

LYNX ELECTRIC CURRENTS

AUGUST 2015 NEWSLETTER

EDITOR'S NOTE

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Despite all of the record setting weather swings between cool, hot, dry, and flash floods this summer, prices have been relatively stable. Natural gas remains in the \$2.80 per MMBTU range. Electric prices reflect the low gas pricing as natural gas fuels 50% or more of the power plants. We have had several calls for load shedding in small pockets of Con Edison otherwise no major NYISO calls for load shedding have occurred.

As we move into the summer fairs and festivals season, the NY REV program continues developing their mandate, releasing more rules and policies. Stakeholders have a chance to review and make suggestions, and are encouraged to do so. Lynx staff monitors new developments and sends in comments regarding

provisions or rules that are detrimental to retail markets.

The long awaited decision from the Supreme Court regarding FERC 745 that impacts DR is still pending. The delay is causing some ISO's and RTO's to drop DR programs while others are modifying their programs and asking FERC to approve temporary programs and payment schedules. The status of FERC 745 and its impact on DR is also causing indecision as investors to hold back investing in energy efficiency and curtailment projects. Similar delays caused many coal plants to be retired or mothballed. The multiplier effect of that has been: closed coal power plants, lost coal markets, closed coal mines, and economic impact on railroad shipping. The Supreme Court

ruling regarding EPA emissions ruled that EPA overstepped their boundaries and the economic impact did not justify the cost of the draconian measures EPA established. The Supreme Court ruling came two years late as EPA regulations caused many older plants to shut down prior to the ruling. Congress had passed some legislation making sure FERC and EPA meet and review economic impacts before issuing orders. Perhaps more executive oversight is required. As a nation, we support clean air and water but reduction plans must be tempered with economic analysis and technology needed to achieve the stated goals must be cost effective and available.

US ENERGY

The US House of Representatives is moving ahead with developing a much needed revised energy bill. The bill does address FERC authority and enforcement powers until the Supreme Court rules on the EPA versus FERC Order 745 case. The House Energy and Commerce Committee's subcommittee Energy and Power has developed the energy bill but left the FERC

section blank pending the court ruling. The US Senate Energy and Natural Resource Committee developed a parallel bill but charged the ISO/RTO's with developing a report on how their markets currently operate. NY congressman Elliot Engel wants FERC to consider the existing NYISO markets before ruling across the country "one size fits all" legislation. NY congressman Paul Tonka, former chairman of

NYSERDA, also expressed his views and concerns, stating the Committee needs to study capacity markets and how they function before making any new rules that can adversely impact existing markets, contracts and energy reliability issues. Action on the energy bills will resume in September when Congress is back in session.

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Space conditioning, or air conditioning as it is more commonly called, is the biggest expense for many customers depending on their geographic location. Even northeastern states such as NY have demand spikes of 10,000MW or more caused by air conditioning loads. Ultimately, more generator capacity and transmission lines are needed to handle the AC load for a few extreme high temperature weeks. The result is a poor load factor driving up utility costs. Commercial and Industrial accounts have options with interval metering by shifting loads to off-peak

periods. Some commercial facilities using chillers make ice during off peak periods to reduce on peak compressor loads. GRIA, the Rochester airport, uses waste heat from their generators to operate their absorption chillers to air condition the terminal concourse. Building envelope can also be considered to lower air condition loads. Installing Low E glass, shades, or tinted windows are all options to reduce cooling costs, but may have a longer payback periods. Typically windows replacement payback may be 30 plus years. Incentives are available from utilities and various state programs for installing high efficiency air conditioning units that meet SEER efficiency ratings of 15 or EER ratings of 12. Pre-cooling a facility to get ready for extreme high temperatures can be a low tech method of using cheaper off peak power to lower your cooling costs. Upgrading lighting to LED has a high payback by using less electricity for lighting and producing less heat load in your building thereby reducing your cooling load.

We hope these tips can help your facility save some cash and help keep you cool. You can contact our staff for assistance on grants and energy efficiency solutions.

