And in reality ALL NEM is “virtual”, all NEM DG customers enter the grid, the only difference is where the door is located, then all electrons flow to the nearest demand and credits to the appropriate account.

4. The WSS proposed pilot directly addresses the two issues specifically raised by the Board for pilots: raising the NEM cap and analyzing management of surplus credits. Though the IOUs have commented in the DG docket that there is no demand for raising the cap, this claim is disingenuous given their refusal to allow LGS customers access to NEM, and the fact that LGS customers would be the only ones with enough demand to utilize systems that large. The WSS pilot proposes inclusion of LGS meters with a stacked net bill credit, begins with the current NEM cap of 500KW/customer, and allows for future expansion. It combines monthly credit rollover with annual rollover up to a maximum percentage of annual usage (e.g. 50%), over which surplus reverts to the utility, thus providing customer flexibility while disallowing perpetual accumulation.

5. Annual reporting and analysis will work to document the “bundle of benefits” provided by both the utility to the DG-NEM customers, and by the customers to the utility, grid, and society. The utilities’ testimony regarding costs not paid by DG customers (and thus subsidized by non-DG customers) in the docket to date – and
the foundation of their new rate design proposals – are incomplete in their failure to recognize and document the many values ADDED to the grid, utility, ratepayers and society by DG solar.

Part 2. Further Discussion of Key Principles Involved in the WSS Pilot, NEM, DG, and Iowa’s Grid

The energy world – and especially the electricity sector – is turning upside down. The confluence of renewable energy technologies, economics, climate change, policy, and localism are driving movement from a centralized, fossil fueled, monopolistic paradigm to a decentralized, renewables powered, democratic and participatory paradigm. Just as title character in the new musical “Hamilton” sings “I’m just like my country/ I’m young, scrappy and hungry/ and I’m not throwing away my shot!”, Iowan’s of all stripes are clamoring for a shot at full, fair, and direct participation in the new energy world.

The investor-owned utilities are framing this DG discussion as a narrow debate about cost-shifting and rate design. In reality, the DG issue is inseparable from the new energy era. The question isn’t whether we are moving towards an energy system dominated by renewables, and doing so faster than almost anyone anticipated just six years ago\(^2\). The main questions are who will own it, will Iowa and her communities and citizens realize the truly massive economic development opportunity of locally-owned

\(^1\) The International Energy Agency (not known for exaggerated predictions) [Technology Roadmap: Solar Photovoltaic Energy (2014)](https://www.iea.org/publications/freepublications/iea/technologyroadmap-solarphotovoltaicenergy2014) suggests renewables may generate nearly 80% of global electricity by mid-century, 

\(^2\) The US Department of Energy’s National Renewable Energy Laboratory’s [Renewable Electricity Futures Study](https://www.osti.gov/servlets/purl/1363635) key findings include: “Renewable electricity generation from technologies that are commercially available today, in combination with a more flexible electric system, is more than adequate to supply 80% of total U.S. electricity generation in 2050 while meeting electricity demand on an hourly basis in every region of the country.”
renewable energy, and how will the energy regulatory practices and paradigms of the 20th century change to enable the fair, participatory and democratic grid demanded by customers and communities in the 21st century?

Iowans are justly proud of the roughly 30% of our annual electricity consumption matched by Iowa-located (though not mostly Iowa-owned) wind generation. Yet the Preliminary Assessment of Iowa’s Energy Position3 demonstrates that Iowa annually imports over half of our energy.

Conclusion 1. Iowa currently consumes more raw energy than it produces, and also imports more raw energy than it produces. Thus, from a basic economic policy standpoint, increasing energy production in Iowa will enhance Iowa’s balance of trade and benefit the Iowa economy.

With over $17 billion in annual statewide energy expenditures, this amounts to a multi-billion dollar energy trade deficit at the state level. The economic development opportunity of keeping those dollars local is the sum of both the annual deficit, and the investment that will be required to build the energy infrastructure to turn that deficit into a surplus.

The same logic applies to local energy trade deficits. Most Iowa communities and counties likely run energy trade deficits in the tens and even hundreds of millions of dollars. Simple math based on the state figures referenced above produces $5,527/capita of annual energy expenditures statewide. Clearly this will vary by county and community, but a rough estimate suggests that a rural Iowa county like Winneshiek (population 20,709) spends roughly $114.5 million annually on energy, most (not all) of which leaves the local economy. This made sense with 20th century energy technology and economics, but 21st century energy technology and economics are opening

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3 Part of the 2016 Iowa Energy Plan development process, accessible here: [http://www.iowaenergyplan.org/resources.html](http://www.iowaenergyplan.org/resources.html)
opportunities to turn that reality upside down. And despite electric utility angst about business model disruption and flat-lining demand, in fact the economic opportunity in renewable electricity for ALL grid participants (from utilities to consumers and communities) is almost endless. This is because the most viable low-carbon roadmaps include large-scale transitioning from natural gas (building heat) and petroleum (transportation) towards electricity\textsuperscript{4}, representing a dramatic increase in electrical demand and concurrent economic opportunity for Iowans.

What does this have to do with the WSS, NEM and the DG docket? Locally owned distributed generation, and especially distributed solar PV (DGPV), is currently the single most powerful tool enabling customers and communities to begin to reverse negative energy trade deficits and literally “take power into their own hands”. Development of an open, participatory (“democratized”), 2-way grid is critical to realizing this opportunity on a large scale and accelerating pace. Development of this new energy paradigm and democratic grid will take time, and we have previously in this docket suggested the Board begin a proceeding similar to New York’s REV (Reforming the Energy Vision\textsuperscript{5}). Meanwhile, NEM is currently an effective, elegant, and remarkably fair approximation for the balance of benefits and costs incurred between DGPV customer and utility.

