

M2M PJM Flowgates/Entitlements

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MIWG

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KCC



Agenda

- ◆ **M2M Background**
- ◆ **M2M Flowgates**
- ◆ **M2M NYISO Entitlement Results**
- ◆ **M2M PJM Entitlement Results**

Background

- ◆ **The fundamental philosophy of the PJM/NYISO M2M coordination process is to set up procedures to allow any transmission constraints that are significantly impacted by generation dispatch changes and/or Phase Angle Regulator control actions in both markets to be jointly managed in the security-constrained economic dispatch models of both RTOs.**
- ◆ **The NYISO/PJM activation of Market-to-Market (M2M) is scheduled for January 15, 2013.**

Background Continued

- ◆ **Entitlements are an important component of M2M coordination and need to be established for the agreed upon initial set of M2M Re-dispatch flowgates.**
 - *M2M Flowgates – facilities or groups of facilities that may act as transmission constraint points and are jointly coordinated*
 - Entitlements only apply to the M2M Re-dispatch process
 - Entitlements are not relevant to M2M Ramapo PAR actions
 - *M2M Entitlement – the Non-Monitoring RTO’s permitted use of a M2M Re-dispatch Flowgate’s total capability, for M2M settlement purposes*
- ◆ **The purpose of today’s presentation is to share the list of M2M Flowgates and the results of the entitlement calculations (subject to final verification) that will be effective January 15, 2013.**

NYISO M2M Ramapo Flowgates

- ◆ **PJM and NYISO have agreed to coordinate on the following NYISO M2M Ramapo Flowgates:**

FG Name
DYSINGER
WEST CENTRAL TIES
CENTRAL - EAST TIES
LEEDS 345 PLSNTVLY 345 1_250562 I/o ATHENS_-PLSNTVLY_
LEEDS 345 PLSNTVLY 345 1_250563 I/o LEEDS_-HURLYAVE_
LEEDS 345 PLSNTVLY 345 1_250567 I/o TSA:CE80 91 301
PANNELL 345 CLAY 345 1_25050 I/o PANNELL_-CLAY_
PANNELL 345 CLAY 345 1_25058 I/o PANNELL_-CLAY_
FRASER345 COOPERS345 1_25236 I/o TWR:31 UCC2-41
COOPERS 345 ROCKTVRN 345 1_25111
EDIC_PTR 345 N.SCTLND 345 1_25170 I/o TWR:UCC2-41 EF2
LADENTWN 345 RAMAPO 345 1_25233 I/o SCB:RAMP(T77-94-
LAFAYTTE 345 CLRKSCRN 345 1_25049 I/o TWR:UCC2-41 EF
LEEDS 345 HURLYAVE 345 1_25055 I/o TSA:CE75 91 92
N.SCTLND 345 1 LEEDS 345_251711 I/o \$SCB LEEDS R3 W/
N.SCTLND 345 1 LEEDS 345_251712 I/o \$SCB LEEDS R94 W/
N.SCTLND 345 1 LEEDS 345_251713 I/o BUS:N.SCTLND #99
N.SCTLND 345 1 LEEDS 345_251714 I/o GILBOA_-LEEDS_
N.SCTLND 345 1 LEEDS 345_251715 I/o N.SCTLND-LEEDS_
N.SCTLND 345 1 LEEDS 345_251716 I/o TWR:UCC2-41 EF24
N.SCTLND 345 1 LEEDS 345_251717 I/o TWR:UCC2-41 FCC-