NYISO UPDATES

NYISO has presented their capacity forecast through 2024. The report called CRP (Comprehensive Reliability Plan) outlines how NYISO will meet capacity needs for the next ten years. Despite previous protest, the forming of the new Lower Hudson Region has resulted in suppliers adding new capacity with new, renovated, repowered and upgraded generation. Based on current capacity available, needed reserve capacity should be good through 2025. However, continuing economic problems with pro-

duction costs at the Ginna nuclear plant in Rochester NY, currently providing 610 MW's under a "must run contract", could impact the future reserve capacity. Indian Point has two nuclear plants producing two MW's of power each. The nuclear power plant is located 30 north of NYC on the Hudson River. The plant is having difficulty getting NY DEC permission for cooling water intake from the Hudson River. The potential loss of the two power plants at Indian **Point** would severely threaten

the reserve capacity margin needed by NYISO. Presently the nuclear power plants are asking the Nuclear Regulatory Commission to provide a 20 year renewal license for the plants so they can justify capital expenditure for cooling towers or they resolve the permitting issues with the DEC. Because the power plants are located so close to NYC, Governor Cuomo wants the 4.000 MW of power replaced with DR. DG, new transmission lines and clean energy sources. Additional EPA regulations such as the new Clean Power Plan

could also severely impact NY capacity. Since many of the existing generators are dual fuel to meet emission standards, run hours are limited by EPA regulations for oil fueled plants. Concern over availability of natural gas during periods of extreme winter temperature can also jeopardize capacity. NYISO will have to continue monitoring federal and state emission regulations while meeting their reserve capacity mandates and their overall mandate of providing reliable cost effective and now clean power.

NY UPDATES

The NY-PSC is addressing the construction of new transmission lines in WNY in response to public planning recommendations. As part of the FERC mandated new Transmission Order 1000, the PSC has made a public policy decision for NYISO. Currently NY has 11,000 miles of 115 kV (Kilo Volt) transmission lines. Of that number over 4,600 miles of lines need upgrades or replacing in the coming decade. The upgrades will address and accommodate new generation facilities, new smart grid tech-

nologies, repowered plants, and replace aging infrastructure to maintain efficient and reliable electric power transmission. Proposed upgrades in WNY can receive cost allocation funds from NYISO tariffs. Environmental studies, line siting, and permitting will be required, thereby slowing down the process. Once a review and options are identified the PSC will order NYISO to address the transmission line orders.

The <u>REV</u> continues moving forward with the latest NY-PSC release addressing <u>DER</u>

clarifications. Various technical issues are being identified to help support the new marketing and tariffs being proposed. DER data oversight will be provided by the PSC. however the mechanism for transmitting and delivering data from the DER provider to the PSC remains to be developed. Utility retail DR programs are in operation already. A code of conduct along with a list of best business practices is being developed by the PSC staff. Interested stakeholders may want to contact the PSC staff to

express their opinions, recommendations or suggestions. This new code of conduct will be used to determine eligibility of DER providers, risk management of providers and protocol for dealing with misconduct and means of censure for noncompliant DER providers. DER firms will need to register with the PSC to participate in the market. The latest rulings firmly entrench the NY-PSC into the REC process and new DER provider regulation.

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FERC UPDATES

A ruling on FERC authority regarding DR is still pending, waiting for the Supreme Court hearing, making the status of wholesale capacity markets uncertain. However, in an effort to maintain reliability and reserve margin, FERC has issued approved transitional capacity auctions for the year. To avoid future complications regarding contractual obligations, capacity pricing and major capital investments, the PJM has created a transitional tariff. The new tariff keeps DR and non-generator resources from participating in the auctions. PJM is making revisions between DR and nongenerational capacity that have the ability to participate without expending major capital investments.

