MISO Guide to

FERC Electric Quarterly Reporting

(formerly known as Attachment B)

For Operating Days after JAN-05-2009

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A Purpose

This MISO Guide to Federal Energy Regulatory Commission (FERC) Electric Quarterly Reporting defines MISO's role in reporting sales transactions between Market Participants (MPs) and MISO to MPs for use in the MP's required FERC Electric Quarterly Reports (ERQs). This document identifies the types of Market transactions that will be reported and how the volumes are determined, as well as MISO's EQR Process.

B Scope

These descriptions apply to the Operating Days after January 5, 2009

C FERC Electric Quarterly Reporting

Since the start of the Energy Markets and continuing with the opening of the Energy and Operating Reserve Markets, MISO has assisted MPs in reporting transactions to FERC through the MP's EQRs. However, the main responsibility for the quarterly reporting to FERC under this procedure currently resides with MPs. MISO only reports to MPs transactions that occur between MPs and MISO (MISO Reports). Bilateral transactions continue to be reported by individual parties without MISO assistance. The transactions contained in the MISO Reports involve the MPs net market activity for energy at each node and market activity for Regulating Reserve, Spinning Reserve, Supplemental Reserve, and Short-Term Reserve at each node. The general criteria for determining whether a transaction is included in a MISO Report is summed up in the question: "Is it a sale?" It is not necessary to report both the sale and purchase halves of a transaction.

Transaction Types

- **ENERGY:** Transactions reportable as Energy are derived from the market charge type calculations for Day-Ahead Asset Energy, Real-Time Excessive Energy and Non-Excessive Energy and Day-Ahead, Real-Time Non-Asset Energy & Net Regulation Generation Adjustment.

- **OPERATING RESERVE:** Transactions reportable as Operating Reserve are derived from the market charge type calculations for Day-Ahead & Real-Time Regulating Reserve, Spinning Reserve, Supplemental Reserve, and Short-Term Reserve.
- **UPLIFT**: Make Whole Payments to ensure Revenue Sufficiency for Generators committed by MISO in both the Day-Ahead and Real-Time markets are reportable as Uplift.

Directional Netting

As a rule, since the bilateral transactions for Energy are still reported by the parties, MISO will 'directionally net' them from the spot market transactions for Energy at the same node to avoid reporting the same MW twice. Directional netting for EQR reporting closely resembles the methods used in determining the Day-Ahead/Real-Time Energy volumes and the Day-Ahead/Real-Time Administration volumes.

In order to completely understand what directional netting means it is necessary to examine what transaction volumes would be reported in a vast number of scenarios. In some cases, MISO will report net market purchases as 'negative sales'. Negative sales occur only in Real-Time, and are defined as net Real-Time market purchases where there were reportable sales in the Day-Ahead. In general, negative sales occur when injection obligations from the Day-Ahead market are not met in Real-Time by Non-Excessive Energy injection, Financial Schedules, or a combination of the two.

D MISO EQR Process

MISO agreed to assist MPs with their required quarterly reporting to FERC by generating reports documenting transactions between MPs and MISO. MISO does not assume any responsibility for filing the quarterly reports discussed herein with FERC – this obligation continues to reside with the MPs. MISO's role is to help streamline the process by supplying the MPs with data already available to the Market Settlements (MS) application. A discussed in Section C above, Only Net-Sale (MP to MISO) transactions are recorded by MISO for this purpose in addition to SCUC and RAC Make Whole Payments made by MISO to MPs.

Internally, the MISO EQR procedure is a three-step process in which (1) MISO Reports (EQR csv files) are generated, (2) MISO Reports are posted to the portal, and (3) notifications are sent to Market Participants.

The execution timeline adopted for this functionality dictates that EQR-relevant data is to be saved from MS during the S14 and S105 settlements (currently considered to be the "final" scheduled settlement). At the time of the S14 (14 days after the actual Operating Date (OD)), the saved EQR data is considered new data. At the time of the S105 (105 days after the OD) settlement the original EQR data is replaced with data produced at this settlement. As a product of this new functionality, MS is capable of producing either a preliminary report for all ODs in a calendar month once all ODs have undergone the S14 settlement or the quarterly report once all ODs in the quarter have undergone the S105 settlement.

- **NOTE**: The data in these reports provided by MISO to MPs IS NOT ready at that point to be submitted to FERC as an EQR. MS does not have possession of some of the required information in a compliant FERC EQR (for example: company names, DUNS numbers, tariff reference, etc).

Monthly EQR Schedule

Monthly EQR posting typically occurs on the 15th of the month (or within a few days depending on holidays, weekends, etc.) and provides reports for the previous month. For example, the January EQR report would be posted on February 15th. However, if that date falls on a weekend, it may be posted on the 16th-18th.

Quarterly EQR Schedule

Files created by MISO will be accessible via the Web Portal. EQR files created for each month use data from the S14 settlement run, and quarterly files use data from the S105 settlement run.

Quarter	EQR Post Date	Months in Quarter
1	July 15	January, February, March
2	October 15	April, May, June

3	January 15	July, August, September
4	April 15	October, November, December

File Naming Conventions

The following conventions are applied to file names for monthly and quarterly EQR reports:

Monthly:

EQR_<AO NAME>_<RUN DATE YYYYMMDD>_<TIME 000000>_M_<MONTH AND YEAR MMYYYY>

***Example**: EQR*_<AO NAME>*_20230616_000936_M_052023*

Quarterly:

EQR_<AO NAME>_<RUN DATE YYYYMMDD>_<TIME 000000>_Q_<QUARTER AND YEAR YYYY>

***Example**: EQR*_<AO NAME>*_20230417_151916_Q_Q42022*

E MISO Data Dictionary

The following report columns are the standard fields found in all EQR reports. These can also be found detailed in the FERC EQR Data Dictionary. All fields detailed below are required.

FERC Field #	Field Name	Description	Data Type/ Value	Participant Action
45	Transaction Unique ID	A unique sequence within the file consisting of one record for each transaction	Concatenated “T” plus month in MM	None

		record that must be included in an EQR for a given quarter. A new transaction record must be used every time a price changes in a sale.	format, plus row record number	
46	Seller Company Name	The name of the company that is authorized to make sales.The name must match the one provided as a Seller's "Company Name" in Field 2 of the ID Data.	Seller's registered asset owner name at MISO (100 characters)	Participant may need to modify selling name if it does not match the one used when they defined the contract.
47	Customer Company Name	Name of the purchaser: "MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC"	Name of the purchaser (70 characters)	None; MISO will populate
48	FERC Tariff Reference	This is the individual tariff reference for the entity that makes the sale.	Name of tariff (60 characters)	Participant must fill in the name of their tariff.
49	Contract Service Agreement ID	Unique identifier given to each service agreement that can be used by the Seller to produce the agreement, if requested. The identifier may be the number assigned by FERC for those service agreements that have been filed and approved by the Commission, or it may be generated as part of an internal identification system.	Contract ID (30 characters)	Participant must fill in unique identifier assigned by FERC.
50	Transaction Unique Identifier	Concatenated value of 1 - "MISO_" plus 2 - "DA_" for a Day-Ahead Market related transaction or "RT_" for a Real-Time Market related transaction (Refer to Product Name	Unique reference number assigned by seller (24 characters)	MISO uses special logic to identify transactions for REG and STR. For REG, use _CAP, _ADD, _MWP, and _UDP. FERC does not have a product type for STR and

		cross reference tab) plus 3 - the month number in MM format and row sequential number used in the TRANSACTION_UNIQUE_ID		uses SUPP, so STR must be inserted.
51	Transaction Begin Date	First date and time the product is sold during the quarter.	Trade Date, Hour Beginning, formatted as YYYYMMDD HHMM. HH is 00 - 23. MM is always 00.	None
52	Transaction End Date	Last date and time the product is sold during the quarter.	Trade Date, Hour Ending, formatted as YYYYMMDD HHMM. HH is 00 - 23. MM is always 59.	None
53	Trade Date	The date upon which the parties made the legally binding agreement on the price of a transaction.	For DA transactions, use Trade Date minus one day. For RT transactions, use Trade Date.	None
54	Exchange/ Brokerage Service	If a broker service is used to consummate or effectuate a transaction, the term “Broker” shall be provided. If an exchange is used, the specific exchange that is used shall be selected from the Commission-provided	Name of Broker (50 characters)	Participant must fill in name of broker

		list.		
55	Type of Rate	If the price is the result of an RTO/ISO market or the sale is made to the RTO/ISO.	"RTO/ISO" (10 characters)	None; MISO populates
56	Time Zone	The time zone in which the sales will be made under the contract.	Time zone (2 characters)	None; MISO populates with “ES”
57	Point of Delivery Balancing Authority (PODBA)	The registered Balancing Authority (formerly called NERC Control Area) abbreviation used in OASIS applications.	LBA of the CPNode in #58 (50 characters)	None; MISO populates
58	Point of Delivery Specific Location (PODSL)	The specific location at which the product is delivered. If receipt occurs at a trading hub, a standardized hub name must be used.	CPNode (50 characters)	None; MISO populates with CPNode on transaction
59	Class Name	Dynamic data description: F- Firm NF- NonFirm UP- UnitPowerSale BA- BillingAmount N/A-NonApplicable Static Data: F	Text (4 characters)	None; MISO populates with “**F”**
60	Term Name	Power sales transactions with durations of one year or greater are long-term. Transactions with shorter durations are short-term.	Text (4 characters)	None; MISO populates with **“ST”**
61	Increment Name	This column will be populated with 5, 15, H, D, M or Y, depending on the	Text (4 characters)	None: MISO populates with “**H”**