FG Name
LEEDS 345 N.SCTLND 345 1_252031 I/o GILBOA_-LEEDS_
LEEDS 345 N.SCTLND 345 1_252032 I/o N.SCTLND-LEEDS_
LEEDS 345 N.SCTLND 345 1_252033 I/o TWR:UCC2-41 FC
ATHENS 345 PLSNTVLY 345 1_250541 I/o LEEDS_-HURLYAVE
ATHENS 345 PLSNTVLY 345 1_250542 I/o LEEDS_-PLSNTVLY
ATHENS 345 PLSNTVLY 345 1_250543 I/o TSA:CE66 W97 W98
LEEDS 345 PLSNTVLY 345 1_250561 I/o \$SCB Plsntvly RN4
LEEDS 345 PLSNTVLY 345 1_250564 I/o SCB:ROSETON(31151)
LEEDS 345 PLSNTVLY 345 1_250565 I/o TSA:CE65 W97 W98
LEEDS 345 PLSNTVLY 345 1_250566 I/o TSA:CE77 91 77
LEEDS 345 PLSNTVLY 345 1_250568 I/o TSA:CE81 91 303
LEEDS 345 PLSNTVLY 345 1_250569 I/o TSA:CE81 91 305
ROCKTVRN 345 RAMAPO 345 1_251831 I/o \$SCB PLEASANT V
ROCKTVRN 345 RAMAPO 345 1_251832 I/o SIN:WOOD ST F30
ROCKTVRN 345 RAMAPO 345 1_251833 I/o TWR:PV F30 F31
ROCKTVRN 345 RAMAPO 345 1_251834 I/o TWR:Y94 Y88 B
NIAGARA 345 ROCHESTR 345 1_25084 I/o KINTIGH_-ROCHEST
PLSNTVLY 345 EFISHKIL 345 1_25256 I/o TWR:PV F30 F31
PLSNTVLY 345 EFISHKIL 345 2_252571 I/o TSA:CE43 F30 F3
PLSNTVLY 345 EFISHKIL 345 2_252572 I/o TWR:PV F30 F31
FRASER 345 GILBOA 345 1_25060 I/o TWR:CMT-34 MTR-3

PJM M2M Ramapo Flowgates

- ◆ **PJM and NYISO have agreed to coordinate on the following PJM M2M Ramapo Flowgates:**

FG Name
PJM Eastern Interface
5004/5005 Interface I/o Black Oak-Bedington 500 kV
5004/5005 Interface I/o Conemaugh-Keystone 500 kV
5004/5005 Interface I/o Pruntytown-Mt. Storm 500 kV
BRANCHBU500KV XFMR flo BRANCHBU500-2 XFMR
ROSELAND-WHIPpany A-941
ROSE-WHIPpany A-941 flo ELROYPL 2TR XFMR
BUCKINGH-PLVY PS L-220-12 flo ALBURTIS-BRANCHBU 5016
BUCKINGH-PLVY PS L-220-12 flo ELROYPL 2TR XFMR
CONEMAUG-HUNTERST 5006 flo BRIGHTON-DOUBS 5055
CONEMAUG-HUNTERST 5006 flo JUNIATA-KEYSTONE 5004
JUNIATA-KEYSTONE 5004 flo CONEMAUG-KEYSTONE 5003
ROSE-WHIPA-941 flo NEPTUNE-SAYREVIL
HOMERCIT SXFMR flo HANDSOME-HOMERCIT

NYISO M2M Re-dispatch Flowgates

- ◆ **PJM and NYISO have agreed to coordinate on the following NYISO M2M Re-dispatch Flowgates:***
 - *Dysinger East Interface*
 - *West Central Interface*
 - *Central East VC Interface*

****See Section 3 of Schedule D in the NYISO-PJM Joint Operating agreement for procedures describing the flowgate qualification process***

PJM M2M Re-dispatch Flowgates

- ◆ **PJM and NYISO have agreed to coordinate on the following PJM M2M Re-dispatch Flowgates:**
 - ***Keystone-Juniata & Conemaugh-Juniata Parallel Lines for the loss of:***
 - **Black Oak-Bedington Line**
 - **Conemaugh-Keystone Line**
 - **Pruntytown-Mt. Storm Line**

M2M Entitlement Calculation

- ◆ **As defined in Section 6 of Schedule D in the NY-PJM Joint Operating agreement, the M2M Entitlement calculation determines a Non-Monitoring RTO's share of a M2M Flowgate's total capacity based on historic dispatch patterns.**
 - ***NYISO performed the Entitlement calculation on PJM M2M Flowgates***
 - ***PJM performed the Entitlement calculation on NYISO M2M Flowgates***
 - ***Both Parties have exchanged the respective Entitlement calculation results, and the proposed results are currently under review***

