

E-Tagging – Current Project Activities

Brian Hurysz
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Overview

- Several tracks of work currently being discussed with MPs.
 - ***Revalidate and update past MP input***
 - ***Five discussion point tracks emailed September 13, 2004***
 - ***Description, status, and next steps to be discussed under each track as part of presentation***
 - ***Details attached to this presentation to be reviewed back at each MPs site with appropriate parties***

- Responding to MP Requests
 - ***Compiled comparison matrix, along with other CA's, to yield MP reference tool for E-Tagging rules at each CA***
 - ▶ Included as attachment to this presentation

- S&PWG Update “NYISO E-Tagging Project–Validation of Approach for MP Involvement” provided August 4, 2004

Discussion point # 1 – E-Tagging 1.4 Release

Description

- Cleanup of “Rogue” E-Tags in OATI – Tags with no MIS bids at HAM close
- Addition of descriptive Reasons in OATI for NYISO responses – MP/CA requested
- Fix to prevent excessive curtailments to OATI for Tags with MW losses
- ***Additional details in attachment to this presentation***

Current status

- Sent discussion point email summary to MP's on 8/27
- Held checkpoint with impacted MP's on 9/21
- No significant issues raised by MP's
- Currently in QA stage, in preparation for deployment along with SMD

Next steps

- Next checkpoint with impacted MP's scheduled for 10/12
- Ongoing QA and deployment preparation
- Update S&PWG as appropriate

Discussion point # 2 – Replace DENY with APPROVE/CURTAIL

Description

- Allow E-Tags submitted after HAM close to become IMPLEMENTED, as long as the TagID matches an MIS bid
- Once IMPLEMENTED, NYISO will request curtail to OATI if MWs different from MIS schedule
- Restores some MP flexibility
- *Additional details in attachment to this presentation*

Current status

- Held con call with MP's on 7/29 to introduce proposal
- Sent discussion point email summary to MP's on 8/27
- MP's acknowledged benefit in new flexibility

Other possible future functionality / Discussion Points

- Ability to change TagID in MIS after HAM close
- Require Tag to be submitted to OATI by HAM close & Reject MIS bids at market close with no tag
- "Draft Tag" concept to ensure Implemented Tag, then Adjust/Curtail as needed
- Pursue transmission reservation rebate through PJM when CA curtails capacity

Next steps

- Proceed with detailed design
- Update S&PWG as appropriate

Discussion point # 3 – Handling of “Phantom” E-Tags

Description

- Cut transactions in MIS for which no matching E-Tag exists, as per NERC requirement
 - ***Additional details in attachment to this presentation***

Current status

- Sent discussion point email summary to MP's on 8/27
- No significant issues raised by MP's
- Communicated impact to HQ (since no current Tag validation done), including examples of past Phantom Tag schedules that would no longer be permitted to flow
- Generated report for Phantom Tags over the month of September
 - ***Number of MIS schedules with Phantom Tag: 90***
 - ***Total MW value of Phantom Tag schedules: over 10,000 MW***
 - ***Total # of MP's responsible for Phantom Tag schedules: 10***

Next steps

- NYISO Customer Relations contacting impacted MP's based on September data
- Ongoing data analysis to track future Phantom Tags and proactively communicate to MP's
- Update S&PWG as appropriate

Discussion point # 4 – Compare MIS Bids to Tag Tools

Description

- Tools to help MPs determine why NYISO assigns a certain status to an E-Tag request

Current status

- Sent discussion point email summary to MP's on 8/27
- MP discussion call held on 9/14
- MP's endorsed high-level design and provided specific design suggestions
 - Indicated interest in MIS screen interface
 - Little interest expressed in OSS or Upload/Download interfaces
 - Preference to see “missing” data from both MIS and E-Tag system
 - Enhancement to existing MIS “View Transaction” display discussed as possibility
 - ***Complete set of notes provided in attachment to this presentation***

