Northwest **Power** and **Conservation** Council

Minutes for Systems Analysis Advisory Committee
January 29, 2026

John Ollis, NWPCC, began the meeting at 9:00am by calling for introductions and reviewing the agenda.

Capital Expansion Model Methodologies Discussion
John Ollis, NWPCC

Fred Heutte, NW Energy Coalition, asked about the timing of presenting modeling results to the SAAC [Slide 3]. Ollis said staff will try to roll out results to the SAAC before the Council but was unsure about the sequencing.

Heutte confirmed that the triangles on [Slide 8] means "needs improvement." Ollis said it's more like a "yield sign" meaning staff is a little unsure. Heutte said the region wants the EE part to be really good, adding that it sounds like that has been happening.

Heutte then asked where flexible load/DR fit. Ollis said they are functionalities in the model and are more advanced than the RPM. Ollis said staff are using some of these functionalities before explaining how they are approaching the issue.

Heutte stressed that things are moving fast in the flexible load/DR space, pointing to data center flexibility and virtual power plants. Heutte said these might not be responsive to shapes and hoped they would not be left behind. Ollis pointed to elastic load functionality and other strategies to capture these important points.

Heutte said another important point is how flexible load interacts with dynamic reserves. Ollis agreed and explained the model's approach.

Heutte confirmed that staff need to use an annual snapshot approach to achieve their goals [Slide 24: Questions]. Ollis agreed, explaining how staff picked an approach. Heutte approved of the choice.

Sophie Major, WA UTC, admitted that some of this was new to her and asked Ollis to speculate how OptGen 2 approach would lead to different results than a 20-year optimization. Ollis said that is the topic of the next presentation.

Model Timestep Approach in Northwest Capital Expansion
Tomás Morrissey, NWPCC

Heutte asked if moving the dates on [Slide 9] by a year, plus or minus ,would have any effect. Tomás Morrissey, NWPCC, answered that the early years have a resource availably issues, and gave examples. Heutte asked about gas constraints. Ollis said it was from stakeholder input (GRAC).

Annika Roberts, NWPCC, said the timing represents how long it would take to get that resource built, and if there is no intent to build a resource in the early years it probably will not get built. Heutte pointed to supply chain issues. Ollis said renewables are also modeled in this way. Heutte said gas pipelines are full and expansions are unlikely.

Morrissey talked about strategies around smaller gas units and combined cycles. Heutte pointed to the Centralia repowering as an example of this.

Major admitted to still struggling with the snapshot year approach, asking for more clarity. Morrissey moved back to [Slide 8] to say the model will only simulate seven years total, even though the Plan has a 20-year horizon.

Major asked if the model has built in assumptions about resource acquisition in the un-modeled years. Morrissey explained how the lock ins would work on both the supply and demand sides.

John Crider, EWEB, asked how to make an economic decision on a one-year run, wondering if the model takes the whole life cycle cost of the resource into account. Morrissey explained that the model takes resource costs and turns them into an annual payment stream. Crider asked if that was like a levelized cost. Morrissey answered yes, delving further into the process.

Crider asked if every year has a different length of time before getting the discount. Morrissey said it depends on what is in the supply side, using an example of a resource with a 30-year lifecycle.

Heutte confirmed that [Slide 10] shows that EE that might not be cost effective remains available so more expansive options could be brought in. Morrissey did not agree, saying it’s more about not forcing the model to stay at a higher rate.

Ollis added that staff are trying to incorporate real life context, like adequacy. Ollis said the model doesn’t understand that utilities might enter a firm contract for a few years. Ollis said this highlights the issue but locking in a strategy would be inappropriate.

Carla Essenberg, BPA, asked how accurately the needs assessment captures what resources will come online in the next few years. Dor Hirsh Bar Gai, NWPCC, said per the new resource definition they must be planned, licensed, under construction, and operating before the year in question. Roberts confirmed.

Ollis said planned resources are available to the model to select but they may not have the attributes needed for an adequacy concern.

Major asked if the region will get a sense of what the supply side investments have been after this is done and if that will just be for the locked in years or for the entire study. Morrissey said the model's perspective will have all the buildout in the locked in years, but staff can interpolate between the years.

Verene Martin, Seattle City Light, asked if there is any risk of resulting builds and portfolio being very different between locked and unlocked years [Slide 11]. Morrissey was not sure, saying staff have discussed this. Morrissey said the runs will show a lot of information that staff will have to think about. Ollis added that dry runs have not revealed a lot of that effect except for in 2028.

BREAK

OptGen Clustering Methodology
Jake Kennedy, NWPCC
Tomás Morrissey, NWPCC

Heutte confirmed that there will be 91 runs with 70 futures each [Slide 4]. Jake Kennedy, NWPCC, said each snapshot year will have 10 futures for a combination of 70 different futures.

Heutte then asked if everything is run through GENESYS or just a portion [Slide 5]. Kennedy answered that GENESYS sees all 90 hydro years while OptGen only sees a snapshot. Morrissey added that staff are only testing year 2031 in GENESYS as it's the end of the action plan period.