This fair balance of trade principle is key to NEM, and must be fundamental to all discussions of alternatives. The IOUs have proposed new rate classes for DG customers based on “cost of service” principles\textsuperscript{6}. Yet those cost principles were

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\textsuperscript{4} Such as the widely-respected Stanford-led Solutions Project, found here: http://thesolutionsproject.org/

\textsuperscript{5} Found at https://www.ny.gov/programs/reforming-energy-vision-rev

\textsuperscript{6} Alliant/IPL’s 3-15-16 presentation can be found here http://energydistrict.org/images/uploads/4f_-IPL-Rate-Design-Presentation-031516.pdf and MidAmerican’s 2-16-16 presentation can be found here
established for the 20th century 1-way grid paradigm, and do not adequately explain transactions on the 21st century 2-way grid. In the 20th century centralized regulated monopoly, energy and related benefits flowed uni-directionally from utility to consumer, costs were incurred by the utility, and regulators authorized recovery of those costs with profits by utilities.

There is no debate whether consumers and communities have a right to participate in the energy sector and in the grid, the debate is about fair terms. In a 21st century 2-way grid, “cost principles” need to be re-evaluated with the understanding that now BOTH costs AND energy and related benefits are now flowing BOTH ways on the grid. This is the fundamental idea behind solar valuation studies undertaken by at least ten states and summarized by Karl Rabago’s recent presentation to the Board7. The benefits provided by DGPV to the grid, the utility, ratepayers, and society are analyzed in such studies, have been covered in this docket previously, and are explained in a very accessible and agnostic approach by the Rocky Mountain Institute8, the National Renewable Energy Laboratory9, and the Interstate Renewable Energy Council’s “Regulator’s Guidebook: Calculating the Benefits and Costs of Distributed Solar Generation”10.


The IOU’s presentation of new demand-based DG rate classes based only on 1-way cost principles (and resultant “cross-subsidization”) is incomplete and dishonest. Utilities understand there are benefits beyond kilowatt hours flowing from DGPV – why haven’t they included those in their analyses or presentations? And where is the data upon which to build demand charges even if such an approach were to be part of a fair balance of trade approach?

We propose that the fundamental cost-of-service principles and rate design processes should be revised in a NY REV-like process to more fully reflect the costs AND BENEFITS of DG well prior to further consideration of new rate classes. Even if the Board were to proceed with a narrower scope, 1) there is inadequate data behind the IOU’s presentations to build or approve pilots leading down the road towards a new demand-based DG rate class\(^\text{11}\), 2) just as IOU energy sales include bundled benefits to consumers, DGPV provides a bundle of benefits to utilities, the grid, and all ratepayers, 3) any roadmap leading towards potential rate re-design must include collection of hard data on both bundles of benefits, therefore 4) if the Board is willing to entertain rate redesign discussion need a process that first and simultaneously collects hard data on both sides. Thus no new rate class pilots should be approved without simultaneously authorizing and funding a deep and comprehensive VOS study relevant to both IOUs and coordinated by the OCA.

Meanwhile as NEM remains a remarkably sound approximation for the costs and benefits of DGPV, its accessibility must be expanded. Roughly half of residential and

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\(^{11}\) Indeed a Wisconsin Circuit Court recently invalidated part of the Wisconsin Public Service Commission’s approval of a utility rate case implementing such demand charges, calling them “discriminatory”: [http://www.jsonline.com/business/judge-rejects-we-energies-plan-to-assess-solar-panel-owners-extra-fees-b99606784z1-338962302.html](http://www.jsonline.com/business/judge-rejects-we-energies-plan-to-assess-solar-panel-owners-extra-fees-b99606784z1-338962302.html)
commercial utility customers in the United States are not able to install DGPV due to site, tenancy and other limitations to connecting “behind the meter”\textsuperscript{12}. Customers that do have potential to connect a system behind their meter still may have valid reasons for preferring a different location. Refusing NEM to these customers is discriminatory, and should be remedied by the expansion of NEM to allow access to the grid anywhere within the utility’s distribution network.

Some have termed this approach “virtual net metering”. It appears to have become a bogeyman within the utility industry, and Alliant/IPL has declined serious consideration of it in our WSS pilot proposal. Yet the distinction between “virtual” NEM and “traditional” NEM is a false one, because most DGPV NEM connections are already “virtual” – they receive credit by sending electrons into the grid when there is a surplus, and use that “virtual” energy (credits) when demand exceeds on-site production. NEM by definition is grid-connected, and the location of the doorway onto the grid may have many factors suggesting an ideal location other than “behind the meter” to benefit both customer AND utility.

Clearly, NEM tariffs have historically located the grid doorway behind the customer's meter. But there is nothing stopping the Board from revising the NEM tariff to allow any doorway onto the distribution grid, and in so doing open the door to millions of Iowans to participate in the 21\textsuperscript{st} century energy world. As explained earlier, this “open door” NEM interconnection policy is a key principle underlying our WSS pilot proposal, which if allowed to proceed would provide important insight into the simplicity or potentially unforeseen challenges of this adjustment to NEM.

The other key principle we’ve proposed in the WSS pilot is the inclusion of LGS meters in the NEM tariffs. Their original omission from those tariffs was either for convenience or in error, and – like the exclusion of customers without behind-the-meter options – is discriminatory. The unique nature of the LGS rate class does not preclude the development of a relatively simple approximation of an NEM equivalent, based on either an “all-in” net billing approach or the stacking of quantifiable values such as energy, capacity, and ancillary and other services. The critical foundation in making NEM accessible to ALL Iowans regardless of location or meter type is the principle that an energy consumer has the right to participate in the grid and generate most or all of their own power in an economically and technically fair and viable arrangement. Inclusion of LGS meters in NEM thus suggests simultaneous raising of the cap, because without doing so many LGS customers would remain arbitrarily excluded.