Next steps

- Screen alternatives to be documented and sent to MP's
- Update S&PWG as appropriate

Discussion point # 5 – After-the-fact Scheduling

Description

- Flexibility to enter transaction MW values after the hour
- Allow submissions including new transactions up till noon next day
- Applies to NYISO internal financial (internal) transactions only

Current status

- Sent discussion point email summary to MP's on 8/27
- No significant issues raised by MP's
- Item still very much in the planning phase and looking for input

Next steps

- Identify MP's interested in using this functionality and schedule call to discuss
- Update S&PWG as appropriate

Attachments

1. **E-Tagging Control Areas Comparison Matrix**
2. **Discussion point # 1 – E-Tagging 1.4 Release – design details**
3. **Discussion point # 2 – Replace DENY with APPROVE/CURTAIN – design details**
4. **Discussion point # 3 – Handling of “Phantom” E-Tags – design details**
5. **Discussion point # 4 – Compare MIS Bids to Tag Tools – notes from 9/14 MP call**

E-Tagging Control Area Comparison Matrix (Section 1 of 5)

	Question/Process	NYISO	ISO-NE	IMO	PJM	HQ	MISO	NB
1	When is the tag submission deadline time?	<ul style="list-style-type: none"> All tags denied after T-20 After T-75, tags are approved only if they match MIS bids/schedules 	Tag for any transaction must be in place by T-60	<ul style="list-style-type: none"> eTag must be submitted and adjusted before T-30 (note: when impactive TLR activated, must be transferred to IDC by T-35) bid/offer in IMO market can only be submitted or changed before T-120 	20 Minutes prior to start of schedule.	Officially, 1 minute. In fact, approx. 30 minutes prior to start of transaction as seen through checkout interface due to external market rules.	Procedure calls for 40 minutes past but we will evaluate on a per tag basis.	
2	Scheduling/Etag synchronization							
2a	In general, does CA update eTag to reflect scheduling?	Yes (<i>details below</i>)	Yes (<i>details below</i>)		Yes		Yes	
2b	In general, does CA update scheduling to reflect Etag?	No	No		Yes, since the tag is the schedule		The system will update as appropriate	
3	Market Rules for CA							
3a	Market Closing times	DAM closes at 500 HAM closes at T-75	DAM closes at 1200		DAM closes at 1200		Not applicable	
3b	Checkout start time	Approx T-40	Approx T-40				Not applicable	
3c	What validations are done at checkout?						Not applicable	
3d	What special scheduling criteria should one be aware of?	Schedule is hourly, with all start and end times at top of hour only.	Schedule is hourly, with all start and end times at top of hour only		15-minute granularity on scheduling		Not applicable	
3e	Do transactions that are solely for DAM require an eTag?	No	No. DAM transactions are entirely separate from the RTM.	N/A. IMO does not have a DAM currently.	Our 2-Settlement Day-Ahead market is only financial, thus no tags are required.	Yes [but, HQ doesn't have a DAM?]	Not applicable	
3f	What must be submitted in order for a transaction to be executed?	Market Trx (MIS bid) & eTag NOTE: eTag currently not checked by NYISO but upcoming 'Phantom Tag' (Market Trx with no E-Tag) enhancement will provide NYISO Operator visibility for curtailment in MIS.	Market Trx and eTag	Market Trx and eTag	E-Tag only (unless there is other specific market information in the bid e.g. dispatchable)	eTag only	Not applicable	

E-Tagging Control Area Comparison Matrix (Section 2 of 5)

