IPA Request for Comments - Full Requirements Products
Ameren Illinois Company Informal Response
July 2, 2014

Question 1:

At the June 5th workshop some participants suggested that an analysis of a potential full requirements procurement should be for a product that includes capacity, ancillary services, etc., not just a load following energy product (as the IPA had analyzed in the 2014 Procurement Plan). Please comment on the advantages and disadvantages of this product definition, and explain which ancillary services should, or should not, be included (e.g., active power reserves but not voltage support).

We are making the assumption that any full requirements product would be designed such that the suppliers would act as market participant in MISO. Under a scenario where Ameren Illinois acts as the market participant in MISO, the complexities associated with the contract and settlements in MISO would likely make such a scenario undesirable. So working under the assumption that the suppliers act as the market participant in MISO, suppliers would incur all MISO related costs including capacity and ancillary services and the contract would be structured such that Ameren Illinois pays the supplier for a fixed price which includes capacity, ancillary services, energy and all other MISO charges. It is noteworthy that the process by which a market participant is setup within MISO is fairly involved and would therefore need to be considered as part of the timetable for full requirements implementation.

Another important consideration is that any full requirements products should work within the context of the MISO market and this requires a thorough understanding of the MISO tariffs and business practices which in turn would assist in the design of a full requirements product and the subsequent contract. This process will require careful consideration to ensure that any full requirements product is implemented properly. In addition, any expectation that Ameren's MDMA should be an integral part of the settlement process associated with full requirements contracts should consider that modifications to the current system may be necessary and such modifications could involve effort and therefore lead time.

In summary, if the IPA desires to pursue a full requirements product, we are of the opinion that the suppliers should act as market participant in MISO and incur all MISO related costs. Ameren Illinois would then pay the supplier a fixed price under the contract. The design of the product and the contract is critical so as to ensure it meets the requirements of the MISO market. A clear understanding of the settlement expectations between Ameren Illinois, suppliers, MISO and Ameren's MDMA is also critical. We encourage the IPA to ensure adequate time is allotted to address these issues prior to implementation of any full requirements procurement and subsequent contract.

Question 2:

A participant at the workshop indicated that suppliers of fixed-price full requirements

products assume price risks associated with capacity, ancillary services, etc. How would one quantify the anticipated costs of including the non-load following energy components (capacity, ancillary services, etc.) in the product described in question 1?

The ancillary service costs could be estimated using historical data from MISO. The same could be true for capacity costs. Ancillary service costs have been a small portion of overall supply costs since MISO market inception in 2009. The same is true of MISO capacity costs, however capacity costs are subject to dramatic increases in a year where scarcity occurs. This makes modeling of capacity costs based on historical outcomes potentially less accurate.

Question 3:

Bids for full requirements contracts include compensation for various costs and risks borne by the product supplier (i.e., "residual compensation" as described in the ICEA presentation).

Please comment on what factors influence the level of this cost and how it should be estimated. Other discussions of full requirements procurement (e.g., the IPA's 2014 Procurement Plan) discuss the concept of a "risk premium." Please also comment on the differences in definition between "residual compensation" and "risk premium" and how the two concepts should be differently understood.

We have no comment at this time, however we may comment once the draft plan is made public.

Question 4:

For the purposes of modeling the full requirements approach, there was discussion at the June 5th workshop about modeling for the 2015/16 delivery year an implementation of full requirements that would account for the existing block contracts as well as separately modeling (for the 2015/16 delivery year or future implementation years) an approach consisting entirely of full requirements contracts. Please discuss any limitations or adjustments to those two models, and how the existing contracts should be treated in the first model.

Any modeling in the upcoming procurement plan should consider the existing block contracts.

Question 5:

Please suggest models for how full requirements procurement could be phased into the existing ComEd and Ameren portfolios previously procured by the IPA.

The first step would include an evaluation of the supplier risk premium expected in a full requirements solicitation. This would be followed by additional evaluation as to whether the supplier risk premium is justified based on a reduction in customer expected costs and/or price stability. If the evaluation suggests that full requirements products should be pursued in a future

IPA solicitation, the design of the full requirements product and its associated contract are critical to achieve the desired result and minimize operational and administrative complexities. Regarding the quantities that would be phased in, Ameren Illinois believes a "go slow" approach would be appropriate given this would represent a significant departure from current procurement practice.

Question 6:

The analysis conducted by PA Consulting for the IPA as part of the 2014 Procurement Plan included assumptions that suppliers bidding in a full requirements procurement would hedge their price exposure with forward contracts. Please provide input on what models suppliers use for estimating the costs and risks (including, but not limited to, price and load risk) that they bear as a full requirements product supplier and what inputs the IPA should consider when modeling supplier bidding behavior in a full requirements procurement.

We have no comment at this time, however we may comment once the draft plan is made public.

Question 7:

To what degree, and how, could the potential benefits of procuring full requirements products (as compared to a block procurement approach) be quantified rather than qualitatively described? What are some of the relevant risk metrics that should be included in such an analysis, and how should they be compared to known procurement costs? Additionally, what are some of the inputs and variables that must be appropriately captured in order to quantitatively assess potential benefits? Are there benefits of the block procurement approach (as compared to a full requirements approach) that could also be assessed and quantified?

We have no comment at this time, however we may comment once the draft plan is made public.