To meet FERC Order 1000, new transmission lines are being built by developers to handle renewable energy capacity, provide additional capacity in areas were existing coal plants have been retired, to bring in outside capacity in areas experiencing capacity growth, and to upgrade aging system to maintain reliability. Transmission developers are asking FERC to modify the order to protect transmission firms involved in competitive projects from additional cost once the com-

petitive project has been accepted. Proponents point to the Mobil-Sierra standard which has provisions for cost additions resulting from violation in the transmission lines that impact public interest. Otherwise the contract remains intact as bid. Developers state that such a measure would provide cost stability, reduce risk for developers, and encourage investors to participate and invest in transmission projects. Competitive bidding will also encourage efficiency in building new transmission lines while allowing firms to project rate of return and cost for their projects. Devel-

opers such as ITC are requesting FERC to allow a 40 year (or life cycle of the equipment) binding bid costs, while allowances for needed exemptions can be made. The result would allow competitive bidding on transmission lines and developers can more accurately project their costs, factor in project margins and avoid unexpected changes from outside entities being introduced in the project after the contracts have been executed with the exception of public safety measures.

PJM UPDATES

With the recent announcement from First Energy that they will no longer be providing retail supply to customers, the PA-PUC is monitoring the situation and encouraging the two million plus customers to shop for suppliers. They are encouraging consumers to utilize "Competitive Power Markets" for purchasing elec-

tric supply. In addressing the First Energy pull out from the retail market, has the PUC publishing a list of available suppliers that can fill the supply gap. The PA "one stop shopping" website allows customers to evaluate various rate options, product offerings and related information. The hardest impacted region

will be southwestern PA. The PUC information will make customers aware of pricing options and new products on the energy market available to them including hedging, fixed price options, energy efficiency upgrades and related programs. First Energy withdrawal from retail markets should open up some marketing opportunity for other retailers.

ISO-NE UPDATES

ISO-NE has requested FERC to approve their latest Winter Reliability proposal, which will cover the region through 2018. FERC will have to decide between two submittals or a combination of the two. ISO-NE and NE-POOL both submitted proposals for the New England Winter Reliability program. The NEPOOL proposal follows last winter's format and will pay generators to maintain oil inventory or LNG supplies to provide a dual fuel back-

up, should severe temperature result in natural gas or pipeline capacity shortages. The ISO's proposal would eliminate DR payments but would pay for oil and LNG inventory at generator sites. In addition the ISO would pay for nuclear, hydro, biomass, and coal capacity. The ISO states their proposal of allowing all fuel types is more representative of actual market make up. Furthermore it is expected to encourage more diversified fuel storage capa-

bility. The NEPOOL proposal is about 60% cheaper at \$35 million, in comparison to the ISO proposal expected to cost \$100 million. Stakeholders and state officials favor the NEPOOL proposal. It is now up to FERC to make a ruling on New England winter capacity.



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NYSERDA PON UPDATES

Remember that many of the PON's will expire this year. REV will be modifying funding parameters. If you have a project that requires outside funding such as grants, ACT NOW!

LYNX has developed partnerships to assist you with NYSERDA funding, feasibility studies and developing projects which could be eligible for funding. You can call our office for more information if you have or are thinking about an energy project. For our Cond Ed customers we can provide Cummins Generators for DR programs with funding available from ConEd and NYSERDA.

PON 1219 Existing Buildings: Provides rebates and performance incentives for existing buildings including lighting, motors, generators, HVAC equipment etc. through 12-31-2015. This PON has added natural gas incentives.

PON 1601 New Construction Financial Incentives: Provides incentives for new and remodeled buildings, paying for architectural and engineering services, rebates on electric equipment, appliances, HVAC equipment, and building envelope, through 2015.

PON 1746 Flex Tech: Provides funding for a variety of feasibility and energy related studies through 12-31-2015.

PON 2112 Solar PV Program Financial Incentive: This PON has funding through 2015

PON 2439 Wind Turbines: This PON pays incentives to certified installers of DG windmills under 2 MW through 2015.

PON 2456 Industrial and Process Efficiency Program: This PON is can pay up to \$4.5 Million per project through Dec. 2015.

PON 2568 CHP Acceleration: Funding for onsite generation

with heat recovery (DG/CHP) packaged units through 2015.

