

COST ALLOCATION AND REGIONAL PLANNING (CARP) MEETING

CARP IX

September 24 –25

Midwest ISO

Carmel, IN

Minutes

September 24th

8:30 – 8:35 Welcome and Call of the Roll

CARP Negotiator Attendees:

Commissioner Terry (MO), Mike Proctor (MO), Hisham (OH), Dennis Koepke (WI), Dave Johnston (IN), Commissioner Lemmie (OH), Jerry Lien (ND), Greg Rislov (SD), Chancy Bittner (IA), Marya White (MN), Rob Bernsten (IA), Steve Cameron (MI), Brian DeKiep (MI), Nick Bowden (IL), Jim Melia (PA), Brian Rybarik (WI), Laruen Azar (WI), Bill Bowker (KY), Don Neumeier (WI), Kim Wissman (OH), Bob Pauley (IN)

8:35 – 8:45 RECB Taskforce Update

Commissioner Azar had sent a timeline to the CARP negotiators with the interface between CARP and the RECB taskforce. Today/tomorrow – CARP needs to get the decision tree questions completed to allow the Midwest ISO to provide these groups with the proper information for future decision. The decisions made by CARP today will be forwarded to the RECB taskforce. Next week (at the RECB taskforce), if there are issues raised that conflict with the decisions made by CARP, then CARP will have a conference call to discuss.

GOAL: have RECB taskforce and CARP arrive at the same decisions because MISO can only do one set of analysis.

In October, CARP hopes to have results from the decisions made today (i.e., some modeling results). Then have decisions on whether or not to go forward with Injection/Withdrawal method (this decision may be in November as well).

2010: CARP is going to be done, RECB taskforce will continue work to implement ideas that come out of CARP.

Commissioner Azar thanked Marya White and Dave Johnston for their work as conduits between the RECB Taskforce and CARP.

Eastern Interconnection Wide Planning Update

The Eastern Interconnection States' Planning Council (EISPC) filed a proposal with the Department of Energy on September 14th. EISPC is requesting approximately \$14.8 million. 38 of the 41 jurisdictions involved submitted commitment letters with the proposal.

In the proposal, EISPC identified the goal of (if funded) planning to hire an executive director and Administrative Assistant very quickly. They will be originally housed at NRRI with Scott Hempling performing a facilitation role. In time, EISPC may also hire an economist and a planning engineer.

In many ways, EISPC may actually look a lot like CARP on steroids. It is obviously going to be much larger in scope and will have additional resources to perform its own independent studies and research.

As far as process, it is anticipated that funding decisions will be made in November. It is possible that funding would be available immediately upon that funding decision, meaning that governance decisions could be made at a meeting before the January timeframe.

Commissioner Azar also identified that there is at least one other proposal (from a group of NGOs) for Topic B funding. It is also understood that a group of consumer advocates also submitted a funding proposal.

At this time, the EISPC Governance Committee is working on some issues to bring forward to the whole council (i.e., identifying options for voting rights etc...) If people want to participate in this process, they should contact Commissioner McKinney (West Virginia). The one caveat is that the committee will aim to have equal representation from the various regions in the eastern interconnection.

UMTDI Update

Marya White (MN) provided a quick update on the work of the Upper Midwest Transmission Development Initiative (UMTDI). Marya identified that there is a goal of having the UMTDI's work done by 1st of year. They are currently waiting on some analysis from the Midwest ISO to consider for their consideration moving forward.

Angie B (MI): asked how the UMTDI's work would fit in to the CARP work? Would it create a subregion or an exception to these efforts?

Marya W. (MN): Answered that this will largely depend on the results of CARP's work and the work of the UMTDI.

Tehachapi Decision

Mike Proctor (MO): Identified that this model has been useful in the specific circumstances that were present in this area of California where they really needed to fund a "collector system." The specific situation in Tehachapi made this a viable solution. This really isn't a good substitute for the types of issues facing the Midwest ISO.

Mike also identified that the revenue crediting process in the SPP might be a better idea – we should ensure that the Midwest ISO has a similar mechanism.