4								
<i>In initial review of an eTag:</i>								
4a	Under what circumstances do you Actively Approve?	Any eTag submitted within our market deadlines that matches an MIS bid/schedule will be Actively Approved	Any eTag submitted within our market deadlines that contains valid information will be Actively Approved	<ul style="list-style-type: none"> We normally only Actively Approve eTags after the results of our predispatch short report (approx T-45). The eTags must meet our predispatch results as well as our Market Rules and NERC requirements We Actively Approve late eTags if agreed to by all required entities 	Immediately upon receipt of tag.	Never. External markets provide active approval	Approval or Denial is always Active	
4b	Under what circumstances do you Passively Approve?	If eTag is submitted prior to T-75 and does not match an MIS bid, NYISO will assign STUDY status (eventually becoming passively approved)	We will never intentionally allow an initial submittal to go Passively Approved	All eTags that are submitted before the results of our predispatch short report for the next dispatch hour are allowed to be passively approved by the eTag program.	None	Always.	None	
4c	Under what circumstances do you Actively Deny?	<ul style="list-style-type: none"> Any eTag submitted after T-75 that does not match an MIS bid/schedule Any eTag submitted after T-20 	<ul style="list-style-type: none"> Any eTag submitted outside the market deadlines. Any eTag with information that is incorrect relative to ISO-NE Market Rules 	<ul style="list-style-type: none"> If it can be confirmed that the transaction has not been scheduled in our market If it does not meet NERC or Market Rules requirements 	If there is no ramp room available for the request, or if it is past the scheduling deadline.	Any tag that does not meet NERC requirements or submitted outside deadline is denied.	Approval or Denial is always Active	
5								
<i>In review of PSE Adjustment to an eTag:</i>								
5a	When do you Actively Approve?	same as 4a	same as 4a	same as 4a	same as 4a	same as 4a	same as 4a	
5b	When do you Passively Approve?	same as 4b	same as 4b	same as 4b	same as 4b	same as 4b	same as 4b	
5c	When do you Actively Deny?	same as 4c	same as 4c	same as 4c	same as 4c	same as 4c	same as 4c	

E-Tagging Control Area Comparison Matrix (Section 3 of 5)

6	What does the 'Implemented' status of the eTag mean?	<p>a) For Implemented eTag that was actively approved by NYISO: The Tag energy profile matched a transaction bid in MIS at the time the Tag was approved (the MIS bid may have subsequently been modified). Does not ensure a transaction will be scheduled</p> <p>b) For Implemented eTag that was passively approved by NYISO: The Tag energy profile does not match a transaction bid in MIS. Tag defaults to Passive Approved at close of Study window then defaults to Implemented. Does not ensure a transaction will be scheduled "phantom" tags. For any implemented eTag, NYISO will attempt to adjust eTag to schedule value during market evaluation and check-out if NYISO schedule does not match eTag.</p>	<ul style="list-style-type: none"> All data on eTag affecting ISNE is correct Does not ensure a Market Trx was submitted 	<ul style="list-style-type: none"> The eTag data has been transferred to IDC Does not necessarily mean that the transaction has been scheduled in the IMO market (see item 4b) 	All data on E-Tag is correct All validations passed Profile is now in EMS	All checkout data is consistent with eTag in EMS. HQTÉ does not currently forward curtailments to eTag agent (OATI).	It means the Schedule has been reviewed and action has been taken by all parties involved.
7	When does your CA adjust eTags?						
7a	for Next-Hour Schedule?	If next hour schedule does not match the requested MW level, CA adjusts eTag to match next hour schedule NOTE: Any "Rogue" eTag that does not have a corresponding Market Trx will be curtailed to 0 MW for that hour	If next hour schedule does not match the requested MW level, CA adjusts eTag to match next hour schedule	<ul style="list-style-type: none"> eTags on the IMO/NYISO flow-gate: are curtailed by the receiving control area in the hour before the start of the schedule for eTags on all other interties: we require the PSE to adjust the eTag to match results of IMO predispach results in the hour prior to the start of the transaction IMO will curtail eTags on behalf of PSE requests for adjustments due to tool failures IMO will perform all required curtailments for TLRs or other security reasons 	PJM will curtail tags after the tag is implemented in the event other withdraws etc. cause a ramp violation. PJM will also curtail tags during checkouts with NY if the profile changed, and NY has not already posted the change on the tag.	Same as 6?	MISO would Curtail next hour
7b	for In-Hour Schedule?	Currently, this is never done (will be added in the future)	If an in-hour curtailment is made, CA adjusts eTag to match current schedule	same as 7a	???		Not normally, but Intra-hour can be done under extreme circumstances