PON 2689 Emerging Technologies and accelerated Commercialization through Dec. 2016

PON 2701 Combined Heat and Power CHP Performance Program through Dec. 2016 PON 2828 Renewable Portfolio Standard Customer-Sited Tier Anaerobic Digester Gas to Electricity Through 2015

PON 3082 NY SUN Commercial/Industrial Incentive Program through 12/2023

US MARKETING

ABACCUS (Annual Baseline Assessment of Choice in Canada and the US) issued a report covering marketing trend for utilities and electric markets. The report has the top five retail markets in North America identified. Texas is in the number one spot followed by Alberta Canada. Pennsylvania placed third followed by New York in fourth place. Rounding out the top five is Connecticut. Evaluation criteria used for the rankings in-

clude the following items:

- The role of utilities
- Default tariffs and retail service options
- Advanced Infrastructure (Smart Grid)
- Scope of Retailers and Energy Markets
- Scope and variety of Customer Supply choices and options
- Customer access to Information

The report points out that Texas, who has won multiple

removed default utility requirements for utilities. The PA-PUC is considering a similar move following the Texas model. A growing consensus of regulatory staff feel utilities should not be responsible for default tariffs but should be responsible for:

- Reliability
- Distribution of power
- Safety

Energy supply issues should be relegated to supply generators and energy supply markets.

The future for utilities should be away from cost per kWh and should focus on electric service. **DEFG** (Distributed Energy Financial Group) spokesperson Nat Treadway states that consumers are focused on value and service they receive not on price or cost per kWh.

GLOSSARY OF ACRONYMS

ABACCUS - Annual Baseline Assessment of Choice in Canada and the US

AEC - Alternative Energy Credits

AEPS - Alternative Energy Portfolio Standard

CRP - Comprehensive Reliability Plan

DEFG - Distributed Energy Financial group

DER - Distributed Energy Resources

DG - Distributed generation

DR - Demand Response

LNG - Liquid Natural Gas

NEPOOL New England Power POOL

REC - Renewable Energy Credits

REV - Reforming Energy Vision

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Sun	Mon	Tue	Wed	Thu	Fri	Sat	
						1	
2	3	4	5	6	7 PJM Bill Issued by 5 PM	8	
9	10 NYISO ICAP Monthly Auction	11 NYISO ICAP Monthly Auction	12	13 NYISO ICAP Monthly Auction Results	14 PJM Bill Due by 5 PM	15	
16	17	18	19	20	21 Certification	22	
23	24	25 NYISO ICAP Monthly Spot	26 NYISO ICAP Monthly Spot	27	28 NYISO ICAP Monthly Spot	29	
30	31	Auction	Auction		Auction Results		

FUTURE DATES

August

7 PJM Bill Issued

10-11 NYISO ICAP Monthly Auction

13 NYISO ICAP Monthly Auction Results

14 PJM Bill Due

21 Certification

25-26 NYISO ICAP Spot Auction

28 NYISO ICAP Spot Auction Results

September

8 PJM Bill Issued

9-10 NYISO ICAP Monthly Auction

14 NYISO ICAP Monthly Auction Results

18 PJM Bill Due

18 SCR enrollment Begins

22 Certification

24-25 NYISO ICAP Spot Auction

28 NYISO ICAP Spot Auction Results

29-30 Strip Auction for Winter 2015-2016

NYISO SCR CURTAILMENT PROGRAM

Proposed changes by the NYISO will impact SCR customers. Lynx will work to keep you informed and updated as changes get approved. Prices for participation in DR programs are up as Governor Cuomo is getting behind peak load reduction programs. Lynx is providing assistance for our customers with event notification and supplying documentation to the NYISO verifying results. A major obstacle for customers having peak demand less than 500 kW is having an interval meter. Lynx can help you with securing grants for interval meters, and getting those meters installed. Many customers willing to participate in NYISO programs need help in determining what items can be curtailed and to determine the kW value of those items to be shut off. Lynx can help your customers determining kW loads that can be curtailed. In addition Lynx can now provide Cummins Generators which can be used for curtailment purposes along with providing protection for property and life during emergencies. Lynx will work with you to get customers registered in a NYISO program. So help your customers get some cash for shedding electric loads during peak load emergency events. ESCO's or suppliers will also earn funds. With Lynx guidance you can avoid costly pitfalls and potential fines. We urge our customers to get their information in to our office now before the summer strip starts. Should you miss the deadline customers can still participate on a monthly basis but will miss out on May payments for 2015. Call Lisa Klein or Bert Spaeth in our Lynx office at 716-774-1341.