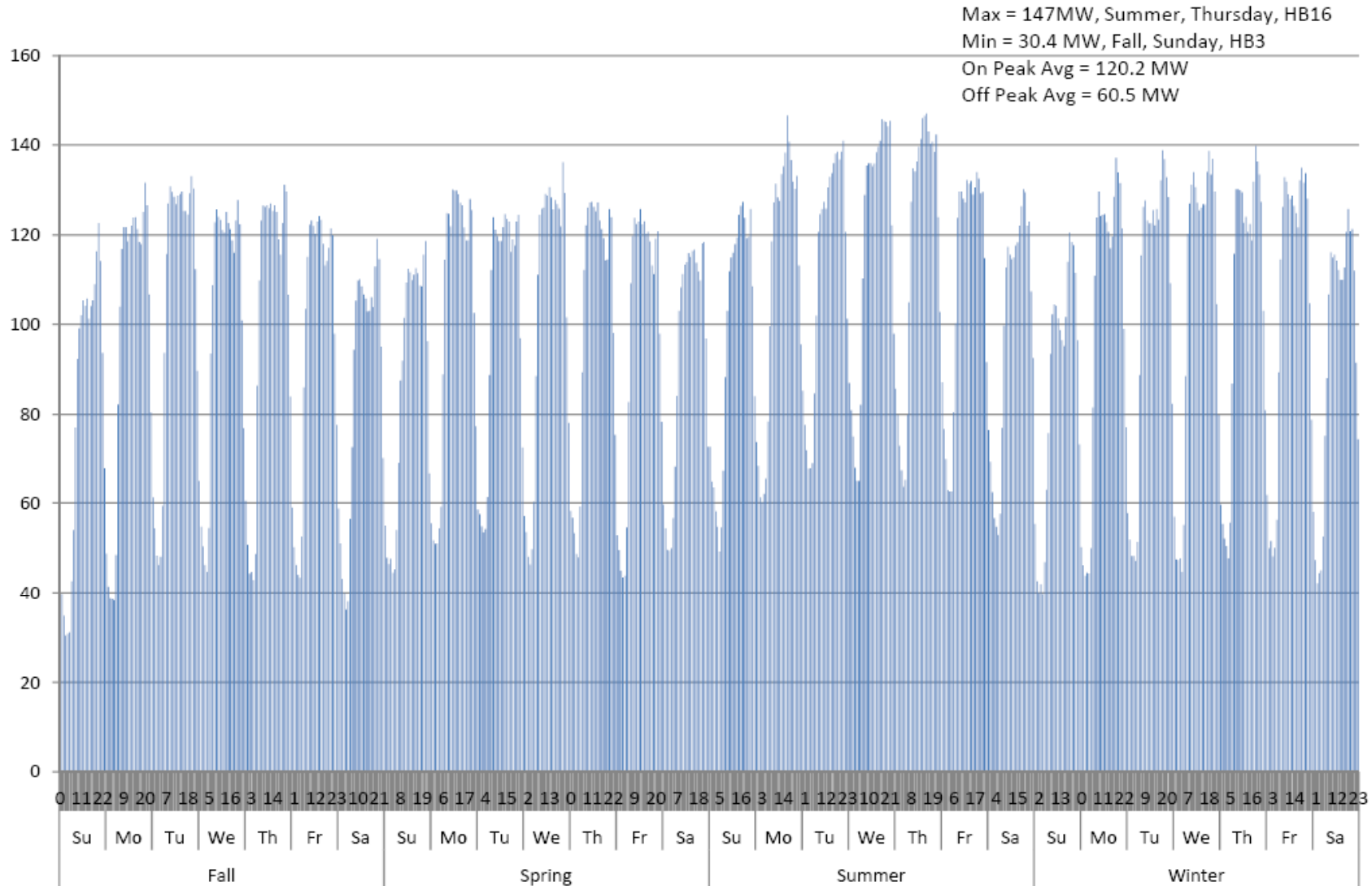
M2M Entitlement Calculation

- ◆ **Entitlements were determined for four Periods using 2009-2011 data**
 - *Period 1: December, January, February*
 - *Period 2: March, April, May*
 - *Period 3: June, July, August*
 - *Period 4: September, October, November*
- ◆ **For each period, an entitlement is calculated for each hour of the representative week**