The grid is a powerful societal resource and public good. As the 20th century centralized regulated monopoly transitions to a 21st century decentralized, democratized grid, utilities will still have important roles to play, and will likely be assured fair compensation for those roles. But the concept of monopoly must be revisited. Evolving federal and state policy is increasingly making it clear that the “first monopoly” belongs to consumers and communities. This first monopoly concept applies both to grid access and to DG ownership. An “open door” NEM policy on grid access not only would eliminate the current exclusions and discrimination, it would also establish a foundation for local ownership of shared and “community” renewables.

13 An excellent review of policy considerations at the state level can be found in the NC Clean Energy Technology Center’s “The 50 States Of Solar” report, February 2016, found here https://nccleantech.ncsu.edu/wp-content/uploads/50sosQ4-FINAL.pdf and reviewed in this Utility Dive article 3-22-2016 http://www.utilitydive.com/news/5-maps-that-show-where-the-action-is-on-solar-policy/415938/.
Community solar has been rapidly gaining interest among consumers and communities around the country, and – where enabled by regulators and policymakers – has seen rapid growth. As the Rocky Mountain Institute's new brief states, “Community-Scale Solar Takes Many Forms In Many Contexts For Many Reasons”. RMI defines community solar strictly by scale and location – 500KW to 5MW distribution grid-connected arrays – while to many the “community” in community solar implies local ownership and the attendant consumer investment and community economic development opportunities.

There is nothing inherently wrong with mid-scale utility-owned and distribution-grid connected renewable energy. But utilities owning solar and offering long-term customer subscriptions for array output are not so much offering “community” solar, as a new form of green power purchase program whereby the utility substitutes a voluntary customer contract “subscription” for rate-basing the generation infrastructure. The “first monopoly” concept proposed earlier implies that mid-scale utility-owned and distribution-grid connected renewables cannot pre-empt, preclude, or exclude non-utility owned shared renewables. A detailed state-run “community solar” program may be a valuable addition to Iowa’s DG toolkit in the near future, but it is not the only way to get to community solar. An open door NEM interconnection policy, together with the elimination of the LGS exclusion, would unleash the pent-up demand and can-do approach of Iowans and create an “innovation lab” of diverse shared renewable approaches and ownership structures unlike that seen in any state to date.

The literal “balance of power” is shifting rapidly in the energy world, to the benefit of Iowa citizens, ratepayers, and communities. To the degree the consumers and communities feel discriminated against or penalized, they are increasingly enabled by technology and economics to take matters into their own hands. The Board, on the other hand, has the opportunity to adapt policy to changing times, maintain the literal and metaphorical “ties that bind” on just rather than coercive terms, and enable an all-in, democratic renewable energy arms race. With this vision in mind, we respectfully request that the Board:

1. Encourage Alliant/IPL to collaborate on implementation of the Winneshiek Shared Solar pilot project as presented here

2. Provide assurance to current Iowa DGPV participants and the Iowa solar marketplace that potential future change to NEM will not be retroactive, and that NEM will remain in place at least through 2019 while the issue is studied further (California’s recent Public Utilities Commission decision\(^\text{15}\) provides a sound model)

3. Remove the arbitrary and discriminatory limitations on NEM that exclude over half of Iowans and an even larger percentage of electrical consumption, by establishing open door NEM interconnection option onto the distribution grid, by creating an all-in or stacked NEM valuation for LGS meter customers, and by replacing the current 500KW NEM cap with a cap based on 100% of annual usage, with a maximum 50% rollover (thus prohibiting perpetual overproduction and accumulation)

\(^{15}\) Decision Adopting Successor to NET Energy Metering Tariff, January 28, 2016, process explained here [http://www.cpuc.ca.gov/General.aspx?id=3934](http://www.cpuc.ca.gov/General.aspx?id=3934) and decision found here [http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M158/K181/158181678.pdf](http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M158/K181/158181678.pdf)
4. Refrain from entertaining utility discussion and pilot projects involving new DG rate design without extensive data to support such actions, and without a parallel data/discovery process analyzing the benefits DG (and especially DGPV) bring to the utility, grid, ratepayers, and society via a comprehensive solar valuation study coordinated by OCA.

5. Consider establishing a successor process (to this DG docket) along the lines of New York’s Reforming the Energy Vision, to analyze all aspects of our current electrical energy system.

Iowans do local well, and we do stewardship well. Our can-do attitude and self-reliance are part of what has led us to our position of leadership not only in wind and biofuels, but also in the small but rapidly growing DGPV sector. Governor Branstad has repeatedly emphasized the importance of pursing all renewable energy options, and of including all Iowans in the process. In June 2015, speaking about renewable fuels, he stated “The EPA has a choice: protect the deep pockets of Big Oil and their monopolistic practices or nurture consumer choice, renewable energy growth and a healthy rural economy”. On February 16th, 2016, he signed the Governor’s Accord For A New Energy Future together with 16 other governors, which begins:

American prosperity has always depended on embracing new ideas and technologies. By deploying renewable, cleaner and more efficient energy solutions, we can make our national economy more productive and resilient. These technologies help to diversify energy sources that power our economy and reduce dependence on foreign energy sources while securing abundant, domestically produced electricity. Embracing these new energy solutions also modernizes our infrastructure and transportation systems,

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17 http://www.governorsnewenergyfuture.org/the-accord
decreases air pollution, and supports the growth of innovative American companies.

Current challenges also demand these new energy solutions. Extreme weather events, such as floods, droughts, wildfires and sea-level rise, can negatively impact electric reliability and the economy. Embracing new energy solutions can provide more durable and resilient infrastructure, and enable economic growth, while protecting the health of our communities and natural resources. These improvements will help secure a safe and prosperous future for our country.

