THE TOWN OF LYSANDER

Lysander Data Center Advisory Committee Meeting

November 13th, 2026

NYISO LLIP Changes

Changes to the Large Load integration procedure (LLIP)

- Background:
  - June 2026 the Federal Energy Regulatory Commission (FERC) issued a Show Cause Order for large and co-located loads
    - The FERC order was a push to speed up grid access for large load customers >=50MW, including AI data centers
    - This was the mandate that drove these NYISO rule changes
  - September, 2026 NYISO introduced draft revisions to their stakeholder groups (ESPWG, ICAPWG, and MIWG)
  - October 28th, 2026 The proposed changes were approved
  - November 16th, the changes are due to the FERC
  - Third Quarter, 2028 is the estimated ***earliest*** time for new project connections under the new framework



Image source: elibrary.ferc.gov

Changes to the Large Load integration procedure (LLIP)

- Highlights:
  - Defines large load as >=50MW
  - Mandatory, transparent waiting list (the queue)
    - No line jumping
    - No private deals with local utilities to skip the queue
  - Requires Grid Adequacy and Reliability Modeling
    - Verify there's enough free capacity for the new load
    - Simulate the impacts of extreme weather
    - Verify the grid can still handle the sudden loss of renewable energy with this new load
    - Simulate how a sudden loss of power to the facility impacts surrounding customers



Image source: blog.editors.ca

Changes to the Large Load integration procedure (LLIP)

- Highlights:
  - Requires that all infrastructure upgrades for the project are paid for by the developer
    - Requires a Financial Security Payment equal to 100% of the estimated network upgrade costs in advance before final approval
  - Prevents “Cost Shifting” to residential and small business customers
    - Requires bankruptcy insurance or a guaranteed letter of credit
    - If the developer goes out of business, the utilities are legally prevented from passing the cost of unpaid bills to the regular customers



Image source: blog.editors.ca

Changes to the Large Load integration procedure (LLIP)

- Highlights:
  - Discourages Speculative Grid Requests
    - $10K non-refundable filing fee (this fee did not change, already paid)
    - $150K Study Deposit 1 (Ranalli is grandfathered for this one)
    - $250K Study Deposit 2
    - $4K/MW Baseline Deposit before entering final study stage ($1,080,000)*
      - There is a prorated penalty for early withdrawal from the queue
      - Later exits from the queue forfeit the entire deposit
      - If they exit, they must start over again at the beginning

Changes to the Large Load integration procedure (LLIP)

- Highlights:
  - Defines customer service levels “Firm” vs “Non-Firm”
    - Firm Customers:
      - Guaranteed continuous flow of power from the grid, with exceptions during major, unplanned outages
      - Must prove resource adequacy on the grid or explicitly sign a 15-year contract with a supplier of a new source of power to cover the additional power load
      - They must pay for all necessary grid upgrades the entire way between the power plant and their facility
    - Non-Firm Customers (or Curtailment Customers):
      - Can be forced to disconnect from the grid whenever the system is stressed or faces congestion
      - They only pay for the upgrades required between their site and the grid unless it’s shown that they will cause stability or voltage problems on the main grid



Image source: nytimes.com

Changes to the Large Load integration procedure (LLIP)

- Timeline:
  - Phase 1: Resource Adequacy & Modeling Period (RAMP) - 90 Days
    - Requires $10K non-refundable application fee
    - 90 day data validation and modeling
    - Applicant has 5 days to respond to any questions from NYISO or the request may be dropped from the queue
  - Phase 2: System Impact Study (SIS) - 90 Days
    - Requires an engineering study deposit $150K to cover the costs of this study
    - 90 day comprehensive engineering study
      - Simulates power flow across the grid with the new load
      - Identifies shifts in electricity patterns, bottlenecks, and reliability impacts
    - Applicant has 15 days to decide if they want to commit to the full study or withdraw their application

Changes to the Large Load integration procedure (LLIP)

- Timeline:
  - Phase 3: Assessment of Load Integration (ALI) – 1 Year
    - Requires $4k/MW commercial readiness deposit ($1,080,000)*
    - Requires a second engineering study deposit $250K to cover the costs of this additional study
    - 1 year engineering study – grid modeling, substation designs, and binding cost estimates
  - Phase 4: Cost Allocation, Security, and Agreement Execution – Multiple Years
    - Applicant has 14 calendar days to accept the final upgrade bill and post construction security funds
    - Readiness deposit is released
    - Draft and Negotiate the Interconnection agreement with the local utility
    - Lock in operational rules: min and max power draw, construction dates, payment schedules, and curtailment rules
    - Obtain permits, perform physical construction, build out grid upgrades, full testing, etc
    - Energize the system

Changes to the Large Load integration procedure (LLIP)

- How does this speed up grid access?