NYISO Entitlement Results

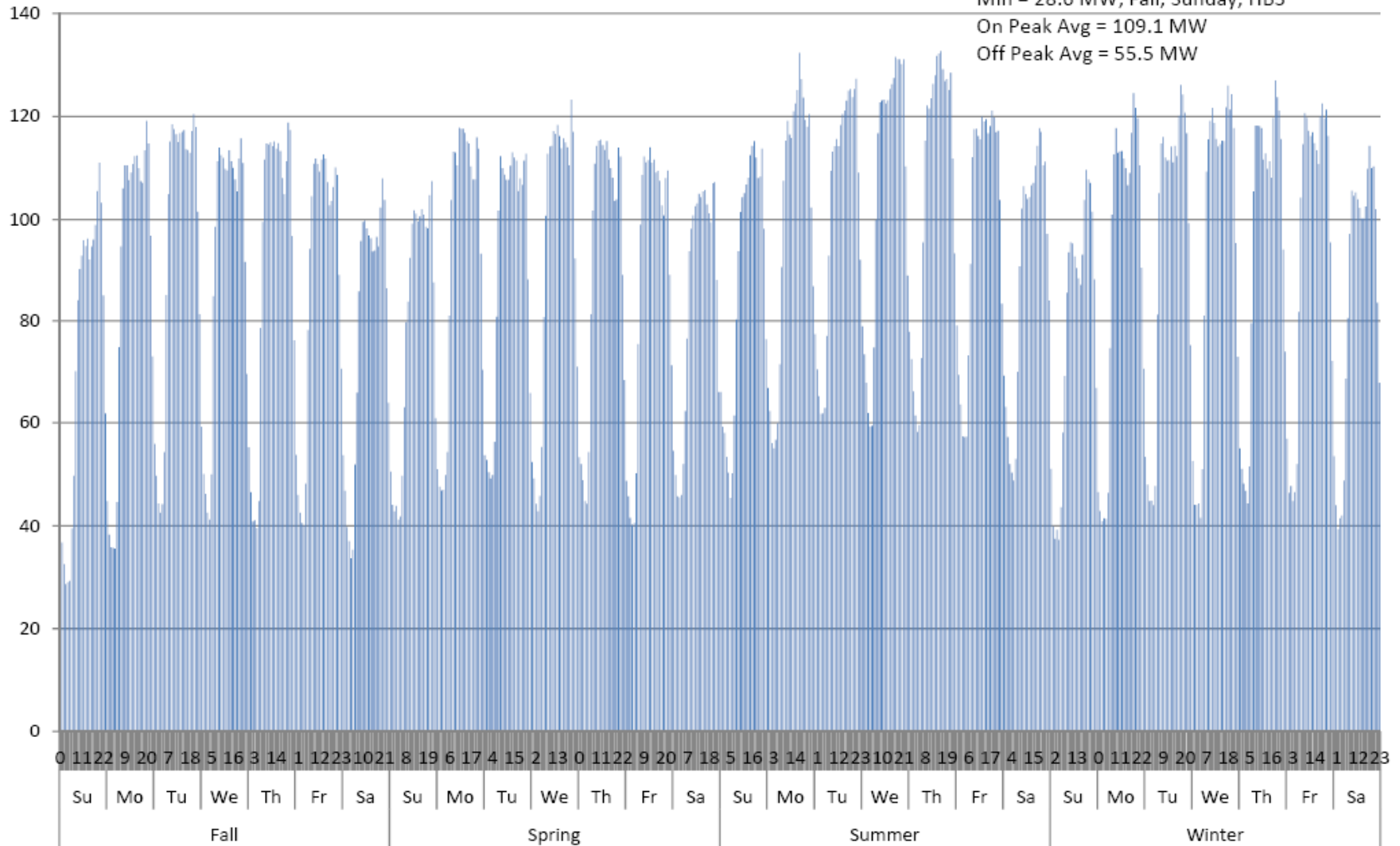
	Keystone-Juniata & Conemaugh-Juniata I/o Black Oak-Bedington	Keystone-Juniata & Conemaugh-Juniata I/o Conemaugh-Keystone	Keystone-Juniata & Conemaugh-Juniata I/o Pruntytown-Mt. Storm
On Peak Average MW (HB7-22)	120.2	109.1	121.2
Off Peak Average MW (HB0-6,HB23)	60.5	55.5	61.1
Maximum MW	147 Summer, Thursday, HB16	132.7 Summer, Thursday, HB16	148.1 Summer, Thursday, HB16
Minimum MW	30.4 Fall, Sunday, HB3	28.6 Fall, Sunday, HB3	30.8 Fall, Sunday, HB3

NYISO Entitlement – Keystone-Juniata & Conemaugh-Juniata I/o Black Oak- Bedington



NYISO Entitlement – Keystone-Juniata & Conemaugh-Juniata I/o Conemaugh-Keystone

Max = 132.7 MW, Summer, Thursday, HB16
 Min = 28.6 MW, Fall, Sunday, HB3
 On Peak Avg = 109.1 MW
 Off Peak Avg = 55.5 MW