E-Tagging Control Area Comparison Matrix (Section 4 of 5)

7c	how will it appear on the eTag?	All CA adjustments appear as 'curtailment'	All CA adjustments appear as 'curtailment'	same as 7a	All CA adjustments appear as 'curtailment'		Curtailment	
8	Do you actively review and approve adjustments to the tag by other CAs?	No. All communication with surrounding CAs occurs regarding the NYISO Mkt Trx, referencing the Tag ID. The CAs are responsible to ensure the Tag matches the agreed upon value, thus no subsequent review of the CA adjustment is required.	No. All communication with surrounding CAs occurs regarding the ISO-NE Mkt Trx, referencing the Tag ID. The CAs are responsible to ensure the Tag matches the agreed upon value, thus no subsequent review of the CA adjustment is required.	same as 4a	Yes.	No	Yes	
9	If both eTag AND Market Transaction are required:							
9a	Is there any validation/review of eTags that do not have a corresponding Market Trx?	Currently being implemented by NYISO ("Rogue Tag" enhancement). With this change, an implemented tag with no Market Trx will be curtailed to 0 MW at T-55 (20 minutes allowed for pending tags to become implemented in OATI).	Just after T-60, eTags are located that DO NOT have corresponding Market Trx. Those eTags are curtailed for the coming hour to ensure the IDC information is accurate.	eTags are manually reviewed prior to the start of each dispatch hour to ensure they have been scheduled in the IMO market. It is the PSE responsibility to make the necessary adjustments (except transactions on the IMO/NYISO flow-gate), however, the IMO will make curtailments if a tag has a greater value than what is scheduled in IMO market and PSE has not adjusted.	Not applicable	Not applicable	Not applicable	
9b	On initial submittal of Market Trx, what validation is performed regarding eTag?	None. PSE is allowed to submit/change bids/offers anytime up to T-75. eTag is not required until T-30 minutes prior to start of dispatch hour	MW profile must match between eTag and Market Trx before Market Trx will be 'Approved'	None. PSE is allowed to submit/change bids/offers anytime up to T-120. eTag is not required until T-30 minutes prior to start of dispatch hour. Verification of eTag occurs as in item 9a above.	Not applicable	Not applicable	Not applicable	
9c	Upon modification of Market Trx, what validation is performed regarding eTag?	Same as 9b	Upon re-submittal of MW profile on Market Trx, the eTag validation is re-initiated (MW profiles must match). (Only the 'current' eTag, those adjustments that are 'Implemented' will be compared to the Market Trx)	same as 9b	Not applicable	Not applicable	Not applicable	

E-Tagging Control Area Comparison Matrix (Section 5 of 5)

10	Upon PSE modification of an eTag, what validation is performed on the Market Transaction?	See answers to 5a, 5b, 5c	<ul style="list-style-type: none"> • PSE Adjustment to an eTag that is linked to a Market Trx that is NOT 'Approved' will cause revalidation of the eTag against the Market Trx (only the 'current' eTag) • PSE Adjustment of an eTag that is linked to an 'Approved' Market Trx will cause no revalidation of the Market Trx 	A manual comparison of the eTag modification to the Market Schedule is done only after the predispatch run in the hour before start of the transaction.	Not applicable	Not applicable	Not applicable	
11	Upon PSE cancellation/termination of an eTag, what validation is performed on the Market Trx?	None. See response on 3f concerning "phantom" tags.	<ul style="list-style-type: none"> • PSE Cancellation/Termination to an eTag that is linked to a Market Trx the is NOT 'Approved' will cause revalidation of the eTag against the Market Trx. This will cause the Trx to move to 'Pending' status and it will not be evaluated • PSE Cancellation/Termination of an eTag that is linked to an 'Approved' Market Trx will cause no revalidation of the Market Trx. However, the manual process to validate the Trx and eTags should catch the discrepancy. The Operator is then notified of the Trx missing a valid eTag. 	After completion of the predispatch run in the hour before the start of the transaction, each transaction scheduled in the IMO market is manually checked for a corresponding eTag. Transactions that do not have corresponding eTags by the required deadline are manually failed (removed) from the IMO Market Schedule.	Not applicable	Not applicable	Not applicable	