Dennis K. (WI): we should put the Tehachapi model on the shelf for another day – it might work in a DC line situation. Tehachapi might have been an AC line, but it really acts more like DC, given the situation.

Dave J. (IN): Identified his understanding that there is a revenue crediting process in the works for the Midwest ISO. There was an important concept in the Tehachapi model that required a showing of interest (i.e., enough interconnection agreements) before the allocation kicks in. This aspect of the Tehachapi model may be a good thing to keep in mind for future decisions.

PROPOSAL: A GREEN vote = not use this model for all cost allocation, but keep it on the shelf for potential targeted uses in the future. A RED vote = considering using this model immediately.

VOTE:

Green: All except

Red: None

White: Nick B (IL)

Injection Withdrawal Continued [Presentation and Decisions]

<http://www.misostates.org/CARP9InjectionWithdrawalPresentation.pdf>

Jennifer gave a very detailed presentation on a variety of aspects of the injection withdrawal methodology – many questions were asked.

Jennifer identified what injection withdrawal is not: it does not tell you which projects will be included in the allocation method, it just tells you how the costs will be shared after you decide which projects will be included. If we assume that all projects approved in Appendix A will be allocated using I/W – the major issue becomes: how we put things into Appendix A?

Marya (MN): why would we need three layers? If it charges the injector and the taker, does it matter how far the generator and the taker are from one another? We have an integrated transmission system – we don't know where the actual electrons go.

Bill Bowker (KY): the key for KY is to determine how this will affect their rate payers. Is it possible for us to determine how each of these decisions will affect KY ratepayers? [That really is the goal of the next decisions – provide a number of decisions (based on what negotiators think is fair) to develop some I/W results to allow the states to further consider this methodology for cost allocation.]

DECISION TREE ITEMS

Regional Layer – On what basis should the regional layer be allocated? These items are listed under heading C on the Decision Tree.

QUESTION: Should the Regional layer be assigned to both Generation and Load [This is item C1 on the decision tree]

- a. Yes [CARP answered “yes” at the August meeting]
- b. No

NOTE: It was identified that FERC policy may have to change to allow for a levy on both generation and load. Clair M. (Midwest ISO) identified that the TRANSLink tariff had levies on both generation and load, but it was never actually applied. Schedule 17 of the Midwest ISO tariff also applies to both generation and load, and is FERC approved. However, it has never been applied at this expansive of a basis.

QUESTION: On what basis should the Regional layer be allocated [This is question C4 in the decision tree]

- Access
- Usage**
- A combination thereof

Dennis K. (WI): Leaning towards usage, but this might require a more robust transmission system. Access will better reflect the increased cost for variable resources – but that really is the result of policy decisions to get more renewable; so it could be reflected in usage. However, access might be useful in one of the layers.

Mike P. (MO): it does make sense to have access charges in some layer – most likely at the local level.

Jennifer C. (Midwest ISO): do you want to do both at the regional level? It adds a lot of complexity, but doesn’t appear to add any benefit.

PROPOSAL: A GREEN vote is to allocate the regional layer to usage only. A RED vote is a combination of access and usage. A WHITE vote is access only.

VOTE:

- Green: PA, MT, IA, MI, MN, SD, OH, IN, WI, MO (10)
- Red: IL, ND (2)
- White:

QUESTION: Should the Regional layer be assigned to Incremental generation or all generation? [Item C2 on Decision Tree]

VOTE: Green vote assigns to all generators, a white vote would assign to incremental generation.

- Green: Every one voted green.
- White:

QUESTION: What is the method to determine whether all or a portion of a facility or group of facilities should be assigned to the Regional layer? [Item C6 on Decision Tree]

- a. Voltage
- b. Revenue requirement based on “usage”
- c. Revenue requirement based on “usage” and voltage combination

d. Revenue requirement based on “usage”, voltage and location combination

This issue was actually decided as part of the definition of local and subregional layers. The CARP negotiators agreed to move forward as follows:

QUESTION: What is the method to determine whether all or a portion of a facility or group of facilities should be assigned to a specific layer (assumption: the layers will include regional and local and potentially a subregional layer in between)?