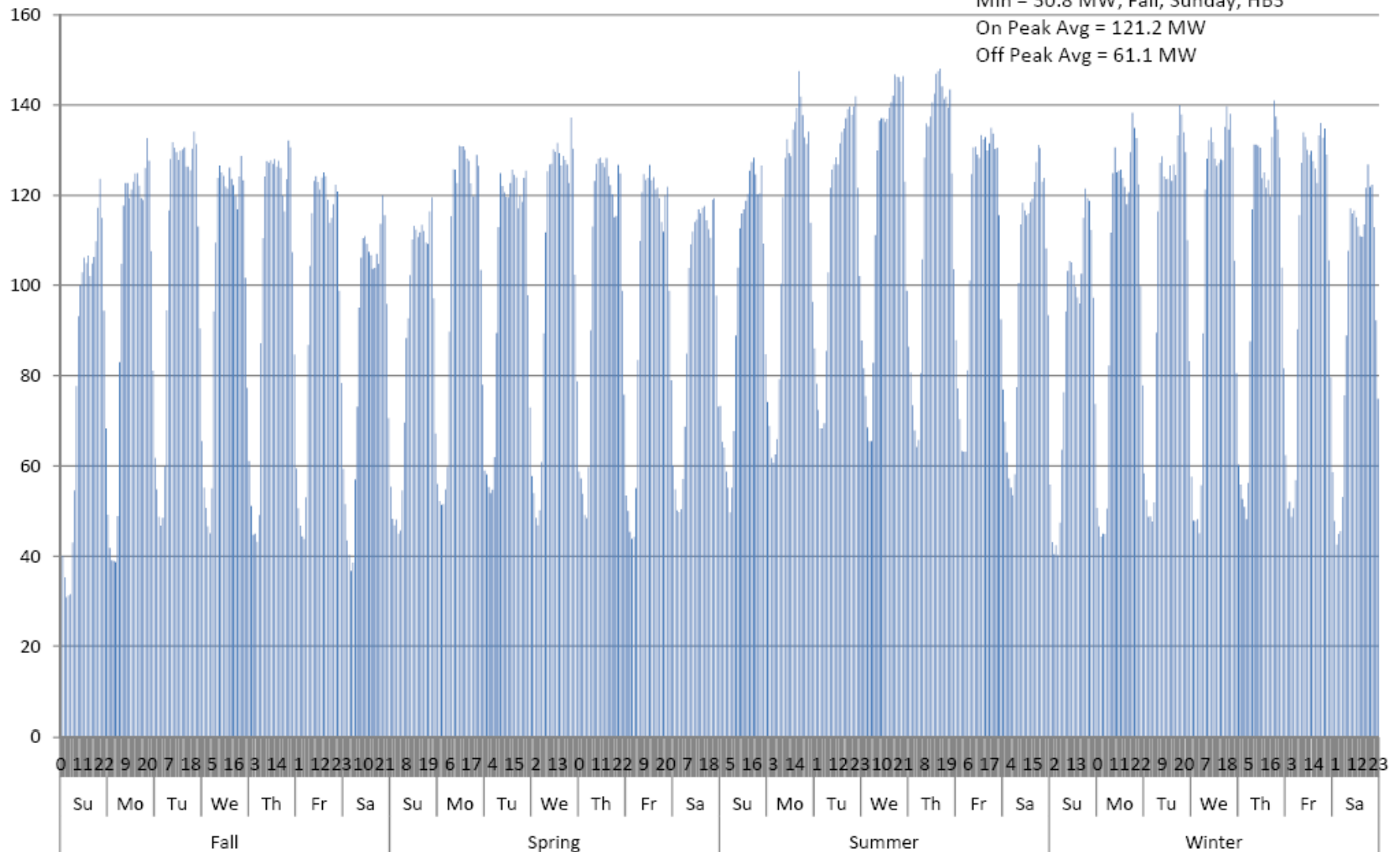
NYISO Entitlement – Keystone-Juniata & Conemaugh-Juniata I/o Pruntytown-Mt. Storm