This DG docket – and the larger conversation on renewable energy policy in Iowa – is fast approaching a major fork in the road. The IOUs are requesting a business-as-usual profit protection process through the creation of new rate classes to avoid competition from customers and communities. Yet business as usual is no longer an option. We cannot continue to fit the square peg of past utility paradigms into the round hole of the new energy world. We encourage the Board to seriously consider the road (so far) less travelled, one enabling full and fair participation of all actors, less utility protectionism, greater local ownership, and a friendly renewable energy arms race among ALL participants. This road will put Iowa on a path to be the first 100% renewable energy state, and with the opportunity for a positive energy balance of trade and truly massive jobs and economic impact in every Iowa county and community ready to lead.

Respectfully submitted,

/s/Andrew Johnson
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Appendix A: Winneshiek Shared Solar Collaborative Timeline

January to June 2015: Discussions among collaborating entities facilitated by Winneshiek Energy District, including: how shared renewables work, potential for shared array among public entities, status of shared options within Iowa utility and NEM, opportunity for the DG docket to open doors.

June 2015: Submission of the WSS pilot proposal to Alliant/IPL, and to the Board within NOI-2014-0001.

September 3, 2015: WSS participants gather in Decorah to discuss the following items:
- Alliant/IPL’s initial written response to the proposal, and acceptance of NEM+PPA arrangements
- Deeper dive into ownership options for public and non-taxable entities, including PPA models
- Introduction of Northeast Iowa Renewables LLC, formed to organize local investors and allow for local capital to fund local public entity owned solar projects when they come to fruition
- Deeper dive into siting options, as initial communication with Alliant/IPL indicated that clarity in both ownership and siting would be important for negotiation

October 8, 2015: Alliant/IPL and WSS representatives meet at City Hall in Decorah:
- WED presented details of third party ownership structure with local investors
- WED presented engineering feasibility study identifying multiple suitable site options near Decorah’s substation (Exhibit D)
- Multiple WSS entity representatives spoke on the importance of local ownership
- Alliant/IPL representative response included significant hesitancy regarding the precedent-setting potential for the project as proposed

October 21, 2015: WED submits term sheet to Alliant/IPL (Exhibit E), requesting it provide the foundation for further dialogue and eventual submission to the Iowa Utilities Board as a pilot in the DG docket. Sheila Tipton of BrownWinick is contracted to provide legal assistance to WSS, in development of the term sheet, and further negotiation with Alliant/IPL.

October 30, 2015: The Board issues “ORDER REGARDING POLICY STATEMENT, RATE DESIGN PRESENTATIONS, AND NET-METERING GENERATION PILOTS” reiterating the request for pilot projects including current docket participants and stakeholders:

The Board encourages all utilities (municipal, rural electric cooperatives, and investor-owned), but particularly the investor-owned utilities (IPL and MidAmerican), to consider implementing pilot projects that will expand renewable DG in Iowa, and to collaborate with the participants in this NOI while developing pilot program proposals.

November 6, 2015: The Community Foundation of Northeast Iowa (headquartered in Cedar Falls, covering 20 NEIA counties) formally awards WED a “Celebration of Community” grant in support of the WSS collaborative and the community development opportunities it represents. WED uses the funds to establish a “WSS consulting fund” to help cover technical and legal consulting fees on behalf of entities.

November 19, 2015: Alliant/IPL and WSS representatives meet at Decorah Bank and Trust in Decorah:
- Alliant/IPL requests (prior to meeting) a non-disclosure agreement (NDA), but WSS participants are mostly public entities, subject to open meetings requirements that make this difficult;
Alliant/IPL declares LGS meters off the table for discussion thanks to the pending Eagle Point case (FCU-2015-0009)

- WED requests the term sheet provide the foundation for negotiation, with a goal towards cooperative filing of a joint application for approval of pilot tariff within the DG docket
- WSS participants make it clear local ownership is a foundation of our DG-NEM pilot proposal, and requests response on the proposed net billing tariff approach proposed in the term sheet for all meters, including LGS
- Alliant/IPL is noncommittal, floats ideas regarding “community” (subscription) and traditional customer-utility PPA possibilities
- WED asks if the preliminary engineering analysis identifying sites is suitable and if the local grid can handle the proposal, Alliant/IPL responds that “Decorah is a solid system” now and they see no problem, ask how flexible we are and indicate there could be grid benefits at other sites too

Subsequently, Alliant/IPL inquired whether the WSS collaborative was more interested in pursuing a potential PPA project or in pursuing a pilot following the Board’s timeline in the DG docket. We made it clear most WSS entities had no appetite for being solar PPA developers and we were interested in the pilot as it has been under discussion for close to six months. Alliant/IPL also asked for a copy of our preliminary engineering study (Exhibit E) which we shared on condition they share with us the site analysis for Winneshiek County they discussed at the most recent gathering.

In 2016 On 1-28-15 Attorney Tipton communicated the following message to Alliant/IPL:

I have conveyed IPL’s most recent offer of a PPA to my clients and they are disappointed. What the [WSS] wants, and believes that it has made clear to IPL throughout these months of discussion, is that they want to engage in a pilot project with IPL that is based on local ownership of DG, with a form of net energy metering (for both GS and LGS meters) for a large offsite array established by a small number of Alliant/IPL’s largest customers (representing the entire citizenry of Decorah and Winneshiek County). It is their belief that their proposed project is innovative, will promote efficiencies for both utility and customers, contribute to a stable and connected grid, serve the interests of a great many Iowans especially/including LMI households, and (critically) directly address many of the issues the Board has asked to be addressed in the DG docket. The [WSS] wants to know whether IPL is willing to move forward with planning the pilot project as proposed by the [WSS]. They would like to know the answer to that question by next Monday, January 31st.