Discussion point # 1 – E-Tagging 1.4 Release – design details

The Business Problem

At HAM close, there may be E-Tags in OATI that do not have any corresponding bids in MIS. These E-Tags are termed as the “Rogue” E-Tags. The “Rogue” E-Tags result in inconsistent data between MIS and the E-Tag data.

The Proposed Solution

The NYISO will cleanup these “Rogue” E-Tags where NYISO is listed as one of the participants.

At T-55, a process, hereafter referred to as “Rogue Tag T-55 run”, will compare the E-Tags that are created before HAM close with the MIS bids. For the E-Tags that do not have a corresponding bid in MIS, NYISO will send a curtailment request for 0 MW to OATI for the HAM close hour.

The time “T-55” has been chosen for the Rogue Tag run as it is the latest time by which all the E-Tags that are created before HAM close will get implemented. As per the OATI rules, a curtailment can be issued only for an implemented E-Tag.

Discussion point # 1 – E-Tagging 1.4 Release – Business Rules

1. **“Rogue” is just a term that is used to define E-Tags with no corresponding bids in MIS. It does not represent the status of an E-Tag or the status of a request in webdata.**
2. **All the E-Tags with NYISO as one of the participants will be evaluated by the “Rogue” Tag engine at T-55. E.g. NYISO could be a participant in an E-Tag as a control area or as a transmission provider.**
3. **All the E-Tags with NYISO as a participant in the capacity of a non-approval entity will not be evaluated at T-55 by the “Rogue” Tag engine. These are the cases where the “IsApprovalEntity” column in the ReqParticipant table is 0 (false) and companyName is NYIS.**
4. **Only the “Implemented” E-Tags created before the HAM close will be evaluated by the Rogue Tag engine.**
5. **The “Withdrawn”, “Dead” and “Rejected” E-Tags will not be evaluated by the “Rogue” Tag engine.**
6. **The “Rogue” Tag engine will not do a MW comparison between an E-Tag and the corresponding bid. It will just evaluate if a bid exists for an E-Tag or not.**
7. **The curtailments at T-55 for 0 MW will be sent only for the hour for which the HAM has closed. So, in the case where the energy profile of an E-Tag extends multiple hours with corresponding bids for some of the hours and no corresponding bids for the other hours, the curtailments for 0 MW at HAM close will be sent only for the hours that do not have a corresponding bid. E.g. If an E-Tag has an energy profile of 5 hours and has corresponding bids only for hour 2 and 4, the curtailments for 0 MW will be sent for hour 1, 3 and 5.**
8. **A curtailment will not be issued in case an E-Tag is associated with at least one and any of the DAM, HAM or NON-FIRM bids for the hour of the HAM close.**
9. **A curtailment will not be issued in case an E-Tag is associated with at least one bid with the following status:**
 1. *Validation Passed*
 2. *Evaluating*
 3. *Bid Accepted*
 4. *Advisory Accepted*
 5. *Pre Sched Confirmed*
 6. *Waiting Validation*
 7. *Pre Sched Queued*
10. **The E-Tag will be denied in case the E-Tag is created after T-75 and there are no corresponding bids in MIS or the energy profile of the E-Tag and the bids profile does not match. This business rule is already implemented in the E-Tagging 1.0 release.**
11. **The E-Tag will be denied in case the E-Tag is created after T-20. This business rule is already implemented in the E-Tagging 1.0 release**