Max = 148.1 MW, Summer, Thursday, HB16

Min = 30.8 MW, Fall, Sunday, HB3

On Peak Avg = 121.2 MW

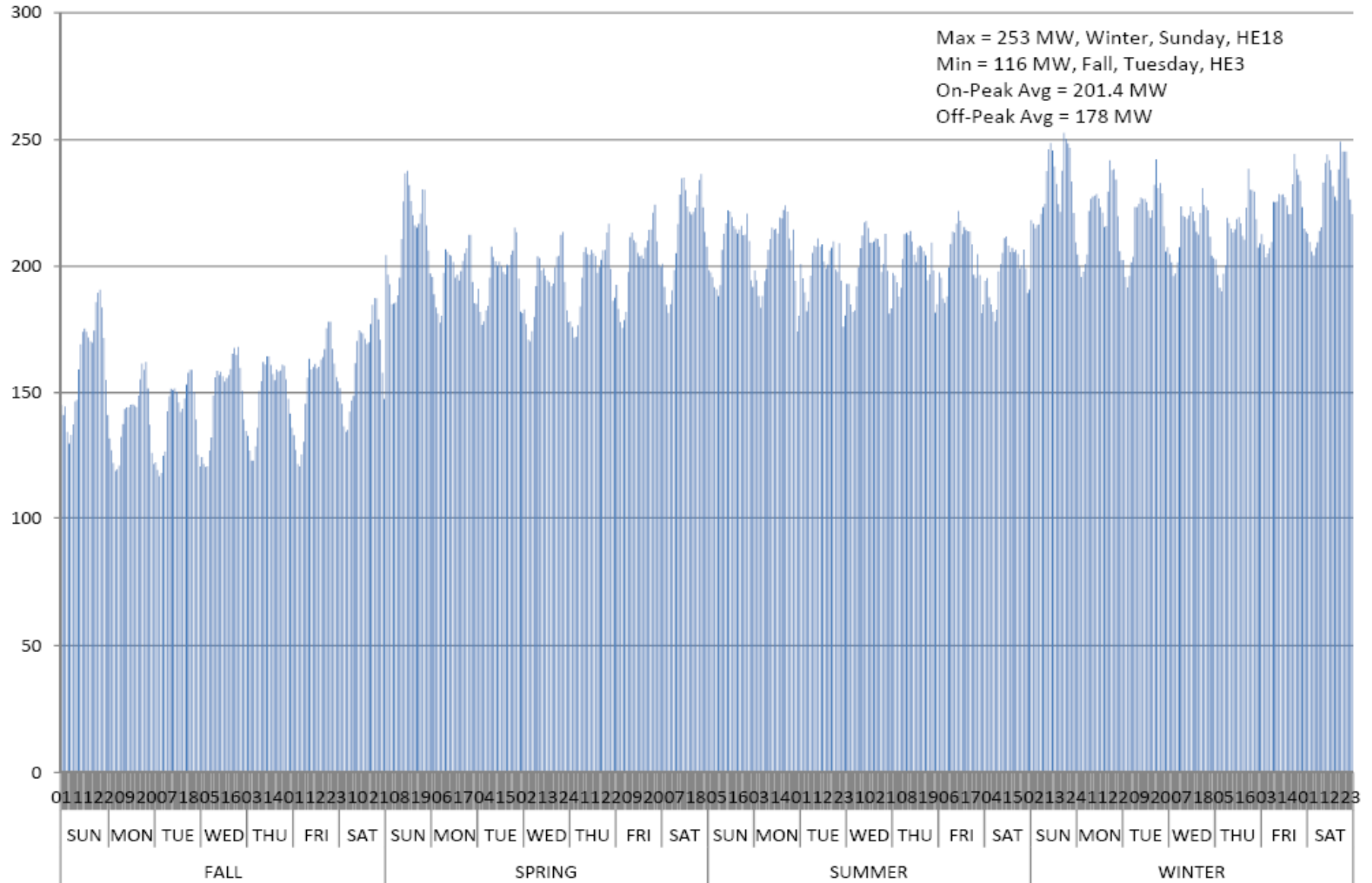
Off Peak Avg = 61.1 MW



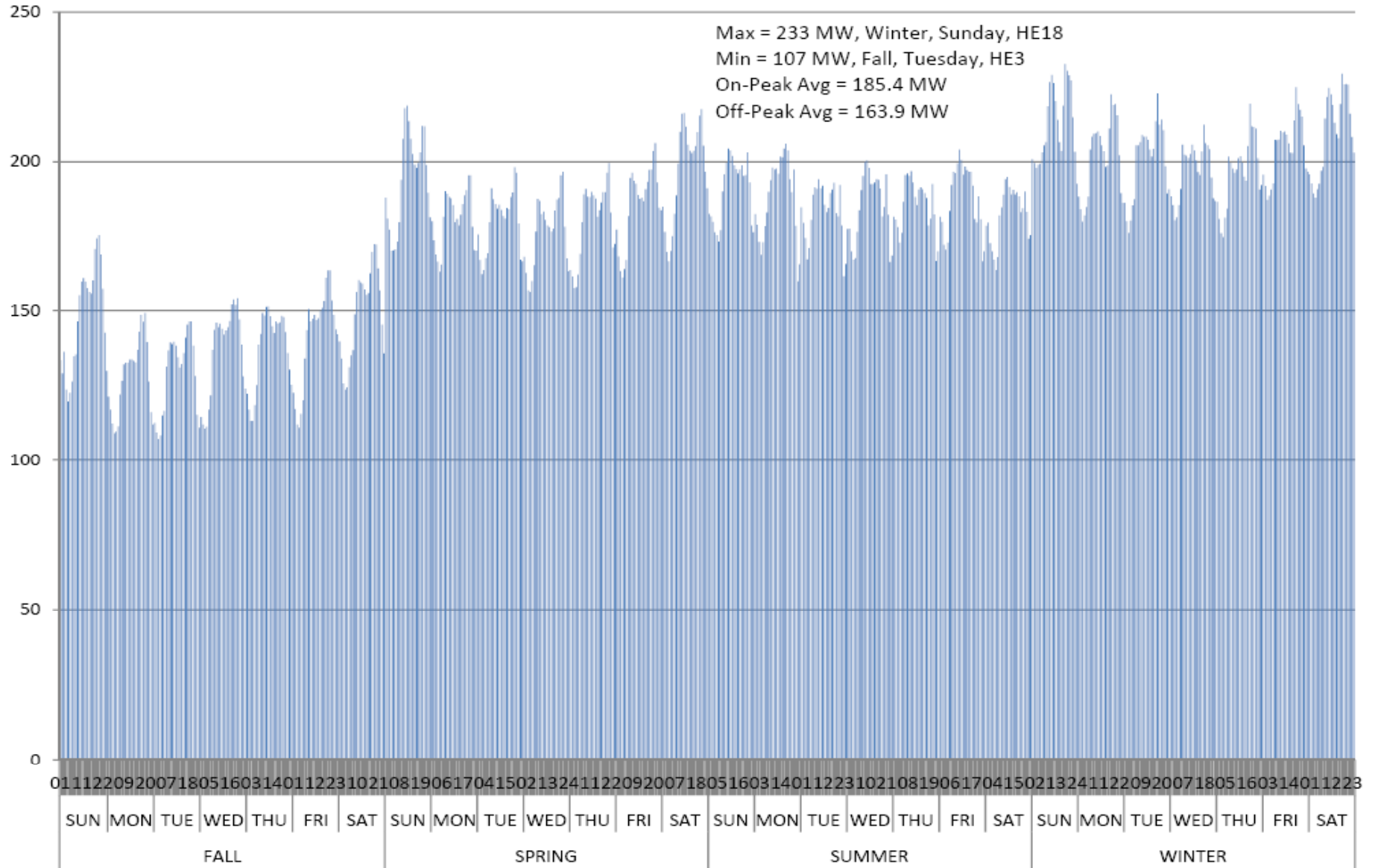
PJM Entitlement Results

	Dysinger East	West Central	Central East VC
On Peak Average MW (HE8-23)	201.4	185.4	43.7
Off Peak Average MW (HE1-7,HE24)	178.0	163.9	38.5
Maximum MW	253 Winter, Sunday, HE18	233 Winter, Sunday, HE18	52 Summer, Monday, HE17
Minimum MW	116 Fall, Tuesday, HE3	107 Fall, Tuesday, HE3	27 Fall, Tuesday, HE3