We never received the requested answer in writing. Instead, Alliant/IPL continued to inquire about PPA options. When Luther College (the only WSS entity with potential PPA ability or appetite at this time) made it clear they were not interested in a PPA *in lieu of* the WSS pilot proposal, Alliant/IPL reiterated their unwillingness to discuss LGS meters with the Eagle Point case pending, and dismissed virtual net metering (apparently referring to the net billing portion of the term sheet) as “not something [IPL] wishes to offer or pursue”.
Appendix B: Winneshiek Shared Solar Pilot As Submitted 6-15-15

Date June 15, 2015

To Alliant/IPL Energy/Interstate Power and Light, Iowa

From Winneshiek County Public and Non-Taxable Entities

Re Winneshiek Non-Taxable Entity Shared Solar Field Request

The following entities propose the creation of a collaborative Winneshiek/Decorah Non-Taxable Entity (NTE) solar field. This proposal represents a common expression of interest among the entities. Signatory entities are not committing to final participation, but requesting response from Alliant/IPL Energy on key questions so we may determine best how to proceed in the interests of our constituencies.

Whereas:

Participating non-taxable entities represent taxpayers and citizens of Decorah and Winneshiek County, and are entrusted with fiduciary and resource stewardship responsibilities, including franchise contracts

Energy costs are a major budget expense with steady increases forecasted, and installed solar PV power costs have declined to the point of strong positive ROI and cost-effectiveness

Non-taxable entities such as schools and local government are not able to take advantage of state and federal tax incentives except through third party power purchase agreements, and the Iowa Supreme Court has recently affirmed these arrangements are legally acceptable in Iowa

Retail net metering is currently available to Iowa IOU customers for systems up to 500KW/meter connected on the customer’s side of the meter

Signatory entities are actively considering the installation of solar PV systems at numerous behind-meter locations, either in outright ownership or in power purchase arrangements

Alliant/IPL Energy has repeatedly stated they are exploring options for a community solar initiative

However:

Wide variation exists in site or rooftop suitability among the numerous meters of interest to signatories, and some locations have no opportunity for behind-meter installation
The reality of numerous dispersed meters (both within and among entities), often with relatively low usage yet similar rate structures, makes installation of equally numerous small arrays interconnecting behind each meter cumbersome and potentially costly to both Alliant/IPL and signatory entities.

Forms of virtual meter aggregation, virtual retail net metering, and “community” solar are authorized by many state regulatory bodies, create significant cost and administrative efficiencies for both customer/owners and utilities, and are critical tools especially for non-taxable entities.

The IUB rule on retail net metering is silent on (and certainly not prohibitive to) application of net metering and meter aggregation through a “virtual” approach, and considerate interpretation by Alliant/IPL and the IUB would allow NTEs to enjoy incentives and advantages currently enjoyed by taxable entities, thus benefitting their constituents and taxpayers.

Grid safety and management, and array management and value of solar to the grid and utility, can be significantly improved with a single large array (representing multiple owners) and interconnection than with dozens of small behind-the-meter arrays and unique interconnections.

Therefore:

Signatory non-taxable entities propose the creation of a single NTE solar field as the location for our combined planned solar PV generation capacity.

Entities have access to multiple potentially suitable sites in close proximity to Alliant/IPL’s transmission/distribution system in the Decorah area, and are willing to collaborate on array siting to maximize grid safety and reliability, voltage and frequency regulation, and to minimize line losses.

Entities are willing to discuss aspects of array construction that could include orientation and adjustment capabilities with the effect of increasing mid-late afternoon production over baseline Iowa PV, significantly increasing the value of retail net metered power to Alliant/IPL Energy and all ratepayers.

Entities respectfully request Alliant/IPL Energy confirm the acceptability of the following key terms by July 1, 2015, in order that we may proceed with array planning as soon as possible:

8. That multiple meters pertaining to a single entity and under similar rate structures may be virtually aggregated for the purpose of retail net meter calculation, balancing, and crediting.

9. That monthly production for each entity, as reported to Alliant/IPL in an acceptable electronic format and timing, be net metered in the same manner as would happen if production were interconnected behind the physical meter/s.

10. That surplus monthly and annual production for each entity be credited on a kWh basis and continuously rolled over for future availability, as long as the surplus at the end of a given calendar year does not exceed 50% of average annual consumption.

11. That both outright entity ownership, and entity participation in a PPA arrangement within the NTE solar array, be treated equally at the point of interconnection.
12. That renewable energy credits remain with customer/entities, the current norm in Iowa

13. That the array be sited and planned with the understanding of potential future expansion

Respectfully submitted,

/s/Liang Chee Wee, President, Northeast Iowa Community College

/s/John Logsdon, Chair, Winneshiek County Board of Supervisors

/s/Diane Tacke, Vice President for Finance and Administration, Luther College

/s/Lisa Radtke, Chief Administrative Officer, Winneshiek Medical Center

/s/Chad Bird, Administrator, City of Decorah

cc  Iowa Utilities Board
Senator Michael Breitbach, Senator Mary Jo Wilhelm, Representative Darrel Branhagen, Representative Josh Byrnes

June 15, 2015

Kim G. King
Manager-Renewables
Alliant/IPL Energy
Cedar Rapids, Iowa

Dear Ms. King,

The attached document represents a proposal from a small number of Winneshiek County non-taxable entities for an offsite, shared solar array under terms and conditions outlined in the request.

As you are aware, shared renewables (also referred to as “community solar” or “solar gardens”) include a wide diversity of approaches. Iowa has not legislatively defined or mandated a shared renewable option, but certain utilities have already tested the waters and others will continue to do so.