Edison Elizeh, Confederate Tribes of Warm Springs, asked about transmission modeling saying the dynamic changes as generation changes. Elizeh then asked about assumptions around the region's generation level. Ollis clarified that the clustering graphic on [Slide 4] is not an emulation of the Council's zonal transport model. Ollis added that staff are guided by public information on path ratings and utility input. Ollis concluded that sensitivities will include transmission builds outlined in the WestTEC process.

Elizeh said this raises more questions and asked for a one-on-one, particularly on putting BPA in one zone. Ollis said there are three BPA zones in this work and offered to meet offline.

Heutte asked how staff plan to present a non-numerical representation of hydro [Slide 21]. Kennedy answered that hydro is 30 different years run through three different climate informed models to create 90 unique annual profiles. Heutte understood the approach.

Major asked if the net load range is primarily driven by hydro variation [Slide 30]. Morrissey pointed to column three to illustrate that load is creating 6000aMW of variation. Morrissey them moved to [Slide 25] to show 9000MW hydro variation, calling it a mix.

Kennedy continued, showing how good/bad/average hydro years influence the outcome.

Major commented that the linear programming approach made sense to her while the simplified, K-means approach gets at edge cases. Major said that the linear approach seems more important and asked for staff to talk about tradeoffs.

Kennedy said this is what drove staff to the linear approach and talked about the selection problem with the K-means approach.

Scott Levy, Blue Fish, addressed the different scenarios including data centers that can drop their needs on hot days. Levy said there could be a future policy that asks data centers to curtail first, pointing to the efficiency potential. Ollis said staff are not treating data centers as a flexible load right now based on expert input. Ollis said he will take Levy's idea to the Council.

LUNCH

OptGen Methodology Updates
John Ollis, NWPCC

Levy mentioned the fish plan needing resources for emergency [Slide 6] before speaking about an ongoing court case.

Essenberg asked for more information on sustained peaking needs particularly during summer evenings [Slide 7]. Ollis admitted that this was a bit of a struggle saying the first bite at the problem used new thermal, EE, and long duration storage as they are seasonally agnostic. Ollis said trying with wind and solar was tougher. Ollis said the minimum capacity factor, which added more energy to the system, was zero.

Essenberg confirmed that it was a one-hour minimum and not an average across the whole event. Ollis answered yes, as staff wanted to be conservative.

Major moved back to [Slide 5] to ask for more information on how some new strategies act like an ELCC. Ollis spoke about the dynamic probabilistic reserve requirement, saying staff are not planning to use an ELCC because of this new approach [Slide 6]. Ollis said the goal is to capture the same information as an ELCC as the resources are dispatching.

Major confirmed that the dynamic probabilistic reserve requirement will reveal the peak contributions of resources as they interact with each other. Ollis agreed, explaining further.

Jason Sierman, ODOE, asked if the solar shape was in or out of region. Sierman then asked where out-of-region solar fits in the mix on [Slide 6] and if transmission would be modeled as a resource. Ollis admitted that staff are trying to break this problem apart in a new way. Ollis talked about the needs assessment conducted in GENESYS, how staff found the region's energy problem, and how the market reliance limits are regularly hit for adequacy.

Levy reminded the room that the 2500MW transmission constraint is an artificial policy choice while the physical constraint is double that. Heutte agreed, adding information about south-to-north flow before calling 2500 way to low. Ollis said staff will pass that information along.

Graessley asked if staff could split the NW into two or three different pools for the calculations illustrated on [Slide 8]. Ollis answered yes, cautioning that he wasn't sure how much time it would add to the modeling work. Ollis then listed possible complications that could arise.

Major addressed CVAR, asking if staff chose a number. Major admitted that she is more familiar with planning reserve margins and ELCCs and the CVAR choice feels like choosing a PRM. Ollis explained the work behind the CVAR choice, calling it a look at the tail of the forecast error variations distribution.

Essenberg asked for a definition of the letters in the equation on [Slide 8]. Ollis provided them.

Heutte asked if staff is considering BPA's GERP effort [Slide 12]. Ollis said staff is looking at everything that has been announced since December. Heutte pointed to North Plains which he defined as 3000MW and bidirectional along with Bethel Round Butte. Ollis admitted that PacWest is hard on the model.

Heutte said PacWest announced Blueprint, describing it for the group before stressing that it's an example of new, significant, big lines coming. Ollis said staff will look into the North Plains project.

Levy was happy to see transmission modeling before asking about where storage fits. Levy argued that it matters where storage resources are placed [Slide 17]. Ollis said staff are letting the model place the storage. Levy said more granularity might be helpful.

Policy Update: Incremental CETA Compliance
Tomás Morrissey, NWPCC

Heutte was unclear why sales are different than load on [Slide 21]. Morrissey said staff is imagining that 100% clean sales mean 100% clean RECs on a sales level which needs higher generation due to line loss. Ollis added that CETA is defined on sales but the model dispatches on loads which has line losses.