		billing line item. 5 = Five-Minute 15 = Fifteen-Minute H = Hourly D = Daily M = Monthly Y = Yearly N/A – not applicable		
62	Increment Peaking Name	**1**. The product described was sold during Peak and Off-Peak hours. **2**. The product described was sold only during those hours designated as off-peak at the point of delivery. **3**. The product described was sold only during those hours designated as off-peak at the point of delivery. **4**. To be used only when the other available increment peaking names do not apply.	"P" for Peak "OP" for Off-Peak Value based on Transaction Begin Date and FERC definition of Peak and Off-Peak hours. (4 characters)	None; MISO populates
63	Product Name	Description of product being offered. Based on Charge Type. Refer to Product Name cross reference tab	Text (50) characters	None
64	Transaction Quantity	The quantity of the product in this transaction record. "1" if Product Name is "UPLIFT" or the calculated net energy sale for all other Product Names. Refer to Product Name cross reference tab.	NUMBER(17) *With up to 4 decimals*	None
65	Price	Actual price charged for the product per unit. The price reported cannot be averaged	NUMBER(17) *With up to 6 decimals*	None

		or otherwise aggregated. For UPLIFT Product Name, the hourly RSG Make Whole Payment. For other Product Names, the commercial node LMP or MCP. Refer to Product Name cross reference tab.		
66	Rate Units	Measure appropriate to the price of the product sold. "FLAT RATE" for UPLIFT Product Name. "$/MWH" for other Product Names (except NRGA). Refer to Product Name cross reference tab.	Text (10 characters)	None
67	Standardized Quantity	For product names energy, capacity, and booked out power only. Specify the quantity in MWh if the product is energy or booked out power and specify the quantity in MW-month if the product is capacity or booked out power. For Product Name ENERGY only. **Set equal to #64 Transaction Quantity**	NUMBER(17) *With up to 4 decimals*	None
68	Standardized Price	For product names energy, capacity, and booked out power only. Specify the price in $/MWh if the product is energy or booked out power and specify the price in $/MW-month if the product is capacity or booked out power. For Product Name	NUMBER(17) *With up to 6 decimals*	None

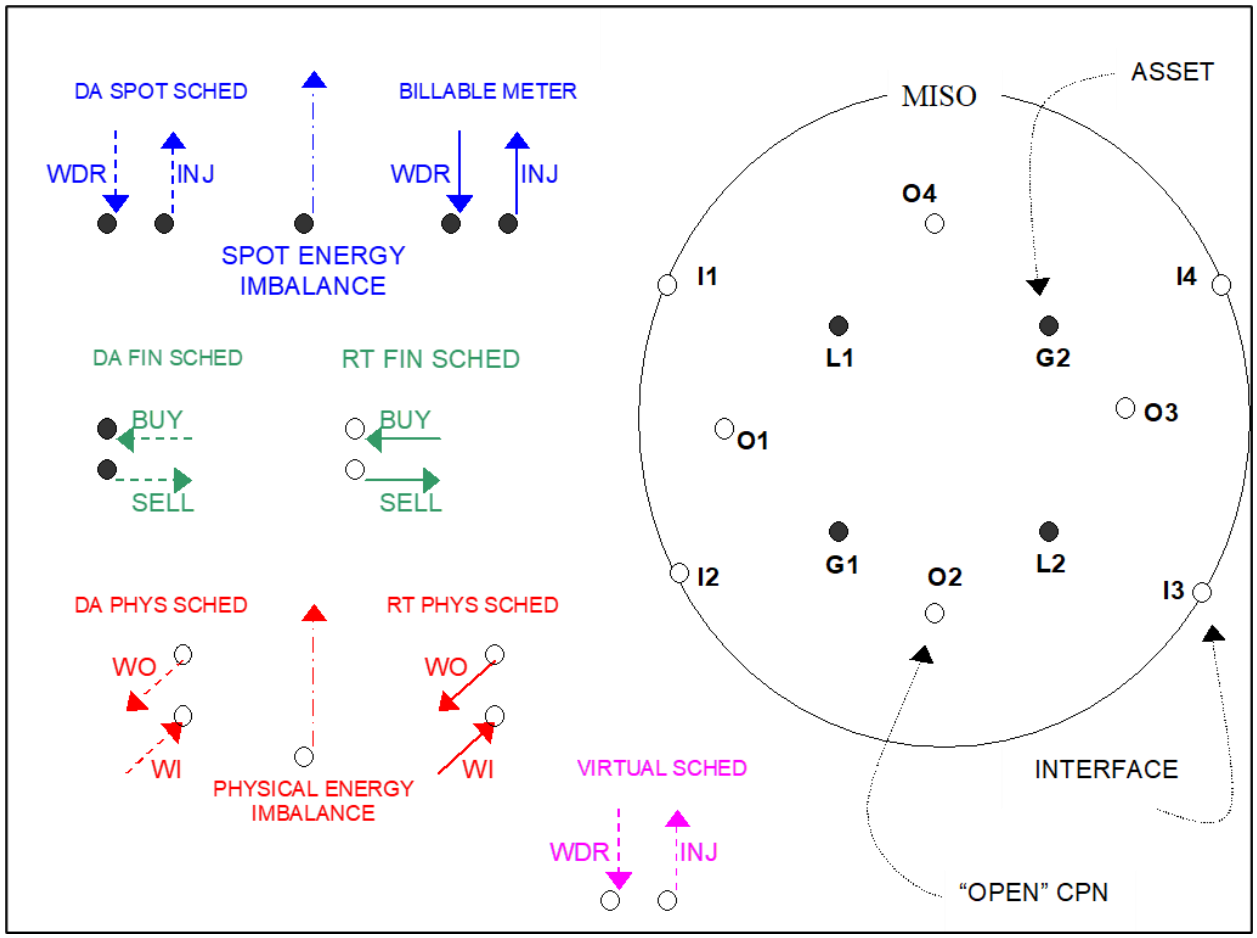
		ENERGY only. **Set equal to #65 Price.**		
69	Total Transmission Charge	Payments received for transmission services when explicitly identified.	NUMBER(17) *With up to 2 decimals*	None; MISO will populate with “zero”
70	Total Transaction Charge	This is a calculated field. Transaction Quantity (FERC field 64), times Price (FERC field 65), plus Total Transmission Charge (FERC field 69)	NUMBER(17) *With up to 2 decimals*	If the quantity, price and transmission are zero, the record should not be reported to FERC. If price is zero and quantity or transmission are not equal zero, report zero to FERC.

F Resource Links

- FERC EQR Overview
- FERC EQR Change Logs
- FERC EQR FAQs
- FERC EQR Templates
- FERC EQR Report Viewer
- EQR Filing Page
- MISO Stakeholder Engagement
- About MISO Market Settlements
- About MISO Transmission Settlements

G Appendix

Exhibit C- 1: Symbol Definition Used in Exhibits



C.1 MISO reported EQR transactions

C.1.1 Day-Ahead MW at an Asset

The following exhibits provide examples of MISO reporting scenarios for Day-Ahead MW at an Asset.