Signatory entities have been considering installing solar PV for some time, and Winneshiek Energy District has been involved in discussions of options and opportunities along the way. We believe the approach represented here would be in the best interests of both signatory entities and Alliant/IPL Energy/IPL, compared to a large number of small arrays interconnected at possibly dozens of meter locations.

These discussions have been happening at the local level since well before the IUB’s latest request for pilot projects in the distributed generation docket. But given that request, and the possibility that certain conditions such as virtual net metering may require consideration by the Board, we felt the timing fortuitous for all parties and have included this proposal in our recent submitted comments as a possible pilot project.

We should make it clear that Winneshiek Energy District has no intention of owning or managing the shared solar project discussed here. We are facilitating the discussions on behalf of local entities. We request a reply outlining Alliant/IPL/IPL’s initial response and concurrence/concerns, potentially followed by an in-person meeting among parties in Decorah.

We look forward to working with you on what we hope will be a mutually beneficial and innovative pilot project on distributed generation and shared solar in Iowa.

Sincerely,

Andrew Johnson
Executive Director
Appendix D. Preliminary Engineering Feasibility Assessment for a Community Solar PV Project For the Winneshiek Energy District

Overview of Analysis

A group of five large electric customers (“Customers”) served by Alliant Energy in Decorah is proposing the construction of a large 2.5 MW solar photovoltaic (PV) array in the immediate Decorah area that would consist of five separately metered 500 kW arrays. These customers are non-profit entities that normally cannot effectively use the federal and state income tax benefits available for solar PV projects.

Based on a cursory evaluation by the Customers, they have proposed three potential sites for the solar PV array. Figure 1 is an aerial photograph from Google Earth showing the Decorah area and the location of Alliant’s main distribution substation that serves most of the Decorah area, and the location of the three potential sites.

FIGURE 1 – Decorah Area and Potential Solar PV Sites
(removed to protect privacy of private landowners)

Figure 2 shows the general location of the three proposed sites, which are all in or near Freeport, an unincorporated populated area adjacent to Decorah. The Freeport area is served by a three-phase 13.8 kV line emanating from the Decorah substation.

FIGURE 2 – Location of Potential Array Sites in Freeport
(removed to protect privacy of private landowners)

The Customers have requested Wind Utility Consulting, PC (“Consultant”) to provide a preliminary engineering assessment of the sites to determine the relative advantages and disadvantages of each of the three sites.

The Consultant’s assessments considered the following factors:

1) Proximity to and difficulty of interconnecting to an Alliant three-phase line that directly connects to Alliant’s main distribution substation immediately south of the Winneshiek County Fairgrounds on the southeastern side of Decorah

2) Constructability of the site, based on the levelness of the terrain, suitability of the soils for foundations, access to the site, and the proximity of trees

3) Useable acreage of the proposed area and an estimated range of direct current output in kW (kW_{DC})

Site visits were made by the Consultant and pictures were taken of the sites. Based on this information, drawings were made on aerial photographs to show usable areas for building the solar PV array, and for interconnecting to Alliant’s 13.8 kV distribution grid.
To enable easy comparisons of the three sites, a table showing the relative advantages of the three sites has been developed. Each of the three sites is discussed below as Options 1, 2 or 3.

**Option 1: Winneshiek County Recycling Center Property Site**

The Recycling Center site is parcel #111337700300 as listed by the Winneshiek County assessor’s office. It sits east of the recycling center in Freeport and is nestled between Moellers Drive, Old Stage Road, and 170th Avenue. Figure 3 depicts the location of the site.

![FIGURE 3 – Location of Recycling Center Site](image)

The parcel has 10.4 acres, but the usable part indicated by the area enclosed by the yellow line is about 6 acres. The alternative expansion area to the west is also owned by the county. If this expansion area is used, the usable area can be expanded to 9 acres. The parcel is currently planted to corn. The usable area is very flat, with about 10 feet of drop in elevation from the south to the north end. The north end has an elevation averaging 847 feet, which is about 10 feet above the river level. A shallow drainage ditch runs adjacent to the west edge of the parcel. The land is very suitable for structural foundations or driven pilings for supporting the arrays. However, some consideration should be given to possible intermittent flooding during heavy rain events, due to the proximity of the drainage ditch. Alliant’s three-phase line is immediately adjacent to the east side of the site as shown by the dashed red line.

Figures 4, 5 and 6 are photographs of the site.
In general, the site has easy access, is adjacent to Alliant’s three-phase lines, and is very suitable for construction.

**FIGURE 4 – Looking North from South End of Parcel**

**FIGURE 5 – Looking South-Southeast from West Side of Parcel**
FIGURE 6 – Looking Northeast from West Side of Parcel

Option 2: Winneshiek County Property Site

The Winneshiek County site is parcel #112415100100. It is located south of Old Stage Road, and south of the Option 1 site. The county stores salvaged steel beams and timbers on the northwest corner of the site. Figure 7 depicts the location of the site.

FIGURE 7 – Location of Winneshiek County Property Site
The parcel has 74 acres, which is mostly forested. There is a cleared area that is about 200’ higher in elevation than Old Stage Road. This higher area is planted in corn. Although it is relatively flat compared to the rugged terrain that is forested, the cleared area contains sloping land in all directions. Due to the direction of the slopes in the cleared area, the Consultant has estimated that the usable area is only about 3 to 4 acres, as shown by the area enclosed by the yellow line. There are scattered limestone rocks showing on the surface of the area planted in corn, especially in areas near the trees. This suggests that rocks will be encountered during the construction of any foundations in this area. The site is surrounded by 25’ to 35’ tall trees, which requires the solar PV panels to be set back from the trees to minimize shading. To connect to Alliant’s system, a new 13.8 kV overhead line could be installed through an existing narrow clearing through the forest. This clearing may be where an underground waterline connects the large water storage tank on the site to the municipal water system along Old Stage Road. Since the narrow clearing is very steep and rocky, an overhead line would likely be less expensive to install than an underground line. Since this narrow clearing is too steep for transportation access to the site, an access road would have to be built from the south.