Heutte was still confused and asked for more clarity. Morrissey and Ollis gave more explanation and examples. Ollis asked that any members who are still confused or have a different interpretation to email him for more information.

Essenberg asked about carbon price assumptions [Slide 22] wondering if there is empirical evidence that suggests prices will be near the floor. Kenedy reported that carbon pricing history from California and public pricing from Washington reveals a lot of excursions and a volatile settlement. Kenedy talked about modeling assumption challenges, admitting that staff did not have enough granularity.

BREAK

Update on Needs Assessment Results: Recap of Adequacy Reserve Margin Methodology
Dor Hirsh Bar Gai, NWPCC

Alexander Karpoff, PSE, wrote: Re the SCGHG: we (at PSE) apply the costs at the generator. So, to the load v. the sales. We also apply it to unspecified market purchases., in the question pane [Slide 8]. Morrissey asked if the social cost of carbon piece is part of general accounting of resources to meet CETA. Karpoff said yes but was confused and offered to follow up later to keep the presentation moving forward.

Essenberg clarified that the numbers on [Slide 11] are MW. Hirsh Bar Gai said yes, offering to amend the slide after the meeting.

Rebecca Klein, Seattle City Light, agreed with the numbers on [Slide 13] but asked why staff didn't use the Max ARM for summer like they did for the winter months. Ollis said he was wondering the same thing, pointing to the challenge of defining both summer months and resources to meet summer need.

Klein wasn't sure it was necessary to do this as winter tends to be more variable while summer is more complicated yet with less risk. Klein did think it might not be bad to be more conservative in the summer but not necessary. Hirsh Bar Gai said staff do this for energy.

Heutte thought staff should do something for summer as parts of the region are summer or dual peaking. Heutte said hydro is low from late July to September creating a risk, as would a large, multi-region heat wave. Ollis said it would be important to define the summer months.

Mary Kulas, Consultant for PPC, asked how this plays into the six versus 12 season approach. Ollis said the reserve margin is over and on top, asking if anyone from PSR could weigh in. There was no answer. Ollis offered to connect offline to fully answer the question.

Ollis reviewed topics the SAAC suggest staff to continue to think about. Ollis said analysis will kick off next and to expect another meeting in March. Heutte expressed gratitude that ELCC was not going to be used for this work, calling this a much better path.

Ollis thanked Heutte and ended the meeting at 4:00pm.

Attendees in person and via Zoom Webinar

Jennifer Light	NWPCC
Tomás Morrissey	NWPCC
John Ollis	NWPCC
Dor Hirsh Bar Gai	NWPCC
Jake Kennedy	NWPCC
Steven Simmons	NWPCC
Dan Hua	NWPCC
Annika Roberts	NWPCC
Christian Douglass	NWPCC
Fred Heutte	NW Energy Coalition
Carla Essenberg	BPA
Eric Graessley	BPA
Shannon Souza	Obsidian Pacific/Sol Coast
Kaitryn Olson	PSE
Pat Byrne	BPA
Ian BcGetrick	Idaho Power
Andrea Talty	PSE
Verene Martin	Seattle City Light
Alexandra Karpoff	PSE
Kelly Fukai	NWGA
Heather Nicholson	Orcas Power & Light
Sophie Major	WA UTC
Gemma O'Connor	Tacoma Power
Frank Brown	BPA
Carla Essenberg	BPA
Craig Patterson	independent
Elliot Carleton	WA UTC
Mary Kulas	Consultant for PPC
Elizabeth Osborne	NWPCC
Jamie Stamatson	Montana
Rebecca Klein	Seattle City Light
John Purvis	Clallam PUD
Larry Mattson	Washington State
Alex Joe	independent

Scott Levy	Blue Fish
Malcolm Ainspan	NRG
Alessandro Soares	PRS Inc
Rodrigo Benoliel	PRS Inc
John Lyons	Avista Corp
Lori Hermanson	Avista Corp
Ben Kujala	Dunsky
Ron Suppah	CRITFC
Lucas Guerreiro	PRS Inc
Rachel Gardner Clark	Tacoma Power
John Crider	EWEB
Ryan Bottem	Pub Gen Pool
Brian Neff	CA Dept of Energy
Fernanda Thome	PRS Inc
Kevin Smit	NWPCC
Alan Bach	Seattle City Light
Mike Swirsky	Critfc
Edith Bayer	ODOE
Antoine Bachand	Dunsky
Edison Elizeh	Confederate Tribes of Warm Springs
Brad Westmoreland	PGE
Jason Sierman	ODOE
Blake Scherer	Benton PUD
Barbara Miller	US ACE
Greg Brunkhorst	Tacoma Power
Jared Hansen	Idaho Power
Chase Morgan	PGE
Devin Mounts	PGE
Landon Snyder	Snohomish PUD
Angelena Bohman	WA UTC
Matt Mills	PGE
Connor Lennon	Tacoma Power
Kyle Stetier	Flathead Electric
Brian Dekiep	NWPCC