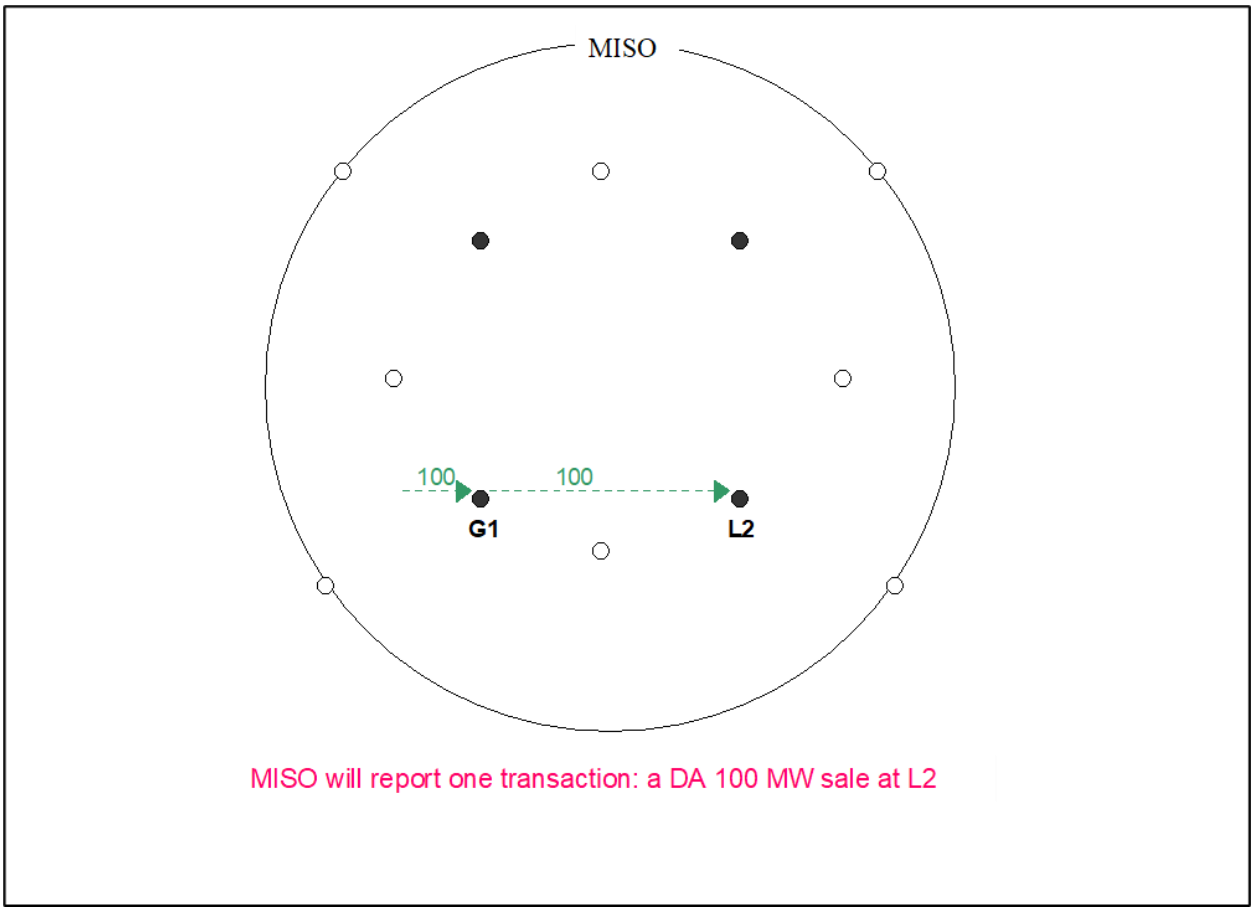


Exhibit C- 3: DA 5 MW Sale at L1

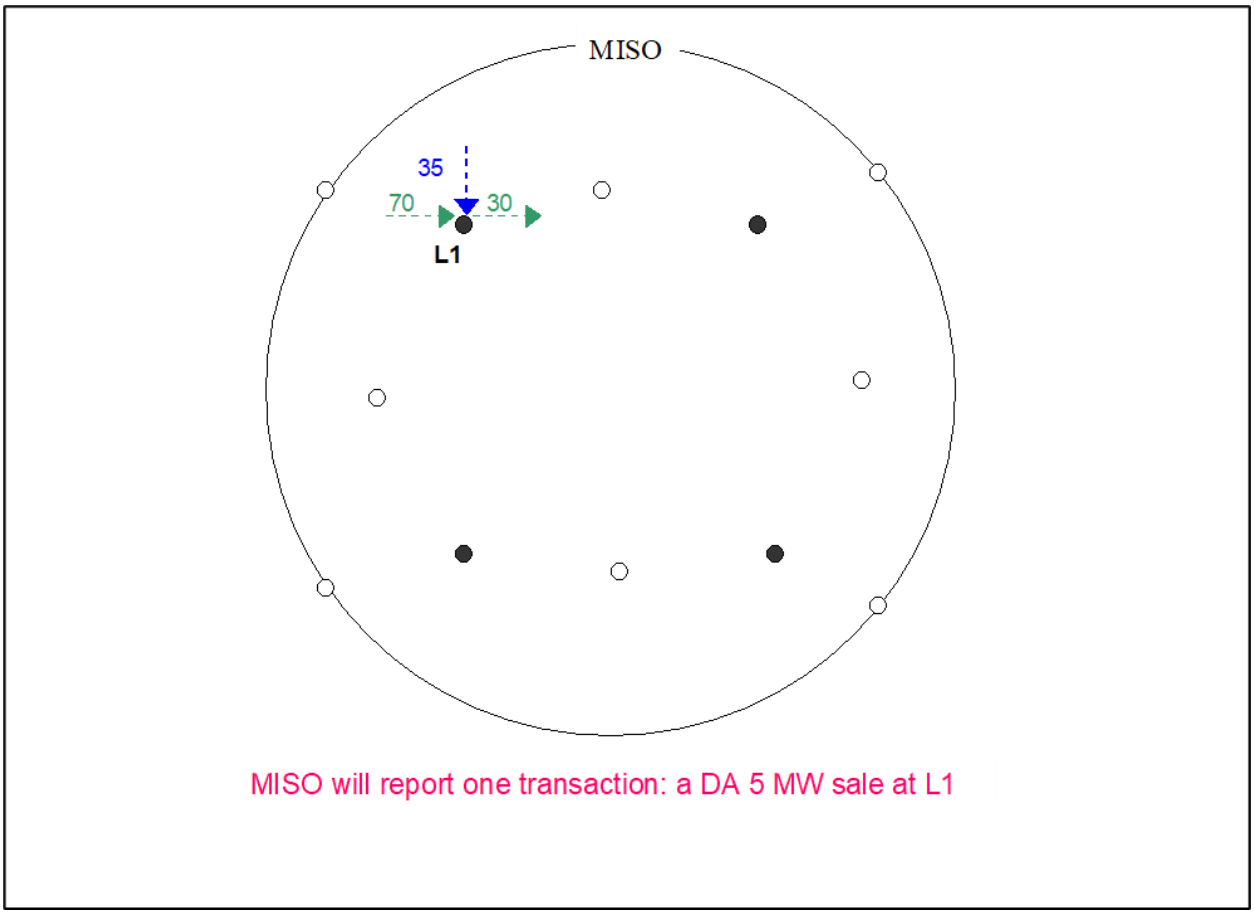


Exhibit C- 4: No DA Transactions Reported

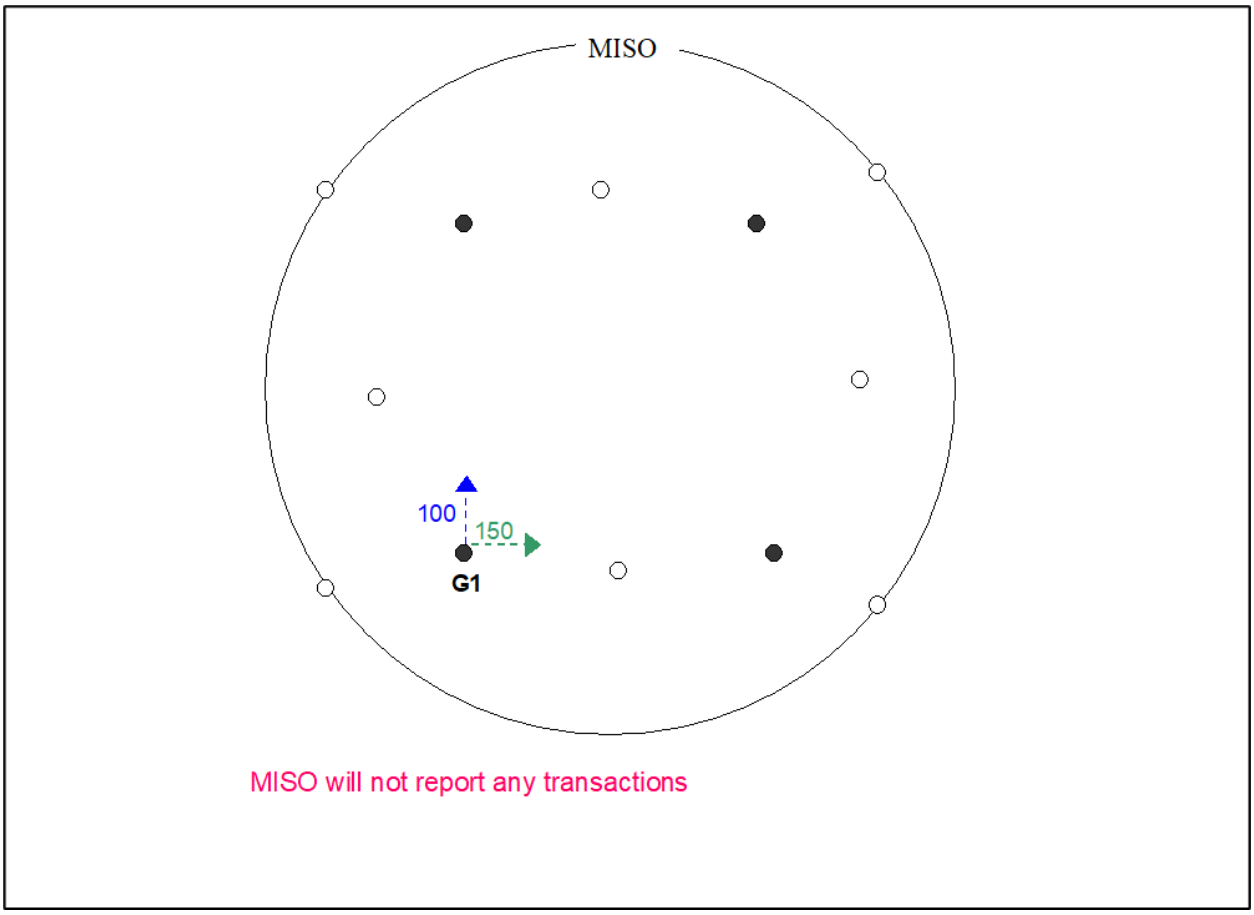


Exhibit C- 5: DA 110 MW Sale at G1