In general, this site is the most difficult to develop due to the need for an access road, an interconnection line going over rough terrain, rocky soils and a sloping site for the solar array. Figures 8, 9, 10 and 11 are photographs of the site. There is a large water storage tank at the north end of the site. Figure 11 illustrates the 200’ elevation drop from the clearing with the corn field down to Old Stage Road on the north side of the property.

FIGURE 8 – Looking West from the Northeast Corner of the Corn Field
FIGURE 9 – Looking South from the North End of the Corn Field
FIGURE 10 – Looking South at the Southeastern edge of the Corn Field

FIGURE 11 – Looking North-Northwest Through the Narrow Clearing in the Forest
Option 3: (some details removed to protect privacy)

This land is currently in agricultural production. Figure 12 (removed) depicts the location of the site.

The entire parcel is planted to corn and is relatively flat. There are 161 kV and 69 kV overhead transmission lines along the southern edge of the parcel. The lines would require about 100 feet of setback for any solar PV array facilities.

The usable area is estimated to be 14 acres in size. A new 0.5 mile 13.8 kV line would be required to interconnect to Alliant’s 13.8 kV system. The route of the new line would be determined by the availability of a private easement with the adjacent property owners. It could go westward or southward from the site to interconnect with Alliant’s 13.8 kV line.

In general, this site would be suitable for a larger solar PV array. The cost for an access road and interconnection line will be more expensive than the other sites, but the site can support a much larger solar PV array, especially if the adjacent property owners to the east, west, or south would make their land available for future solar array expansions.

Figures 13, 14, 15 and 16 (removed) are photographs of the site.

Comparison of the Three Options

Table 1 below compares the relevant attributes of the three options.

<table>
<thead>
<tr>
<th></th>
<th>Option 1 Recycling Center</th>
<th>Option 2 Winneshiek County</th>
<th>Option 3 private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parcel Size, in Acres</td>
<td>10.4</td>
<td>74.4</td>
<td>19.7</td>
</tr>
<tr>
<td>Usable Area, in Acres</td>
<td>6 to 9</td>
<td>3-4</td>
<td>14</td>
</tr>
<tr>
<td>Solar Array Size at 6 acres per 1000 kW&lt;sub&gt;DC&lt;/sub&gt;</td>
<td>1000 to 1500 kW&lt;sub&gt;DC&lt;/sub&gt;</td>
<td>600 kW&lt;sub&gt;DC&lt;/sub&gt;</td>
<td>2300 kW&lt;sub&gt;DC&lt;/sub&gt;</td>
</tr>
<tr>
<td>Construction of Array</td>
<td>Easy</td>
<td>Most Difficult</td>
<td>Easy</td>
</tr>
<tr>
<td>Access Road</td>
<td>0.0 Miles</td>
<td>0.2 Miles</td>
<td>0.1 Miles</td>
</tr>
<tr>
<td>Length of Interconnection Line</td>
<td>0.0 Miles</td>
<td>0.3 Miles</td>
<td>0.5 Miles</td>
</tr>
<tr>
<td>Relative Cost of Construction per kW&lt;sub&gt;DC&lt;/sub&gt; of PV Capacity</td>
<td>Lowest</td>
<td>Highest</td>
<td>Medium</td>
</tr>
<tr>
<td>Suitable for Tracking Array?</td>
<td>Yes</td>
<td>No, Due to Trees</td>
<td>Yes</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----</td>
<td>-----------------</td>
<td>-----</td>
</tr>
<tr>
<td>Ownership of Parcel</td>
<td>Winneshiek Co.</td>
<td>Winneshiek Co.</td>
<td>private</td>
</tr>
<tr>
<td>Adjacent Landowner Easements Required?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Visibility to Public</td>
<td>High</td>
<td>Very Low</td>
<td>Very Low</td>
</tr>
</tbody>
</table>
| Primary Advantages            | - Low in Cost  
- High Visibility  
- Owned by County | - Owned by County | - Array size can be increased |
| Primary Disadvantages         | - Near Drainage Ditch  
- Difficult Access  
- Highest cost per kW | - Lengthy Interconnection |
| Critical Factors              | None | - Availability of Access Road Easement | - Availability of Access Road and Line Easements |
One-Line Diagram of Proposed Facilities

Figure 17 is a simplified one-line diagram showing the five separate 500 kW AC solar arrays that are separately metered at 13.8 kV and then combined into one 13.8 kV interconnection line which is then connected to Alliant’s distribution line at the point of interconnection.

**FIGURE 17 – One Line Diagram of Proposed Facilities**
**Summary of Findings**

In summary, any of the three sites could be used for the construction of a solar PV array. The Option 1 site would be by far the easiest to develop and construct, since no easements would be required other than from one of the participating customers. Option 1 would also be lowest in cost for solar PV arrays up to 1,500 kW_{DC} in size.

Option 3 provides the best option for the largest solar PV array and for future expansion, due to the amount of adjacent open land.

Based on this assessment, the Customers should feel confident that suitable land is available for the construction of a solar PV array that can be connected to Alliant’s 13.8 kV system, which is connected to the Decorah substation.

**Next Steps for Project Development**

The next project development steps include the following:

1) Determine how the solar generation will be used or sold, and the size of the solar PV array in kW.

2) If Options 2 or 3 are considered viable, determine if landowners will provide the necessary land leases and easements for the access road and interconnection line.