MISO will move forward with analysis of the following two options:

Analyze the categorization using voltage and subregions (subregions will be determined by both voltage and location)

Analyze the categorization using revenue requirement based on “usage”, voltage and location combination (we discussed this as “percentage of rate base by voltage with subregions”)

VOTE: on Directing MISO to move forward with these two options: ALL GREEN

The CARP negotiators also agreed that there will be allowance for a rebuttable presumption that would allow a party to present evidence as to why a specific facility should be moved into a higher layer.

At the October meeting, CARP will have data and analysis from MISO on these two options – it will be necessary at that time to decide which of these two methods will be used moving forward.

The CARP negotiators then took up the **local layer** next – the subregional layer was decided on the second day of the September CARP meeting.

Local Layer – Items under E in the decision tree document.

QUESTION: Should the [revenue requirement for facilities built physically within a pricing zone at the] Local layer be assigned to both Generation and Load [within that pricing zone] **[Modified version of E-1 on the decision tree]**

Yes

No

VOTE: Green is yes (assign to both) and red is no (which would require a determination of which to assign to)

Green: All Green except...

Red: Michigan

QUESTION: Should any type of facilities be left as direct assigned? [**Question E-2 on decision tree**]

This question deals with the actual radial line to the new generation facilities, not necessarily the other network upgrades that would integrate specific generation onto the grid. (There is a recognition that this can change over time).

VOTE: GREEN is **yes** / Red is No

Green: All green except...

White: Illinois

QUESTION: If E.1 is “yes”, then should the Local layer be charged to all generators or incremental generators? [**Question E3 in decision tree**]

VOTE: Green is **all** / Red Incremental

Green: All green

Red:

QUESTION: If E.1 is “yes”, then what rate should generators pay for Network Upgrades identified through the interconnection process that are assigned to the Local Layer? (in answering, consider what the rationale would be to treat incremental generators different than existing generation) [**E4 in the decision tree**]

VOTE: GREEN is the **higher of the embedded or incremental rate**, RED is just the embedded rate.

Green: All green except...

Red:

White: IL, MI

QUESTION: On what basis should the Local layer be allocated? [**E5 in the decision tree**]

VOTE: Green vote is **access only** / Red vote is Usage only / White vote is combination

GREEN: PA, MT, MN, SD, ND, OH, IN, WI, MO, IA

RED:

WHITE: MI, IL

QUESTION: If the answer to E.5 is access or a combination, then should generation be charged on nameplate value or some other value such as its capacity contribution as defined under Module E (in answering, consider what the rationale would be to not charge energy resources and merchant generation that was not registered as a capacity resource in module E) **[E6 in the decision tree]**

The CARP negotiators did not use the specific answers in the decision tree, but chose between these two options.

net demonstrated capability (this is acts as a cap as a maximum on what a particular generator may inject into the system)

accredited capability (mod – e capacity contribution)

VOTE: Green is net demonstrated capability / Red is accredited capability

GREEN: All green.

RED:

NEXT ISSUE:

WHERE DO YOU DRAW THE LOCAL V. REGIONAL LAYER?

Some ideas on how to divide between different layers: voltage level method / percentage of rate base / could divide voltage levels by a percentage as well

Ideas: Go with straight voltage, include subregions (example discussed by negotiators)

LOCAL	SUBREGIONAL	REGIONAL
ALL Below 161 kV – allocated to the local users	161 and 230 kV here – if it acts more like regional system, then it is allocated to the geographic subregion	All 345 kV and above – allocated to the full region. 765-kV AC (all green) 500-kV AC (

QUESTION: What is the method to determine whether all or a portion of a facility or group of facilities should be assigned to a specific layer (assumption: the layers will include regional and local and potentially a subregional layer in between)?

MISO will move forward with analysis of the following two options:

Analyze the categorization using voltage and subregions (subregions will be determined by both voltage and location)

Analyze the categorization using revenue requirement based on “usage”, voltage and location combination (we discussed this as “percentage of rate base by voltage with subregions”)

VOTE on Directing MISO to move forward with these two options: ALL GREEN

The CARP negotiators also agreed that there will be allowance for a rebuttable presumption that would allow a party to present evidence as to why a specific facility should be moved into a higher layer.