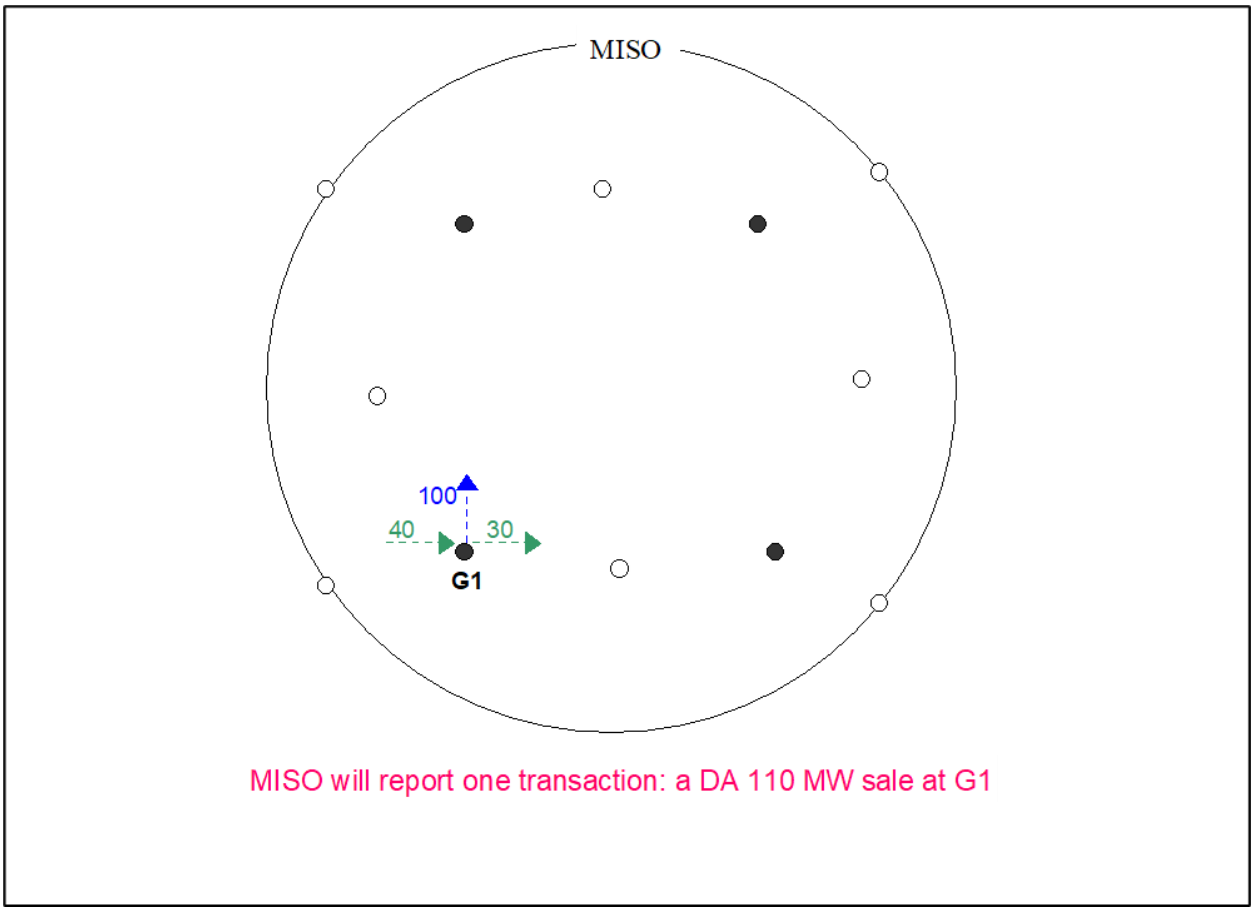
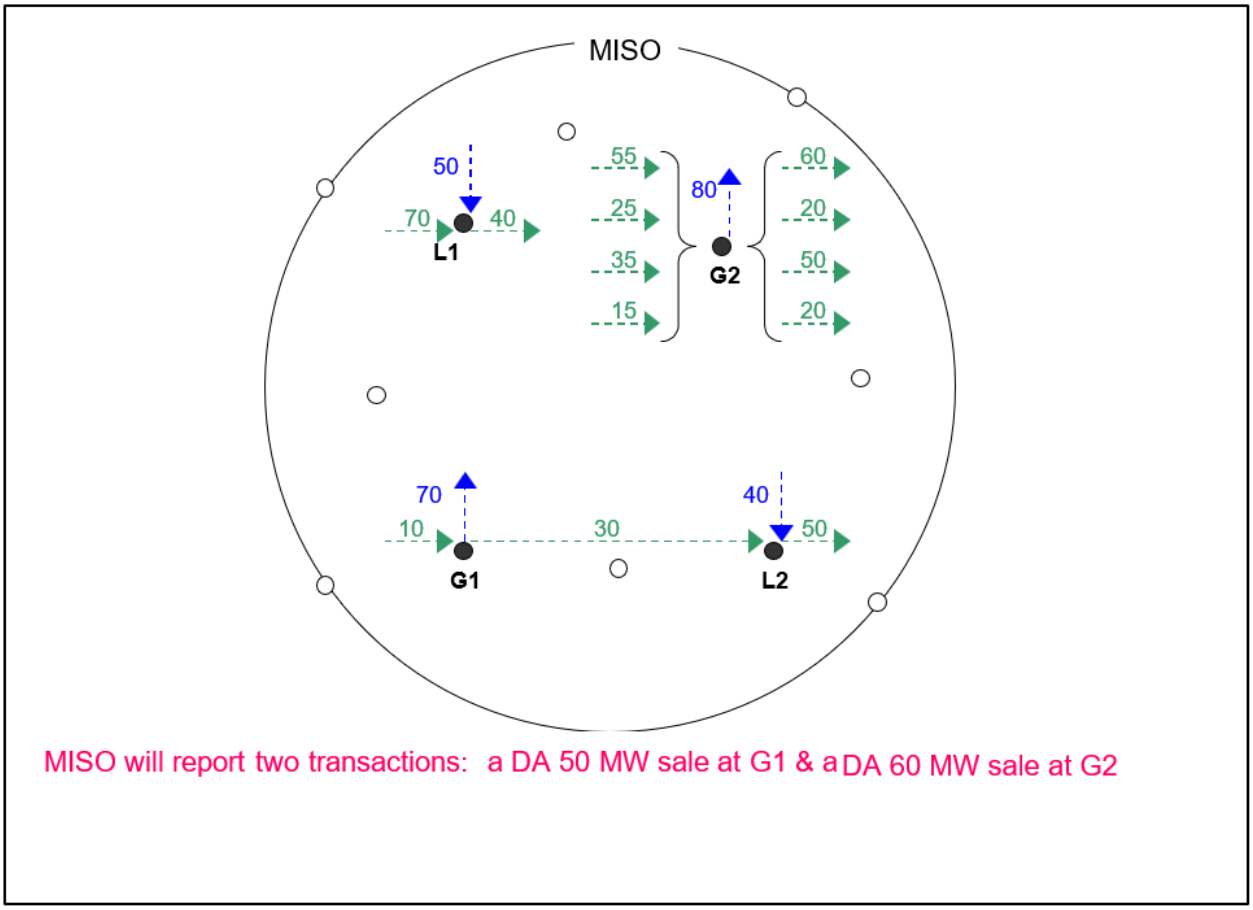


Exhibit C- 6: DA 50 MW Sale at G1 & 60 MW Sale at G2



C.1.2 Day-Ahead MW at an Interface

The following exhibits provide examples of MISO reporting scenarios for Day-Ahead MW at an Interface.