3) Complete a more detailed engineering assessment of constructability and relative costs for developing the viable sites.

4) Select the preferred site for development.

5) Submit an interconnection application for the preferred site to Alliant.

The critical factors are the availability of land leases and easements from adjacent landowners.

Thomas A. Wind, PE  
Wind Utility Consulting, PC  
October 6, 2015
Appendix E.

TERM SHEET
Winneshiek Solar Collaborative Distributed Generation Pilot Project
October 21, 2015

This Term Sheet sets forth the key terms of the Distributed Generation Pilot Project (the “Pilot Project”) proposed to be entered into by the Winneshiek Solar Collaborative or any of its members (the “Customers”) and Interstate Power and Light Company (the “Utility”) which, as further described below, generally involves the development of a solar energy generation array (the “Solar Facility”) near Decorah, Iowa, the sale of energy from the Solar Facility to the Customers via third party power purchase agreements and the accounting for such sales via a virtual net metering (“VNM”) arrangement. This Term Sheet is for discussion purposes only. There are no obligations on the part of any party until definitive agreements are signed by all necessary parties and the Pilot Project is approved by the Iowa Utilities Board (the “IUB”) on terms acceptable to the Customers and the Utility.

<table>
<thead>
<tr>
<th>Project Participants</th>
<th>Limited to the non-taxable entity members of the Winneshiek Solar Collaborative.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Development</td>
<td>Customers will design, develop and construct an approximate 2.5 M Solar Facility at their own expense. The Solar Facility will consist of five (5) separate 500 kW solar sub-arrays, each owned by an LLC. The Customers and the Utility shall cooperate in determining the optimal location of the Solar Facility in relation to the Utility’s distribution system needs. Interconnection of the Solar Facility to the Utility’s electrical distribution system shall be at a single point of interconnection (“POI”) and is subject to the requirements of 199 Iowa Administrative Code (“IAC”) Chapter 47.</td>
</tr>
<tr>
<td>Sale and Delivery of Electricity</td>
<td>The electricity produced by each solar sub-array shall be sold to one or more of the Customers via third party power purchase agreements. The electricity will be delivered to the Utility at the POI.</td>
</tr>
<tr>
<td>Flow Accounting</td>
<td>The flows of electricity between the Solar Facility and the Utility shall be metered at the POI.</td>
</tr>
<tr>
<td>Net Billing</td>
<td>Each Customer shall receive a monthly bill credit from the Company reflecting the Customer’s “utilization” of its 500 kW portion of the Solar Facility’s output, calculated based upon the metered flow of power from this 500 kW portion of the Solar Facility at the POI. The production from the Customer's array shall be measured and recorded, each calendar month, by a Company-owned production meter. The monthly bill credit shall be applied to the Customer's bill from the Company no later than the sixtieth (60th) day after the Company receives the applicable production and billing information from the customer.</td>
</tr>
<tr>
<td>Calculation of the Net Bill Credit</td>
<td>The monthly bill credit shall be the equivalent of the amount each Customer pays the Utility for electricity purchased by the Customer.</td>
</tr>
</tbody>
</table>
from the Utility in that same month. For General Service meters, the Utility shall credit the customer with the amount supplied to the grid by the Customer’s 500 kW portion of the Solar Facility. For Large General Service meters, the bill credit shall include both demand and energy components. A basic service fee to be determined by the parties and energy efficiency cost recovery charges shall be excluded from the bill credit. Bill credits shall be applied to each entity’s usage based on a prioritized list of entity meters supplied by each customer.

<table>
<thead>
<tr>
<th><strong>Rollover of Credits</strong></th>
<th>Net bill credits, if any, shall roll forward up to an agreed maximum percentage of annual consumption as determined by the parties. Any credit surplus beyond this percentage becomes the property of the Utility.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RECs</strong></td>
<td>Each Customer shall retain ownership of the SRECs associated with the Customer’s portion of the Solar Facility. Any Customer may agree to sell its SRECs to the Utility if the Customer so desires.</td>
</tr>
<tr>
<td><strong>Project Term</strong></td>
<td>The pilot project shall commence upon the commercial operation date of the Solar Facility and continue for a period of 10 years, unless earlier terminated by order of the IUB.</td>
</tr>
<tr>
<td><strong>Reports</strong></td>
<td>The Pilot Project shall include a requirement that annual reports on the project will be filed with the IUB and shall cover: 1) how virtual net metering is working and any need modifications, if any; 2) system and environmental impacts of the Solar Facility; 3) system constraints impacted positively or negatively by the Solar Facility; 4) effect of the Solar Facility on the Utility’s system peak; 5) how experience with the Pilot Project can inform future distributed generation and virtual net metering projects; 6) impact of the Solar Facility and the net metering arrangement on other customers; and 7) any other issues identified by the parties.</td>
</tr>
<tr>
<td><strong>Documentation/Filing Date</strong></td>
<td>The parties will cooperate to develop a tariff for the Pilot Project (the “Pilot Project Tariff”) consistent with this Term Sheet. The parties will also cooperate to file a joint application for approval of the Pilot Project Tariff by the IUB, to be submitted to the IUB not later than December 1, 2015.</td>
</tr>
<tr>
<td><strong>Precedential Effect</strong></td>
<td>The parties shall agree that the neither the proposal of the Pilot Project by the parties nor the approval of the terms of the Pilot Project by the IUB shall be argued to, or be deemed to, have precedential effect in any future proceeding brought before the IUB relating to net metering or billing, virtual net metering or billing, the applicability of net metering to Large General Service customers or the applicability of net metering to energy and demand customers.</td>
</tr>
<tr>
<td><strong>Expiration</strong></td>
<td>This Term Sheet shall expire on January 1, 2016, unless extended by the parties.</td>
</tr>
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</table>