At the October meeting, CARP will have data and analysis from MISO on these two options – it will be necessary at that time to decide which of these two methods will be used moving forward.

The discussion of how to divide the various layers was deferred until Friday.

SEPTEMBER 25th

Modeling and Siting Update/ Model Baseline Decision

JT gave a presentation on the EGEAS modeling that they are seeing. His presentation and various maps are available here:

Presentation:

<http://www.misostates.org/CARP9Sep25EGEAS-SitingPresentation.pdf>

Maps/Data:

Data file: http://www.misostates.org/CARP9Sep25_Siting.xls

Map 1 (business as usual): http://www.misostates.org/CARP9Sep25_EI_BAU_MAP.pdf

Map 2 (carbon cap): http://www.misostates.org/CARP9Sep25_EI_CAP_MAP.pdf

Map 3 (RPS): http://www.misostates.org/CARP9Sep25_EI_RPS_MAP.pdf

Map 4 (the everything option): http://www.misostates.org/CARP9Sep25_EI_CRPSEVSG_MAP.pdf

An issue arose relating to the amount of sequestration options that were picked. JT identified that the costs of sequestered units do not include the cost of the actual piping and sequestration (it assumes that will be available). The specific concern is that nuclear is not picked in any scenario (Commissioner Bernsten did note that fuel disposal costs are generally not included in the nuclear capital costs).

JT identified that the IGCC selections could be modified and forced to be nuclear, if we wanted (states can pick and choose which they want to be what).

If you have concerns about the maps, they want to know.

Note that in the Federal RPS, much of the wind is in Texas and Kansas; how did this happen?

What were the rules – NREL data didn't include Nebraska into SPP. Decision rules = highest capacity factors in region and created wind site. Nebraska wasn't in SPP at the time, so it didn't pick them. Wind can be moved into Nebraska if CARP wants.

NEXT STEP: State Negotiators are to take the maps and data and consider whether you would like to move or modify the generation sited within your states. You can also move facilities between states with agreement from both states. You should do this for ALL 4 Scenarios.

YOU HAVE ONE WEEK TO GET THIS INFORMATION TO RYAN WESTPHAL OR JT SMITH.

Should plans start from blank slate or with the assumption of a certain number of proposed lines being included?

Blank Sheet is from current system, other options include using R-GOS lines or MTEP lines.

The major down side with the blank slate is time; when you go through the determination of what you want to add into; this is going to require a considerable amount of time for CARP negotiators. Probably 3-4 days for the next two months to make indicative transmission for the next few meetings.

This work has been done in a bunch of other scenarios; it might be useful to assume one of them, and then add to that.

Since this is the first time that we have modeled carbon caps – this may require that we start from scratch.

JT (Midwest ISO): we can see if the RGOS transmission is robust enough to deal with caps – do an analysis after you overlay the cap requirements over the top of RGOS.

Mike P. (MO): prefer RGOS approach – so long as we have a serious discussion at the time the CARP model is overlaid onto the RGOS plan.

Dave J. (IN): at some point, we are going to have to have a plan ("the plan") – education piece is really important in all of this.

OPTIONS: Blank slate v. non-blank slate...then which non-blank?

SURVEY:

Nick Bowden of IL wanted to start from a blank slate

All others desired to start from a non-blank slate using the RGOS.

Many wanted to continue the education process on this issue.

EMBEDDED COSTS

Will I/W use embedded costs or just forward looking costs (slide 86 of Jennifer's presentation)

Negotiators also discussed the calculation performed by Don Neumeyer (WI) regarding current transmission plant in the MISO system. A copy of Don's spreadsheet is available here:

<http://www.misostates.org/CARP9NetPlantByState.pdf>

Most negotiators discussed the concept of including some level of transition to Injection/Withdrawal using some embedded costs (at least at first). A survey of the comments is included here:

Mike Proctor (MO): would like to see some data, but would prefer not to start shifting costs in the system.