  - Multiple applications are “clustered” together and run through the studies simultaneously (called BELL or Bulk Electric Large Load study clusters)
  - Strict schedule timelines with enforceable deadlines
  - Removes speculative and zombie projects from the queue
  - Non-Firm status skips many otherwise time intensive grid upgrades
  - Colocation with new power plants (For Firm customers, both the facility and new power plant are evaluated using the same studies)

Changes to the Large Load integration procedure (LLIP)

- Are there two separate power applications?
  - A 270 MW Entry (Ranalli SuperDC)
    - Queue Position #1736
    - Filed May 6, 2025
    - For a 270 MW load connecting at 230 kV (Clay to Pannell circuits PC-1 and PC-2) with the ***New York Power Authority*** (NYPA)
  - An ***unconfirmed*** 50 MW Entry (Ranalli SuperDC Lysander)
    - AIxEnergy lists a second, separate application
    - Listed as a separate 50.0 MW large-load entry for a 115 kV connection with ***National Grid*** (terminating at TAP140448)
    - AIxEnergy began showing this in September, 2026

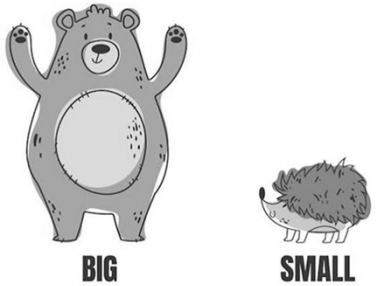


Image source: magnific.com

Changes to the Large Load integration procedure (LLIP)

- Why two separate power Applications?
  - The 270 MW application is slow and expensive
    - $1,080,000 customer readiness deposit
    - Significantly costlier and more time consuming grid upgrades
    - Most likely requires a 15 year co-location contract with a new supplier
  - The 50 MW application is faster and far less expensive
    - $200,000 customer readiness deposit
    - Cheaper and faster grid upgrade alternative
  - Can the project stack both applications to end up with 320 MW?
    - No, they must choose one or the other
    - If they later want to proceed with the other, it starts as an entirely new application and must go through all of the steps, fees, and deposits again

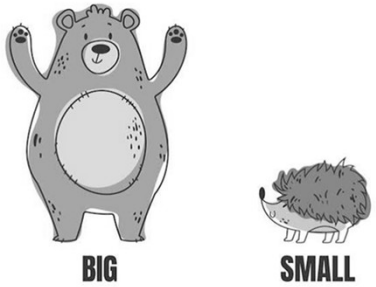


Image source: magnific.com

Changes to the Large Load integration procedure (LLIP)



Image source: magnific.com

- Is the Ranalli project grandfathered?
  - Three Grandfathered groups
    - Group A (Fully Grandfathered)
      - Projects whose System Impact Study (SIS) has been completed
      - This group proceeds under the old rules and are automatically considered Firm customers
    - Group B (Transitional Study Track)
      - Projects that had an approved SIS scope by June, 2026 – **The 270MW application is in this group**
      - SIS Study must be completed by July 1, 2027 or the project is removed from the queue
      - These projects skip earlier steps but must complete the new Resource Adequacy evaluation, and then jump to the Assessment of Load Integration (ALI) phase.
      - Group C (Start Over under the new rules) – **The 50MW application (if exists) is in this group**
      - These projects didn't meet the above SIS Scope deadline

Changes to the Large Load integration procedure (LLIP)

- What does this do to the Ranalli project approval timeline?
  - Phase 2 completion by July, 2027
  - 15 days to pay the $4K/MW deposit and move forward
  - Phase 3 completion by July 2028
  - 14 days to accept and move forward
  - Contract negotiations mid to late 2028
  - Power availability?
    - If they proceed with 270 MW application as a firm customer, this is a multi-year project, estimated full scale, **energized power in 2030 -2032**
    - If they fall back to the 50MW application as a non-firm customer, they could have an **energized connection by 2029**



Changes to the Large Load integration procedure (LLIP)

- Does the new LLIP procedure help with our documented community concerns?
  - Yes
    - Ensures Power system upgrades are solely paid for by the developer
    - Ensures power cannot be taken from residential and small commercial customers to power the data center, no brownouts or outages
    - Ensures grid upgrades are planned well in advance of load approval
    - Ensures large load customers pay for their own power
    - Separates the costs for residential power from large load facility power (no supply/demand impact to residents)
    - Prevents cost shifting in the event they go out of business

Changes to the Large Load integration procedure (LLIP)

- Does the new LLIP procedure help with our documented community concerns?
  - No
    - Non-Firm/Curtailment customers will necessarily run generators more often
    - Non-Firm/Curtailment customers will likely need bigger BESS systems

Next Steps

Next Steps

- Finish talking about pollution concerns from last week
- What did we miss?
- What needs clarification?



Thank You