Exhibit C- 7: DA 40 MW Sale at I2

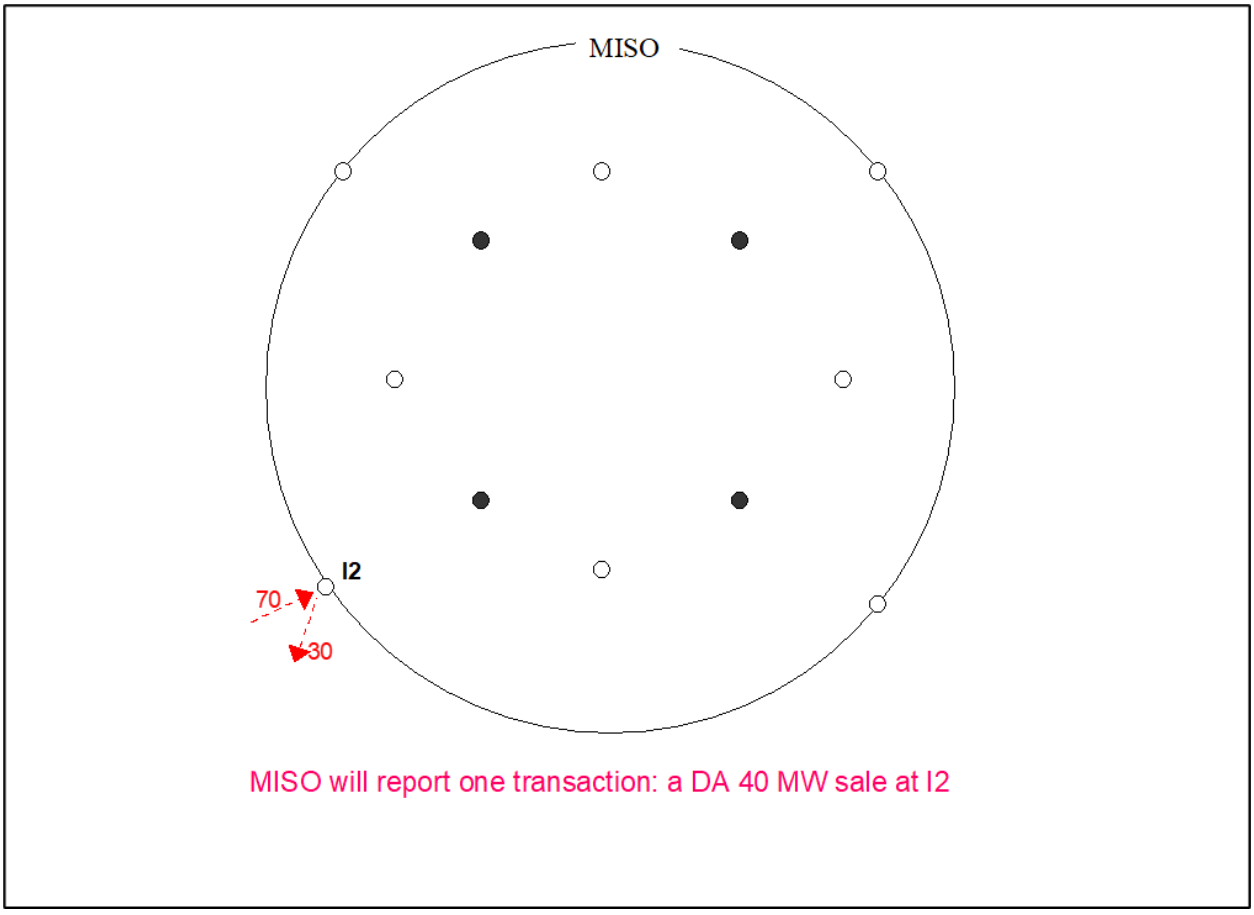


Exhibit C- 8: DA 100 MW Sale at I2

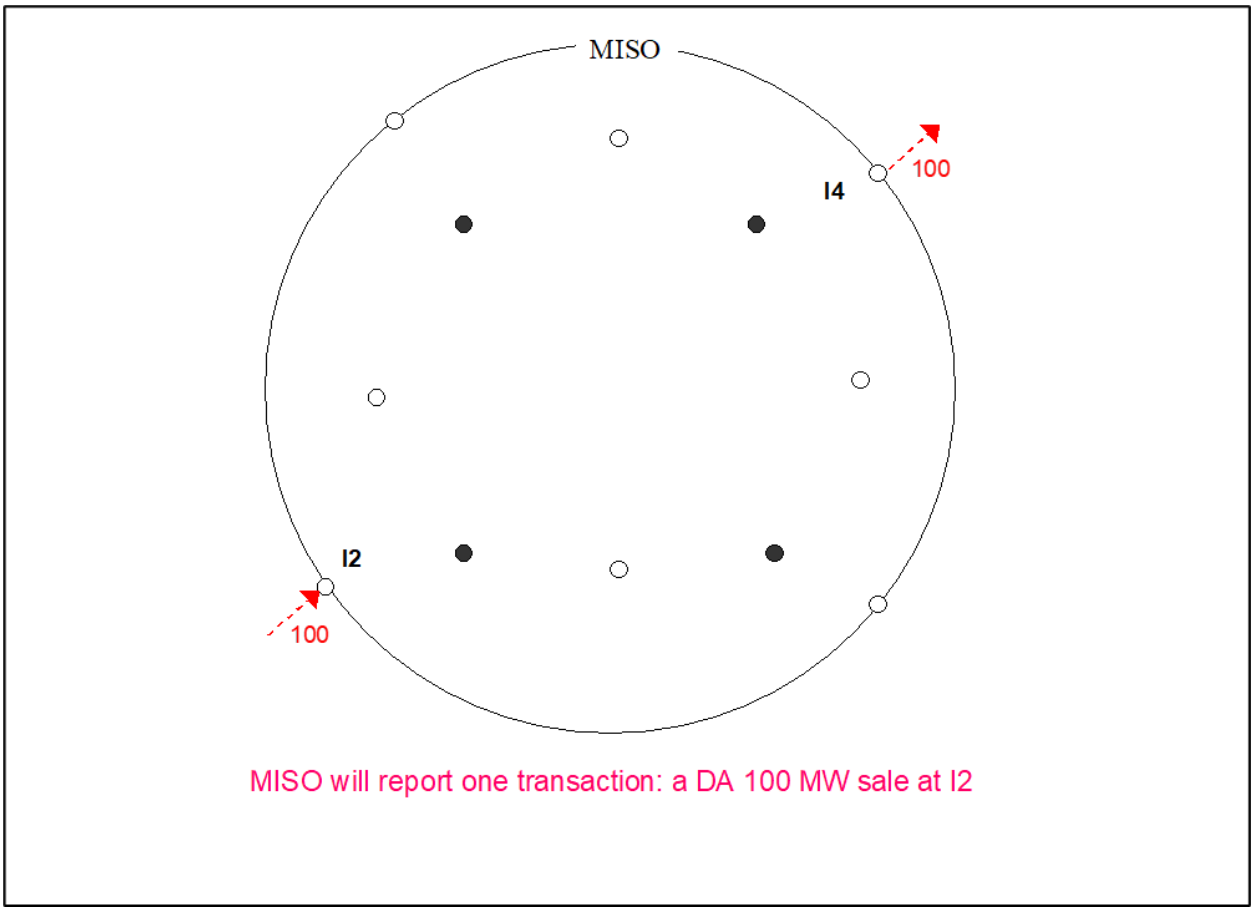


Exhibit C- 9: DA 100 MW Wheel Through Sale at I2