Greg Rislov (SD): Would like to see a transition to the new allocation method.

Marya White (MN): Transition is preferable.

Angie Butcher (MI): Transition is preferable.

Dave J. (IN): Would prefer that all embedded costs be kept at the local level.

Chancy (IA): Would like to see an actual quantification of the potential cost shifts before taking any other action.

Jim M. (PA): Would also like to see the degree of cost shifting.

Nick B. (IL): Fairness should be a goal. Let's see the data.

The Midwest ISO folks identified that they could perform two sensitivities (which they will now be doing). One sensitivity will only look at new transmission, a second will include embedded costs.

DIVISION OF VOLTAGES FOR THE VARIOUS LAYERS OF INJECTION WITHDRAWAL

PROPOSAL: Divide the voltages as follows: Regional is above 345 kV, Subregional is 345 kV and Local is everything below 345 kV.

All agreed that there will be rules to allow for a safety valve – i.e., a rebuttable presumption that these are the voltages for allocation that can be modified with a certain showing (rules for challenges to be determined later)

VOTE:

Green: PA, IL, MT, IA, MI, MN, OH, IN, WI, MO

White: SD
Red: ND

NOTE: Given this division, Jennifer will have to use the RGOS model that includes both 765 and 345, otherwise there would be nothing in the regional layer.

SUBREGIONAL LAYER: Items D in the Decision Tree

Why would we want a subregional layer? The MISO footprint is very large and diverse, so it might make sense to have a subregional layers to better identify the beneficiaries of a particular fixture.

Given the division of voltages in the previous item – some of these decisions were obvious.

QUESTION: Should one or more Subregional Layers be added? [D1 on decision tree]

Yes
No

Given the division of voltages (which included a subregional layer), this is YES.

QUESTION: If the answer to D.1 is “yes”, then what should define the Subregional Layer [D2 on decision tree]

VOTE: Green vote would divide **based on geography using the accepted West/Central/East divisions of MISO** [may need to be revisited as changes occur in MISO]

ALL GREEN

QUESTION: Should the Subregional layer be assigned to both Generation and Load [D3 on decision tree]

VOTE: A green vote is yes, red is no.

Green (yes): All

Red (no):

QUESTION: Should the Subregional Layer be charged to all generators or incremental generators? (in answering, consider what the rationale would be to treat incremental generators different than existing generation) [D4 on decision tree]

VOTE: Green would charge to all, red would be incremental.

ALL GREEN.

QUESTION: On what basis should the Subregional Layer be allocated [D5 on decision tree]

Access
Usage
A combination of Access and Usage

VOTE:

GREEN (access only):

RED (usage only):

WHITE (combination at 50/50 Access and Usage): ALL White

QUESTION: If the answer to D.5 is access or combination then, should generation be charged on nameplate value or some other value such as its capacity contribution as defined under Module E (in answering, consider what the rationale would be to not charge energy resources and merchant generation that was not registered as a capacity resource in module E) [D6 on decision tree]

Nameplate
Module E capacity contribution

The Negotiators agreed to use the same decision as was used in the local layer, which was:

The CARP negotiators did not use the specific answers in the decision tree, but chose between these two options.

net demonstrated capability (this is acts as a cap as a maximum on what a particular generator may inject into the system)

accredited capability (mod – e capacity contribution)

VOTE: Green is net demonstrated capability / Red is accredited capability

GREEN: All green.

RED:

QUESTION: Determining how to charge load for usage (this issue was raised on Thursday, but deferred to Friday).

(note – Jennifer identified that this decision would be easy to change – this will be an interim decision)

PROPOSAL:

Annual peak load
12-CP (average coincident peak for each month)
4-CP

VOTE: GREEN is single peak (annual peak – non coincident peak in the pricing zone), RED is 12-CP (average over 12 months), WHITE is 4-CP

GREEN: IN

RED: PA, MT, MN, SD, ND, OH, WI (7)

WHITE: IL, IA, MO (3)

While this is not a perfect consensus, the states that did not vote for 12-CP identified that it was not a deal-breaker. Therefore, CARP will move forward using 12-CP.