Discussion point # 2 – Replace DENY with APPROVE/CURTAIL – design details

The Business Problem

Due to the details behind NYISO's current E-Tagging implementation, in certain cases E-Tags are being DENIED by NYISO, rendering MP's helpless in getting those Tags to flow. In cases where NYISO feels like we (rather than other CA's or MP's themselves) are primarily responsible for causing the Denial, NYISO would prefer to allow a suitable work-around for the MP without sacrificing any of the Operational communications realized by the E-Tagging 1.0 application.

The Proposed Solution

The high-level solution is to allow E-Tags submitted after HAM close to become Implemented (by either passive or active Approval by NYISO) even if the MW profile of the Tag does not match MIS. However, the TagID of the E-Tag must match an MIS bid (that is, the E-Tag is not Rogue). NYISO will subsequently curtail the E-Tag to match the MIS scheduled value, which will continue to ensure synchronicity between MIS and OATI after BME posts. This is a change from the 1.0 implementation, which will Deny any E-Tag submitted after HAM close that doesn't match both the TagID *and* the energy MW profile in MIS.

Discussion point # 2 – Replace DENY with APPROVE/CURTAIL – Business Rules

1. **E-Tags requests submitted for hour T (and potentially additional hours beyond T), in a timeframe after HAM has closed for hour T but before T-20, will be**
 1. *APPROVED if the E-Tag ID matches the TagID of any bid in MIS for hour T, and the energy profile MW value of the E-Tag matches the MW value in MIS.*
 2. *Put in STUDY status if the E-Tag ID matches the TagID of any bid in MIS for hour T, but the energy profile MW value of the E-Tag differs from the MW value in MIS*
 3. *DENIED if the TagID of the E-Tag request does not match any MIS bid for hour T (this functionality already exists in the E-Tagging 1.0 implementation).*
2. **E-Tags requests submitted after T-20 will still always be Denied by NYISO (unless created by another CA).**
3. **Hours beyond T will still be evaluated with the same rules as E-Tagging 1.0. For example:**
 1. *MIS bid exists for 1:00 and 2:00 for 50 MW
E-Tag submitted with same TagID at 0:30, with 50 MW for 1:00 and 40MW for 2:00
E-Tag will be put in STUDY because MW values for 2:00 don't match.*
4. **The specific MW value from MIS to be used for comparison will be the BME scheduled MW value if BME has posted, otherwise the HAM bid MW will be used (same as 1.0 implementation).**
5. **When E-Tags that fall under Business Rule #1a or #1b above become Implemented (which may be up to 20 minutes after their submission time), NYISO will send a Curtailment to OATI to ensure the E-Tag MW value matches MIS (if necessary).**
6. **When an E-Tag is Curtailed to reflect the MIS schedule (as described in Business Rule 5), any hours in the E-Tag beyond Hour T, which are not yet HAM closed, will not be Curtailed in the E-Tag**
 1. *These will be handled after HAM close for those hours*

Discussion point # 3 – Handling of “Phantom” E-Tags – design details

The Business Problem

Although significant steps were taken by NYISO in E-Tagging 1.0 to adhere to NERC compliance in keeping OATI synchronized with MIS data, a specific area not yet being addressed is “Phantom Tags”. Here we are defining Phantom Tags as those with a TagID attached to an MIS bid that does not also reference a valid E-Tag in OATI (in contrast with Rogue Tags, which exist in OATI but not in MIS).