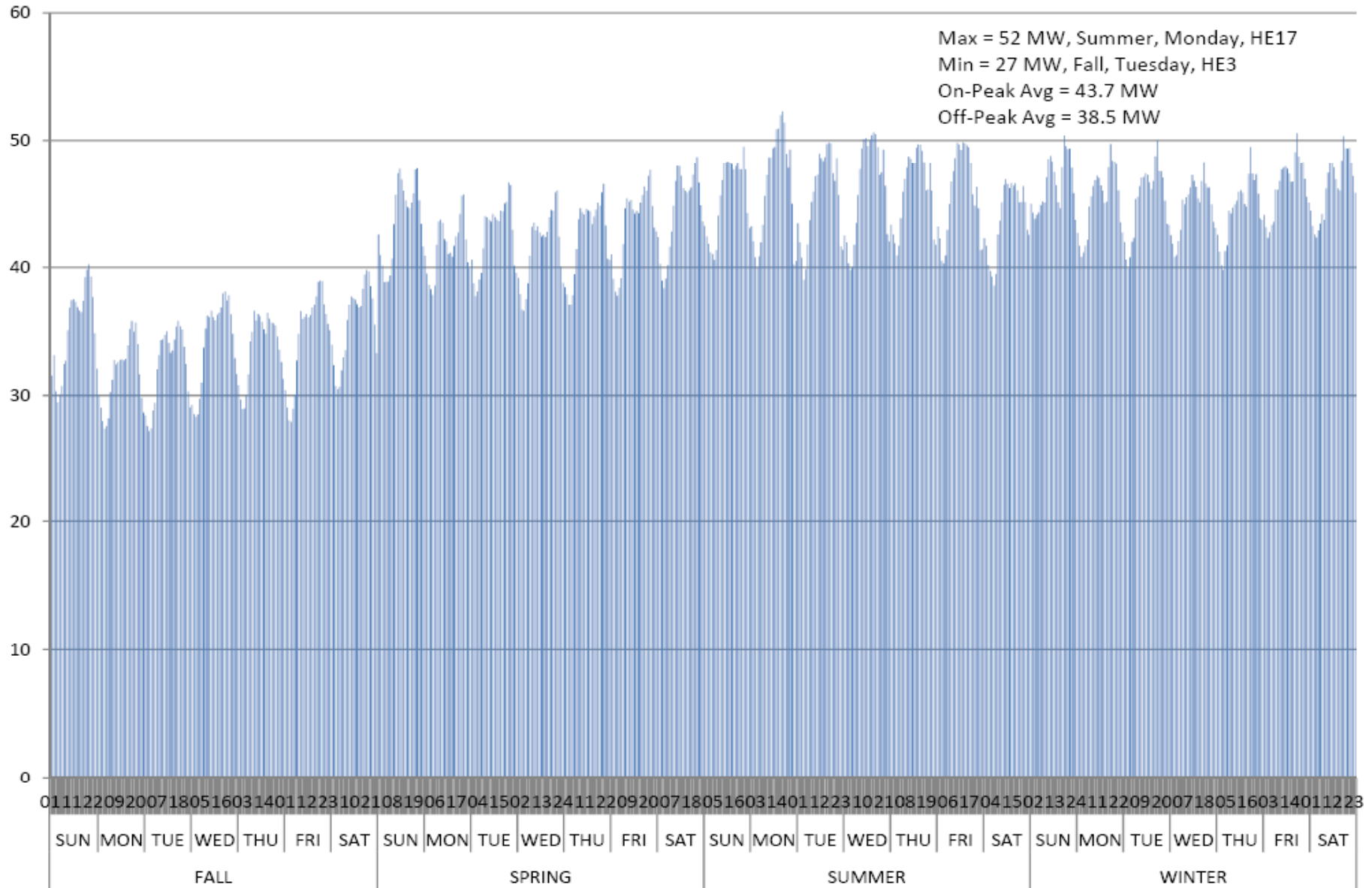
PJM Entitlement – Dysinger East



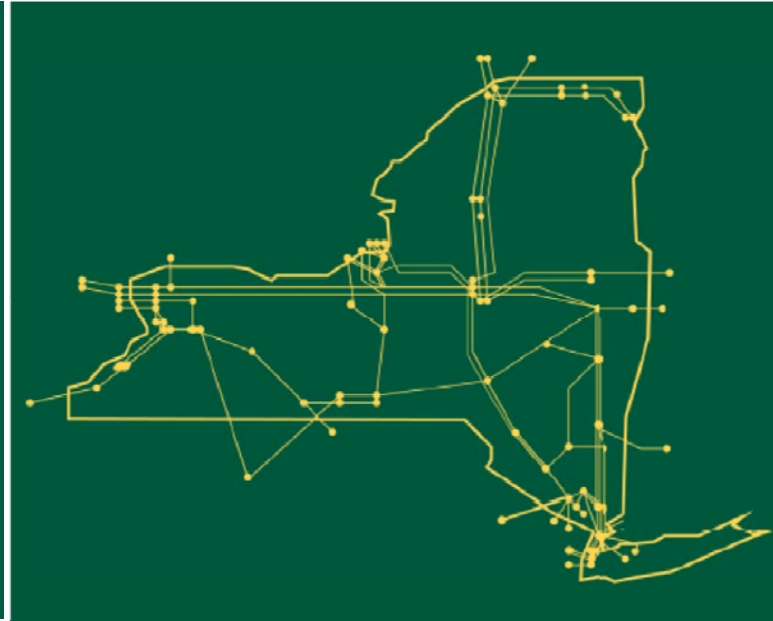
PJM Entitlement – West Central



PJM Entitlement – Central East VC



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