Question 8:

The IPA's traditional procurement approach hedges in the forward market a percentage of expected load taking into account market conditions. In the 2014 Procurement Plan, the IPA hedged 106% of average load for the summer months to mitigate shaping risk, and for the first time, the IPA is planning a fall procurement for ComEd to adjust the balance of the current delivery year supply to balance an updated summer load forecast. The goal of this second procurement is to reduce load risk. Given the legislative mandate of the Agency to "develop electricity procurement plans to ensure adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time, taking into account any benefits of price stability," are there strategies other than full requirements procurement and the IPA's current approach that the IPA could consider for managing risks?

Many electricity trading organizations use a hedging strategy akin to a "funnel approach" whereby numerous procurements are made over time and where each subsequent procurement increases the hedge ratio as the operating day approaches. Under this strategy, procurements made closest to the operating period reflect relatively minor refinements. For example, a fully staffed trade floor could procure yearly, quarterly, monthly, weekly and daily energy in advance of the operating day and potentially hourly energy within the operating day. Since the hedging plan was implemented gradually over time, the result is often that the hedged quantity leading into an operating day is extremely close to the expected load for that operating day. Since the IPA does not have a fully staffed trade floor, it would be impractical to implement hourly, daily or even weekly procurements. But the point is that the IPA could make more frequent purchases gradually over time (including quarterly and perhaps monthly) and this strategy could achieve many of the perceived benefits of full requirements products.

While the downside could be increased procurement costs, this could be offset by a reduction in the additional costs associated with a full requirements products (e.g., supplier risk premiums and administration).

In addition, given that the IPA hedges at the average load and this results in some peak hours that are underhedged, the IPA could pursue the procurement of "super peak" blocks of energy during the summer and/or winter where these periods historically contain the most price volatility. For example, the IPA could pursue the procurement of energy for 4 to 6 hours across peak summer hours at a fixed price or the IPA could pursue other financial means to hedge risk during peak periods such as call options with a fixed strike price or call options with a variable strike price based on the spot price of natural gas multiplied by a predetermined heat rate.

Question 9:

During the workshop the idea was raised that there may be ways to achieve rate stability other than utilizing a full requirements supply strategy. How could the utilities provide firm prices for a defined period through a tariff mechanism? Could the utilities adjust the PEA on an annual basis, as opposed to a monthly basis? Would a "rate stabilization account" approach add unnecessary costs? Are there ways to achieve additional utility price/rate certainty while utilizing the IPA's current competitively-bid block procurement strategy?

We have no comment at this time, however we may comment once the draft plan is made public.

Question 10:

Please provide examples of studies or other evidence that assesses or quantifies the interest of Illinois residential (and/or small commercial) customers in firm rates. To the extent available, please correlate those examples to evidence of customer choice and switching. Please also provide examples from other retail markets.

We have no comment at this time, however we may comment once the draft plan is made public.

Ameren Illinois has added other issues below which it believes the IPA should consider as part of its analysis of full requirements products. The intention is to generate further discussion among the IPA and interested parties.

Determine if the supplier of full requirements products would "wear" any switching risk and any weather risk.

Determine if full requirements products would be a slice of the eligible retail load.

If full requirements would not be a slice of the eligible retail load and instead would be a fixed MW quantity, consider how full requirements products would interact with existing block purchases. For example, under a scenario where total hedges are in excess of the load, presumably block purchases could be sold back to the market. But it is uncertain if the same can be said for full requirements products.

Confirm that the supplier would act as market participant in MISO and therefore administer the load within MISO. Further clarify this would result in all MISO incurred costs (and credits in the case of ARRs) falling to the supplier with the full requirements contract detailing payment terms between Ameren Illinois and the supplier.

However, if Ameren Illinois were expected to act as market participant in MISO, several operational and administrative issues would need to be addressed in the contract including energy scheduling within MISO and issues surrounding capacity and ancillary services. The energy scheduling process alone would create significant complexity because Ameren Illinois would need to enter into a fin schedule with the supplier in MISO for each operating day. And this schedule would be based on estimated load which would later true up against actual load. The other option would be for no fin schedule to occur within MISO and the energy would settle among the supplier and Ameren Illinois as a fin swap. However, this has implications regarding derivative reporting (Dodd Frank) that would also need to be addressed. As previously stated, we believe the proper design would be that the supplier act as market participant in MISO.

Determine which party would administer the invoicing process.

Confirm that Ameren's MDMA is expected to provide settlement data as part of the contract settlement and invoicing process and whether this settlement data would include preliminary (S7 or S14), intermediate (S55) and final (S105) settlement data such that each operating hour would be settled three times. Consider that Ameren's MDMA system may need modifications so as to accommodate the settlement requirements under a full requirements contract.

The procurement follows a process that is benchmarked, contains sealed bids and where winning suppliers are awarded contracts based on lowest price. It would need to be determined if full requirements products would compete "head to head" with block purchase products solely on the basis of price and where the IPA and its procurement administrator decides which mix contains

the least cost. Another alternative could be to determine the quantity of full requirements MWs (or % of eligible retail load per slice of system) in advance of the solicitation and then determine separate quantities associated with a block procurement. This alternative would result in an independent selection of winners from the full requirements procurement relative to the block procurement. It should be considered whether separate procurements of full requirements products and block products meets the objective to "develop electricity procurement plans to ensure adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time, taking into account any benefits of price stability".

Determine if the full requirements products will contain renewables. If included, consider how the cost and quantity of the renewables will be identified so as to be included in the calculation of renewable budgets and targets pertaining to the Renewable Portfolio Standard.

Determine if the full requirements contract will contain a provision whereby suppliers must meet any Illinois clean energy requirement that might emerge through future legislation.

Determine if the full requirements contract will contain any provisions pertaining to the Clean Coal Portfolio Standard.