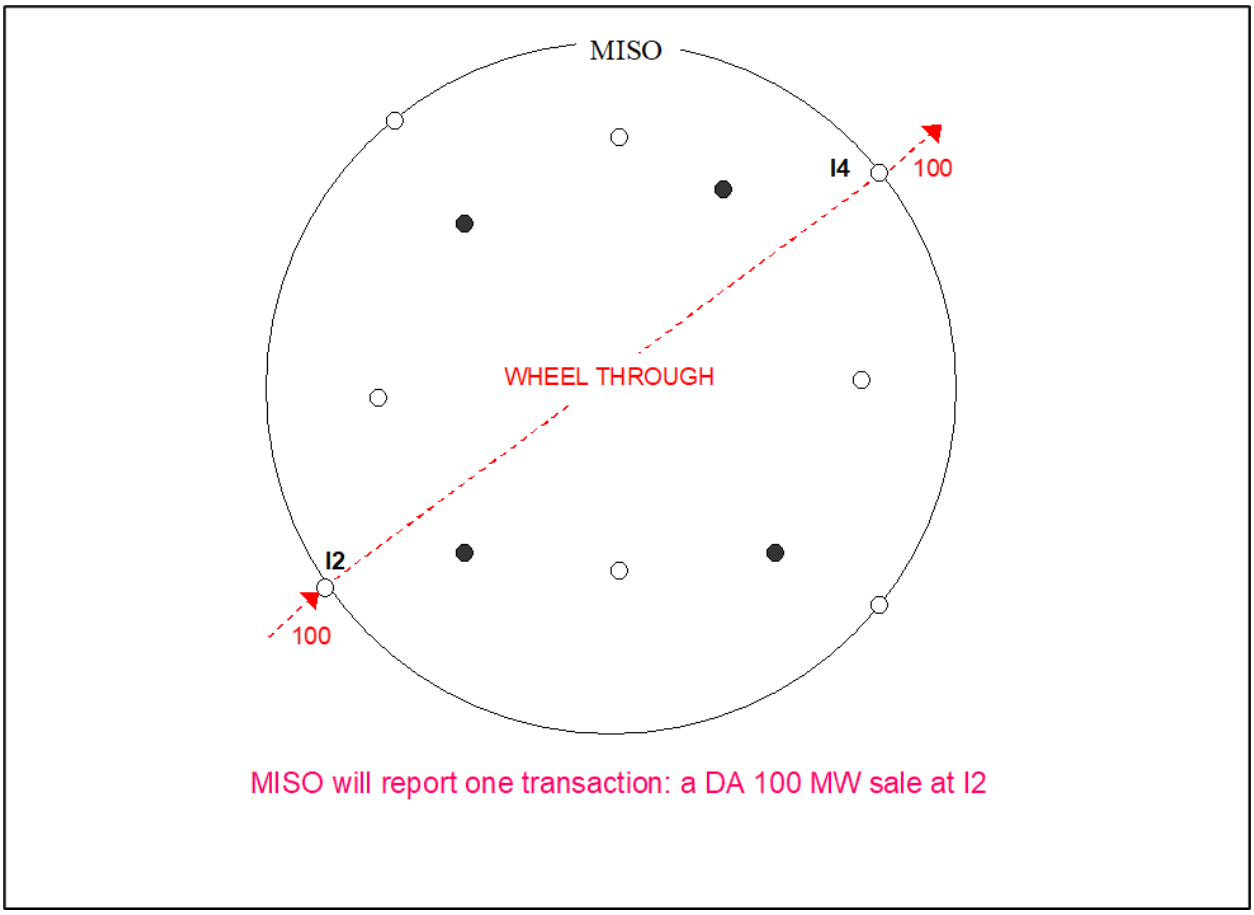


Exhibit C- 10: DA No Transaction Report #1

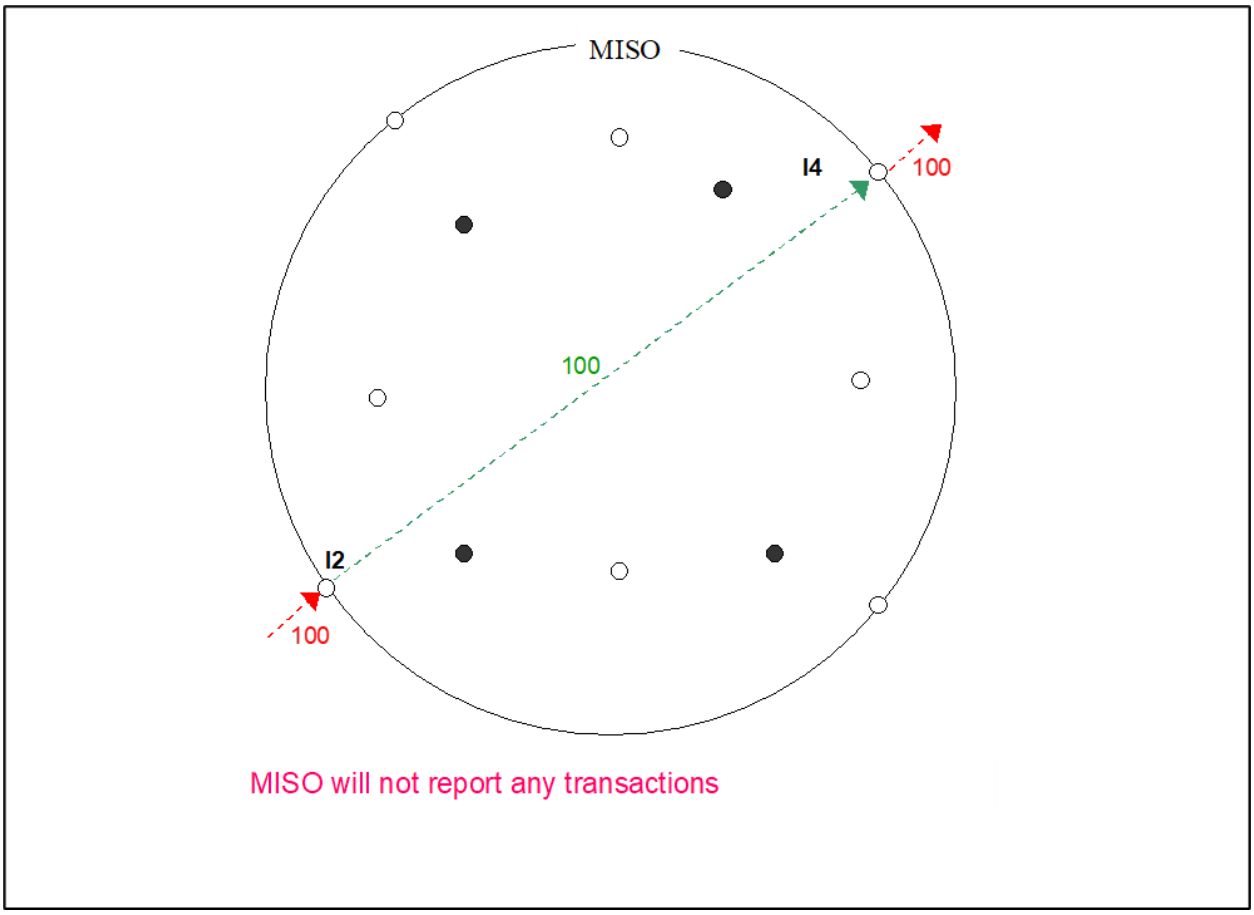


Exhibit C- 11: DA 150 MW Sale at I2

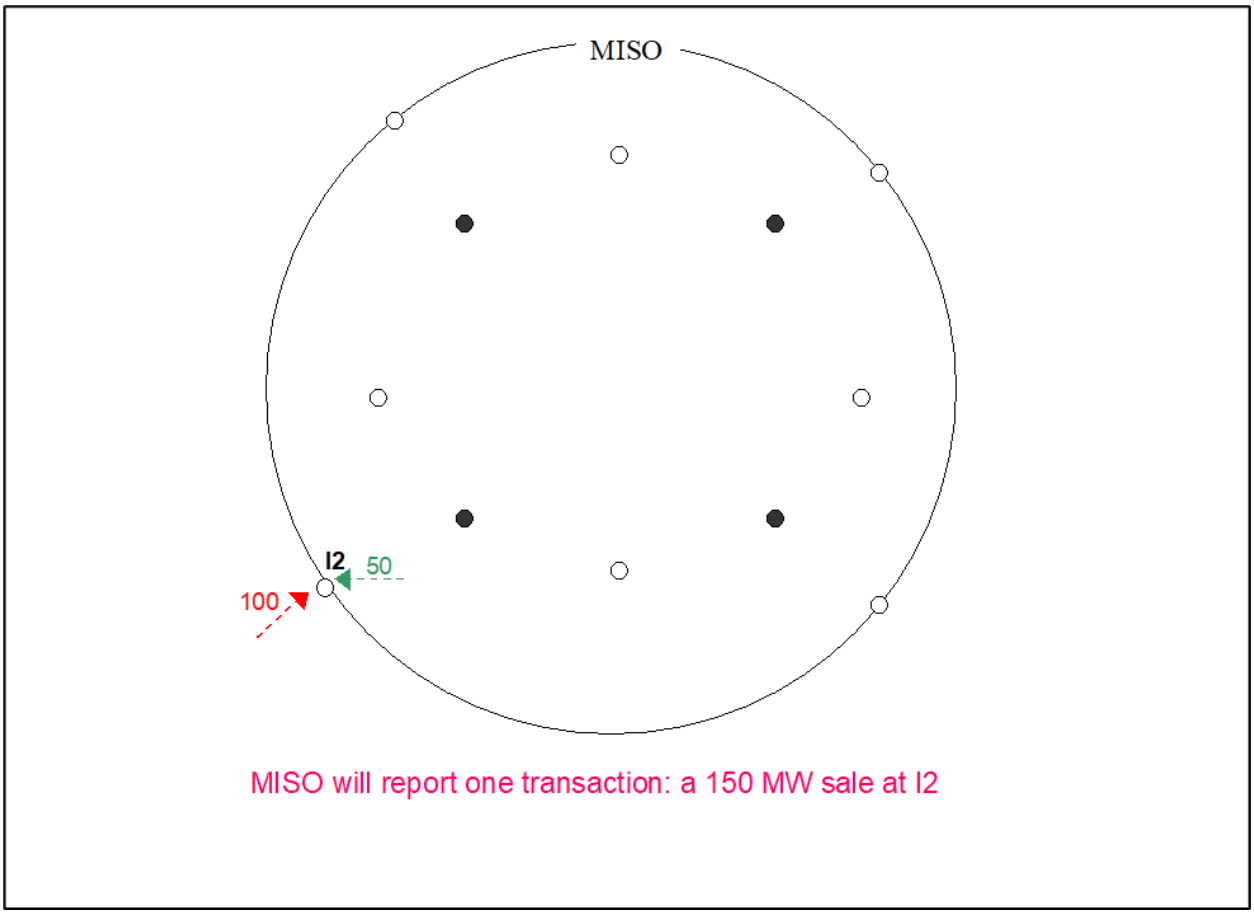