The Proposed Solution

NYISO will continue to allow bids in MIS with a Phantom TagID to pass through BME scheduling with no additional validation. Part 1 of the proposed solution described above will now allow MP’s to subsequently create a matching E-Tag, even after HAM close or BME post. However, if an E-Tag has not been created by T-30, NYISO will now start cutting these transactions in MIS. ECA actions would apply to MP for failure to supply the proper information in scheduling systems. This functionality will most significantly impact transactions between NYISO and HQ, as currently neither CA does any E-Tag validation that would prevent flow of schedules with Phantom Tags. Some enhancements to existing Operations Forms will also be required in order to facilitate this process change.

Discussion point # 3 – Handling of “Phantom” E-Tags – Business Rules

1. **No validation will be done prior to BME to ensure that the TagID of an MIS bid references a valid E-Tag in OATI.**
2. **MP’s may wait until after HAM close or BME post to create E-Tags, which will never be denied by NYISO as long as the TagID matches MIS and the E-Tag is submitted prior to T-20.**
 1. *This rule is due to the previous list of new business rules.*
3. **If an E-Tag has not been created and Implemented in OATI by T-30, NYISO Operators will cut the transaction in MIS.**
 1. *These transactions would be subject to NYISO imposed ECA penalties to discourage this behavior.*

Discussion point # 4 – Compare MIS Bids to Tag Tools – notes from 9/14 MP call

Participation

- 2 MP organizations participated in this call

Confirm overall purpose of this new functionality & validate benefit to MPs

- This new tool would allow MP's to view E-Tag data (from OATI) and NYISO bid/schedule data (from MIS) side-by-side.
- When invoked prior to Market Close, this would enable MP's to more easily modify their MIS bid data based on the additional information/insight they could obtain by viewing the E-Tag data.
- When invoked after Market Close, the functionality would provide read only access to answer potential questions MP's might have about why NYISO assigned a particular status to an E-Tag request.
- MP's validated that this indeed would be a valuable enhancement from their perspective.

What interfaces would be used?

- MIS Web screens would be the primary access point. Potentially also Upload/Download interface.

What key information should be displayed in the screen?

- MPs would want to see all the current MIS bid/schedule information that is displayed in the MIS View Transaction screens, along with the MW and Status of the corresponding E-Tag
- E-Tag responses issues by other CA's in the E-Tag path would be valuable to see
- If Pending requests exist in the E-Tag system for the tag, that would also be good to see
- Visually, some form of highlighting to indicate discrepancies between MIS and OATI data would be helpful to quickly identify potential areas of focus
- If there is "missing" information that is present in one system but not the other, that should also be indicated as a discrepancy (that is, either "Phantom" or "Rogue" E-Tags)

Discussion point # 4 – Compare MIS Bids to Tag Tools – notes from 9/14 MP call (continued)

What timing would MP's use this tool (relative to Tag/bid submission and Market Close)?

- **MP's could utilize this tool either before or after the HAM market close, with the intention of using the information to make decisions about modifying their MIS bids in the time period before HAM closes**
- **Even though it wouldn't be as frequent, using this tool for DAM bids could also be supported**
- **Note that in cases where both DAM and HAM bids exists for an hour, need to figure out how the corresponding E-Tag data would be compared/displayed in those cases (especially if the DAM and HAM bids have different MW values)**

How would MP's prefer to request information?

- **For example: Enter TagID and have MIS bid data programmatically retrieved? Or drill down on MIS bids to programmatically retrieve and compare E-Tag data?**
- **The group originally expressed a preference for the drill-down option (based on the existing MIS screen)**
- **A potential limitation of this approach is when hours are missing from MIS (and therefore can't possibly be drilled-down on)**
- **Team to explore options to address this situation**
- **Also consider more general categorization (ex- all Tags with missing bids within user's org)**

NEXT STEPS

- **Document detailed functionality based on input received during MP design session**
- **Circulate design documentation to wider MP audience**
- **Schedule additional future calls with MPs to validate detailed design & screen prototypes**

Discussion point # 4 – Compare MIS Bids to Tag Tools – notes from 9/14 MP call (continued)

What timing would MP's use this tool (relative to Tag/bid submission and Market Close)?

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