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COMMODITY PRICING

Historical - Flat DAM

Current Projections

								Sep-15	Oct-15	Nov-15	Sep-15 to Aug-16		
	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	1	Flat	Flat	Flat	Flat	Peak	Off Peak
NYISO-A	33.29	23.39	28.91	24.60	29.31	28.86		28.72	29.00	30.71	35.93	45.93	27.18
NYISO-F	53.34	26.64	26.23	20.63	26.05	27.04		26.98	29.06	38.26	45.16	54.24	37.23
NYISO-J	51.26	27.53	30.35	24.95	30.01	30.01		29.87	30.89	39.61	46.27	56.58	37.27
NYISO-K	55.62	30.39	35.24	30.72	41.92	36.55		40.87	43.83	50.38	58.57	68.98	49.48
PJM-PSEG	41.71	28.08	31.84	25.50	27.89	28.03		29.84	29.41	32.58	39.53	47.80	32.31
PJM-JCPL	38.03	27.23	31.67	25.26	27.46	27.62		28.93	28.80	31.71	38.15	46.22	31.09
PJM-APS	39.04	32.34	34.47	31.09	32.93	31.41		33.90	34.23	35.39	39.50	46.91	33.03
PJM-PECO	38.02	25.89	31.50	24.76	26.81	26.82		28.47	28.35	31.01	36.66	44.61	29.72
PJM-PPL	37.36	26.31	32.22	24.45	26.39	26.78		28.25	28.10	30.93	36.42	44.61	29.27
PJM-DLCO	34.92	31.22	34.44	30.35	31.35	30.27		32.39	33.52	33.76	36.31	42.90	30.56
PJM-PENELEC	39.79	29.41	33.06	28.56	31.21	29.97		32.50	33.22	34.30	38.25	45.71	31.74
PJM-METED	37.69	26.29	33.94	24.40	26.12	27.13		28.99	28.84	31.05	36.67	44.92	29.45
PJM-BGE	44.26	40.70	40.82	43.53	42.59	37.84		42.15	41.24	42.54	48.38	57.53	40.39
ISONE-CT	60.67	27.98	25.23	21.89	26.88	27.76		28.12	35.55	49.78	51.97	60.35	44.66

Note: On-peak is defined as HEO8- HE23 Weekdays (less NERC Holidays)
Commodity pricing at MWh reflects an estimate of pricing based on current information available at time of printing
from various market sources. The prices are not intended to be used as hard data for contractual purposes. Prices are
represented in dollar per MWH.

GREEN ENERGY

As state mandates are phased in, suppliers or ESCO's will be required to purchase REC's (Renewable Energy Credits) and show documented proof of purchase. Some states require a percentage of Solar REC's or offshore wind depending on the host states social policies. Each category, whether it is called Tier or Class has different pricing and some states mandate a mix. Suffice it to say, Solar is the most expensive and Tier or Class II is the least expensive. Failure to purchase green energy or AEPS (Alternative Energy Portfolio Standard) or REC's will result in a default REC. PJM customers would pay Alternative Energy Credits (AEC) at \$500 per credit. Connecticut has a default rate as well. Lynx will assist you in locating cost effective green REC's to meet your needs. In addition, Lynx can handle your reporting and assist you in purchasing REC's. The percentage of renewable energy is expected to increase up to 27% in certain states by 2025.

Note: To ease the burden of purchasing annually and the large cash expenditure, Lynx is recommending purchasing REC's on a quarterly basis to avoid higher prices at the end of the reporting period.

Lynx EMS

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