Exhibit C- 12: DA No Transaction Report #2

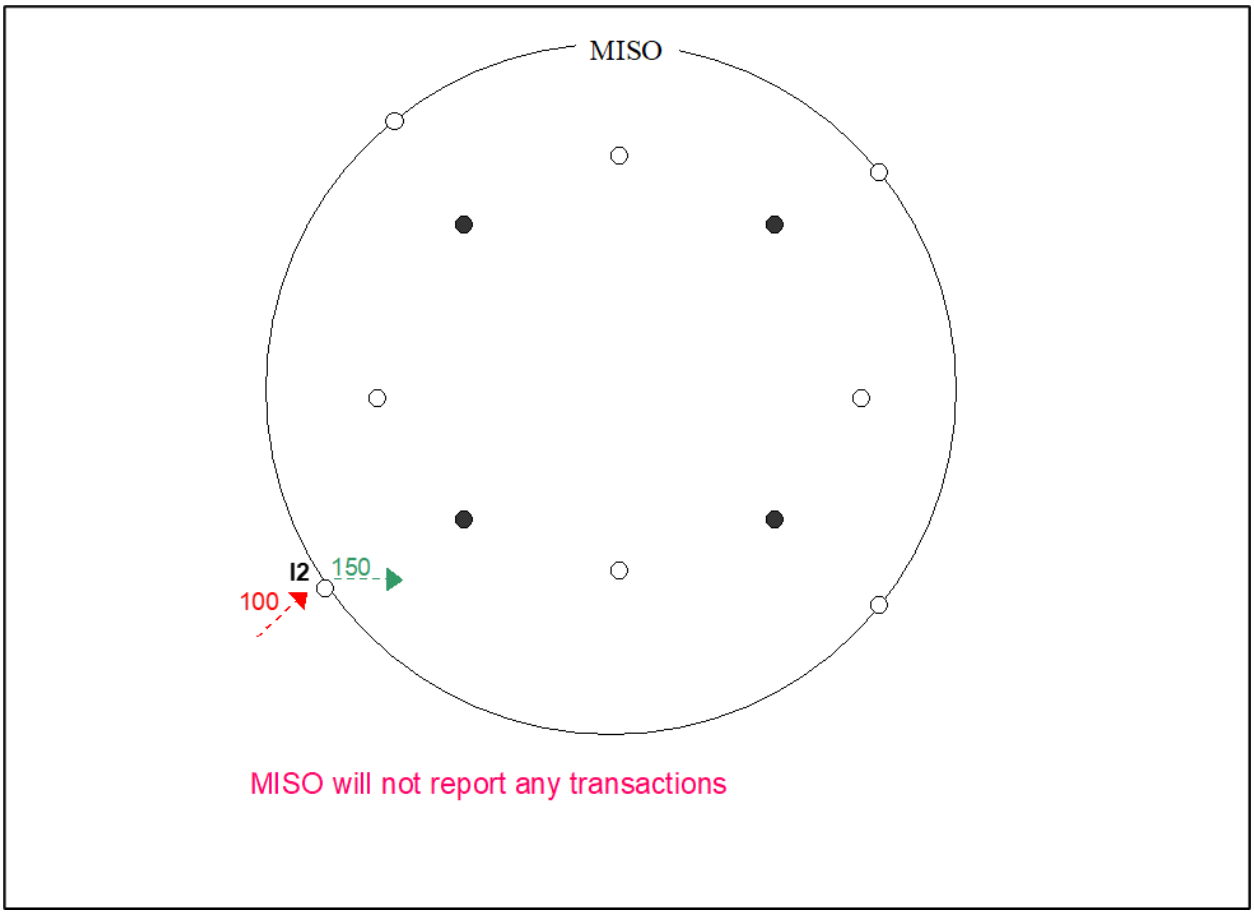


Exhibit C- 13: DA 110 MW Sale at I2

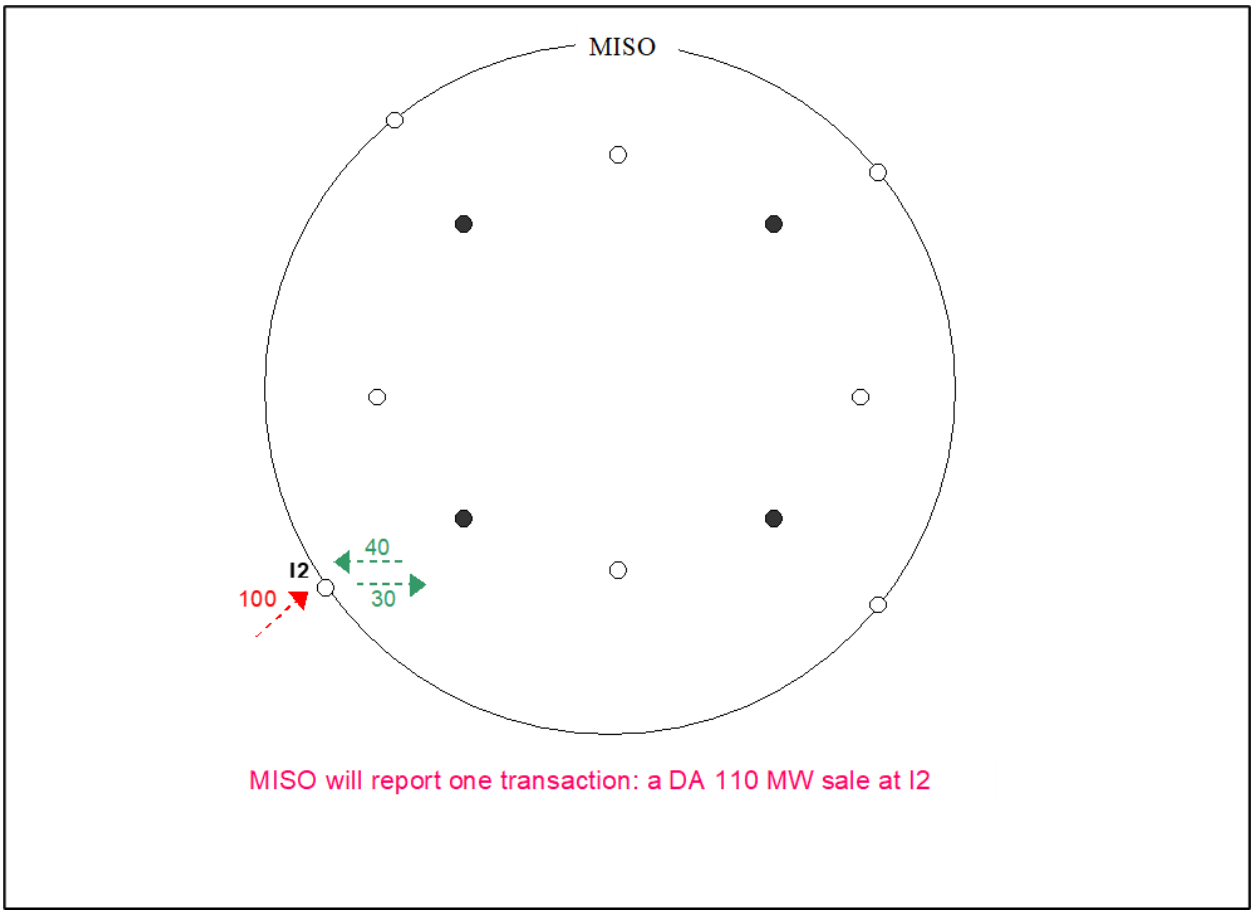
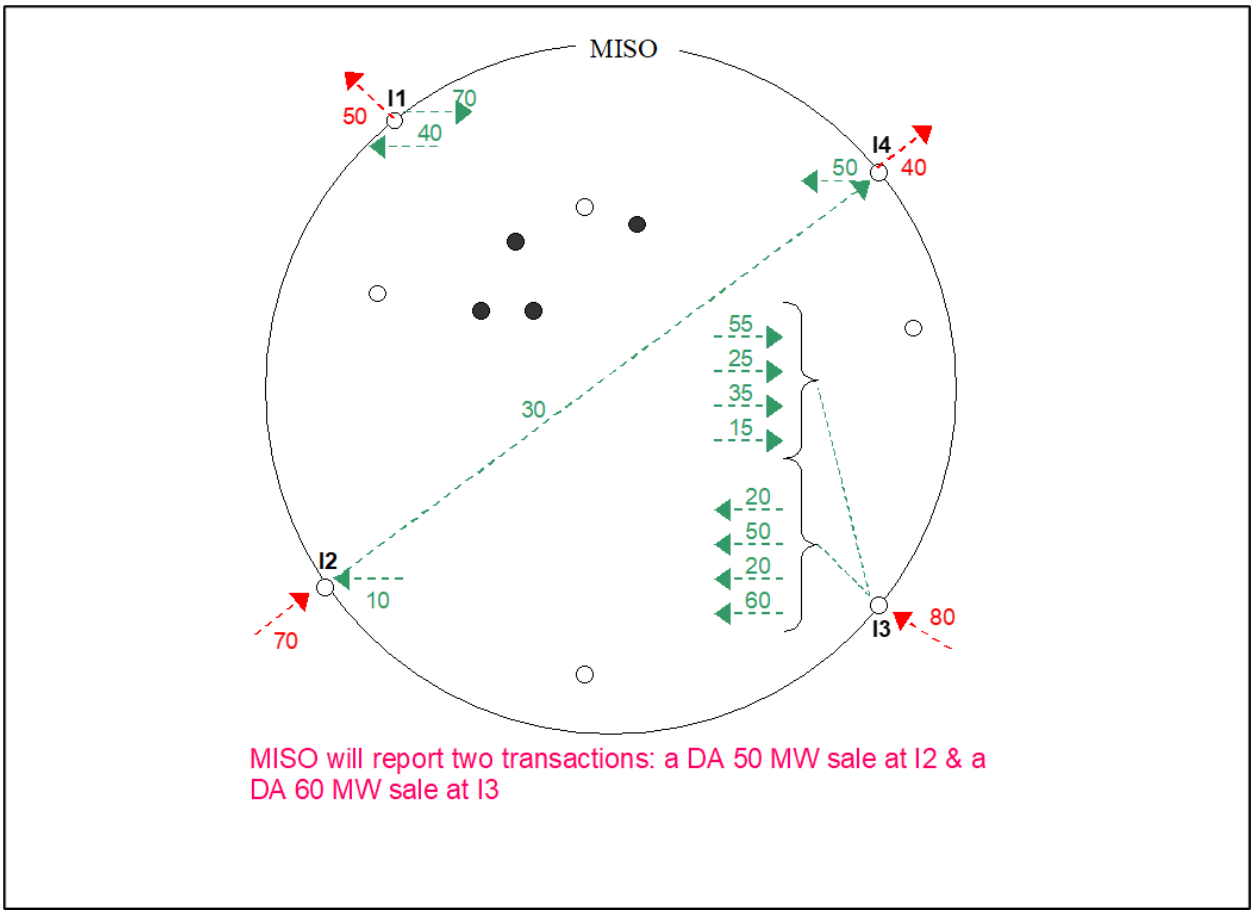


