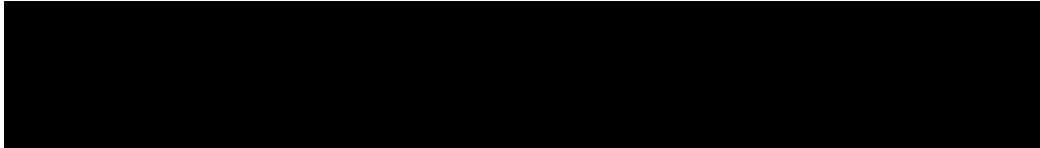


**From:** [Denver York](#)  
**To:**   
**Cc:**  
**Subject:** RE: EKPC Manual Load Shed Plan improvements  
**Date:** Thursday, June 15, 2023 9:10:57 AM  
**Attachments:** [EKPC Manual Load Shed Plan.pdf](#)  
[EKPC Manual Load Shed Plan \(revised 2023\) Member Meetings.pptx](#)

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Hello.

I wanted to update you on where we are with improving the EKPC Manual Load Shed plan and associated communications.

Several of you have been in our conversations at the operations meetings where Scott Sells provided the attached presentation. If we have not met with your team, it will be coming up before winter. I wanted to attach that presentation here as either a reminder or a preview of that discussion.

Also attached is an updated version of the EKPC Manual Load Shed procedure. This version incorporates some of the changes we have discussed.

One section highlights the need to have your teams assist in restoring loads at the substations once we are ready to roll forward to the next location. Your team can help reduce the likelihood of the substation tripping back off due to cold load pickup if they open the distribution breakers first. Once the substation is restored, your team can work to restore each feeder and reduce the overall speed of load pickup and reduce the risk of the sub tripping back offline.

We have also updated the loads in the RPO (Rotating Power Outage) portion of the plan based on new load information and transmission system configuration changes. The member systems allocations now range from 10 to 17 percent with an average of 12.9%.

We are working on another update to the procedure currently scheduled for completion before winter. Prior to that revision, we are working to:

- Develop better communications tools for us to keep you informed before/during/after actual events
- Ensure we do not have any critical infrastructure loads included in the plan
- Provide a more structured process for our system operators to implement the plan in a way that should provide for more predictable and consistent period of interruption for loads.

The ask today is, “Do you have any substations listed in the plan that contain critical infrastructure that should be removed?” Recognize that for the purpose of this plan, the most critical would be facilities responsible for keeping the electric grid energized .. particularly natural gas transmission pumping stations. Let us know if you think we should reconsider some of the substations you have listed in the plan.

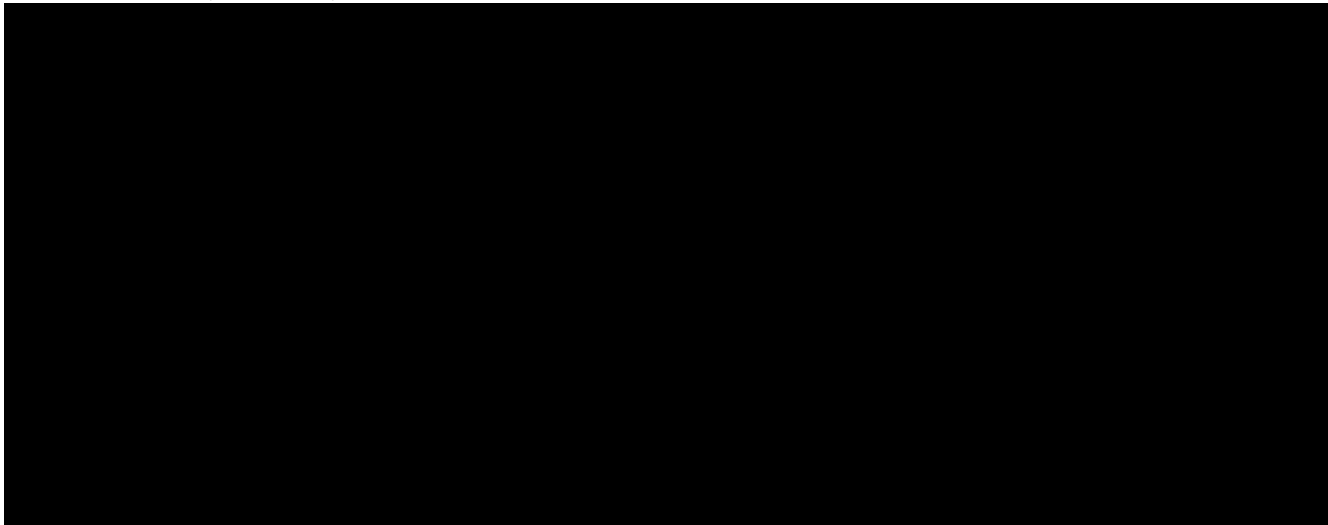
Thanks and, of course, more to come,

Denver

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**From:** Denver York

**Sent:** Thursday, February 16, 2023 2:50 PM



**Subject:** EKPC Manual Load Shed Plan improvements

Hello.

As Mr. Campbell mentioned in the EKPC February Board meeting, we are working to tune up our Manual Load Shed plan. This email is intended to provide some initial information on what we are doing.

The Manual Load Shed plan includes procedures for dropping load to manage localized transmission problems and dropping load due to generation shortages in the PJM footprint. We are not focused on the section pertaining to localized transmission problems at this time.

The plan does NOT include provisions for dropping load due to low frequency (under-frequency load shed, or UFLS). UFLS plans are intended to remove load from the system when the imbalance between generation and load has already become severe enough that frequency has already begun to drop. Manual load shed is intended to allow then operator to selectively remove load from the system in anticipation or reaction to an imbalance that is not yet severe enough to trigger UFLS.

The generation shortage section of the plan can be further divided into the rolling power outage (RPO) section and the remainder of our loads that could be manually shed to maintain balance between generation and load if the RPO is not enough. The work we are doing is focused on the RPO section of the document. We are first working on some short-term changes and training that we can implement prior to the next winter season. We will continue to evaluate longer-term changes and changes to other load shed procedures in the future.

I have already gathered some intel by speaking with several of you and I appreciate the candor during those conversations. Those conversations and our own internal discussions have yielded the following topics we should address in the short-term:

- Better and more regular communications between EKPC and the potentially-affected owner-member cooperatives BEFORE any potential event even appears
- Updating the loads in the plan more regularly for consideration of priority loads
- Creating a more structured process clearly indicating when/what/how we should communicate with you and your operations staff if we anticipate or experience a load-shed event
- Developing a structured process that will help us become more confident in our 30-minute estimate for rolling power outages
- Providing, in writing, more detail around the processes we will need your help with (such as restoring load and managing the challenge of cold load pickup).

Certainly there will be more information from us forthcoming, but I wanted to get this information to you to help ensure you that we are working to get some initial changes done and will subsequently be working with you more closely to make it even better.

The plan was last updated in April 2022 and will be updated again before April 2023. Once we finalize this update, which will be an incremental improvement over the existing plan, I will provide you a copy of it for your review in anticipation of further discussions and plan refinements.

Never hesitate to reach out if you have questions or comments.

Thanks,  
Denver

Denver York, PE  
Senior VP, Power Delivery & System Operations  
East Kentucky Power Cooperative