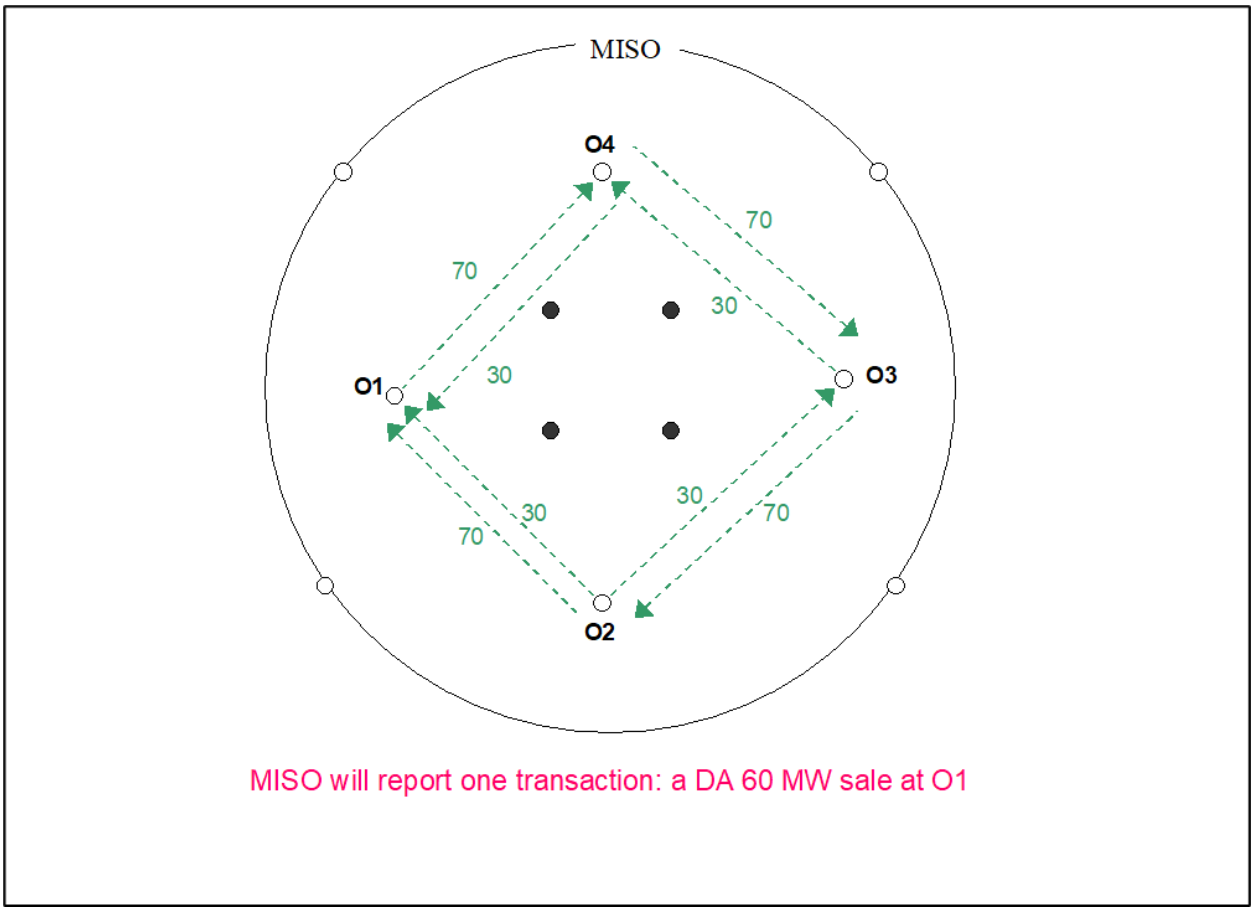
Exhibit C- 14: DA 50 MW Sale at I2 & 60 MW Sale at I3



C.1.3 Day-Ahead MW at a common Commercial Pricing Node

The following exhibits provide examples of MISO reporting scenarios for Day-Ahead MW at a common Commercial Pricing Node (CPNode).

Exhibit C- 15: DA 60 MW Sale at O1



C.1.4 Real-Time MW at an Asset

The following exhibits provide examples of MISO reporting scenarios for Real-Time MW at an Asset.

Exhibit C- 16: RT -5 MW Sale at G1

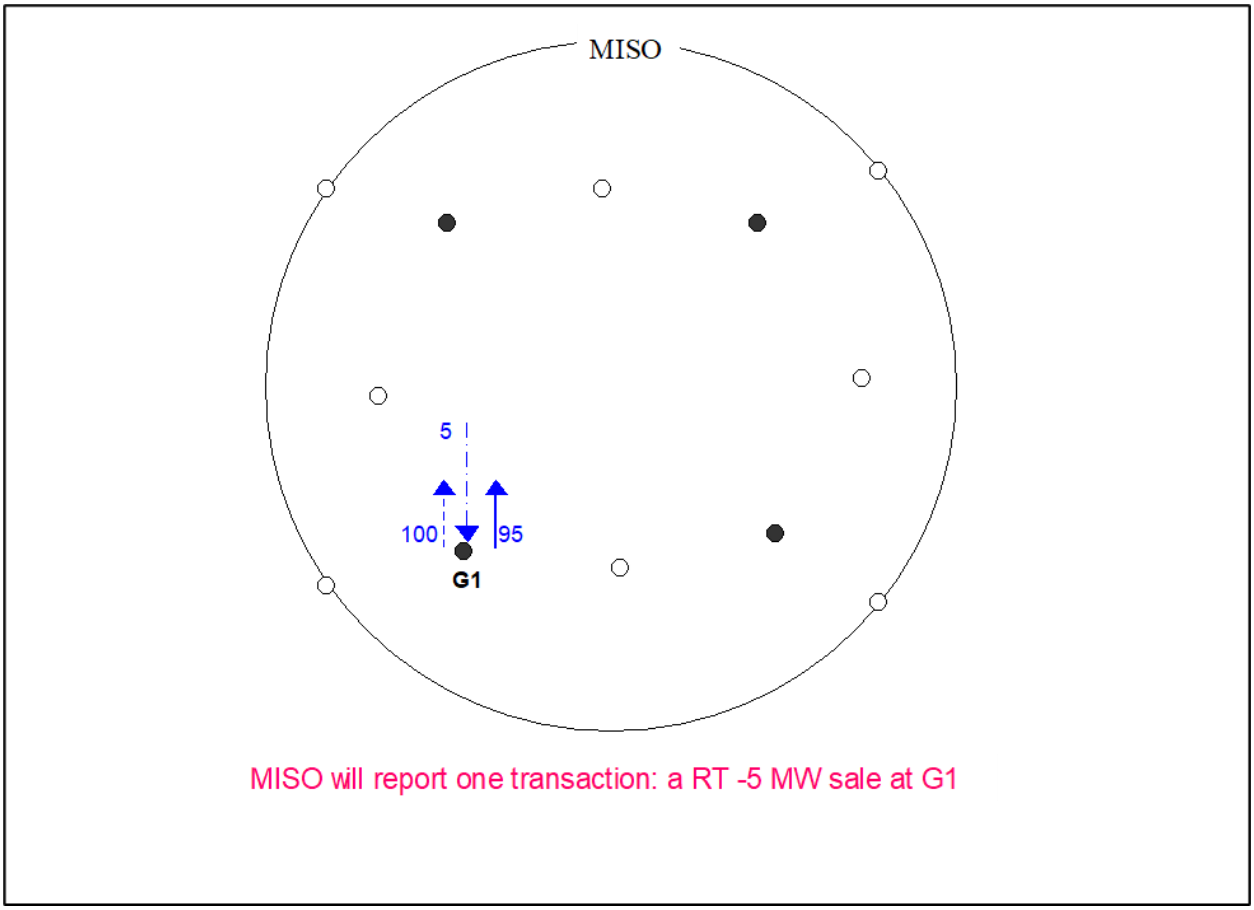


Exhibit C- 17: No RT Transactions Reported Scenario #1

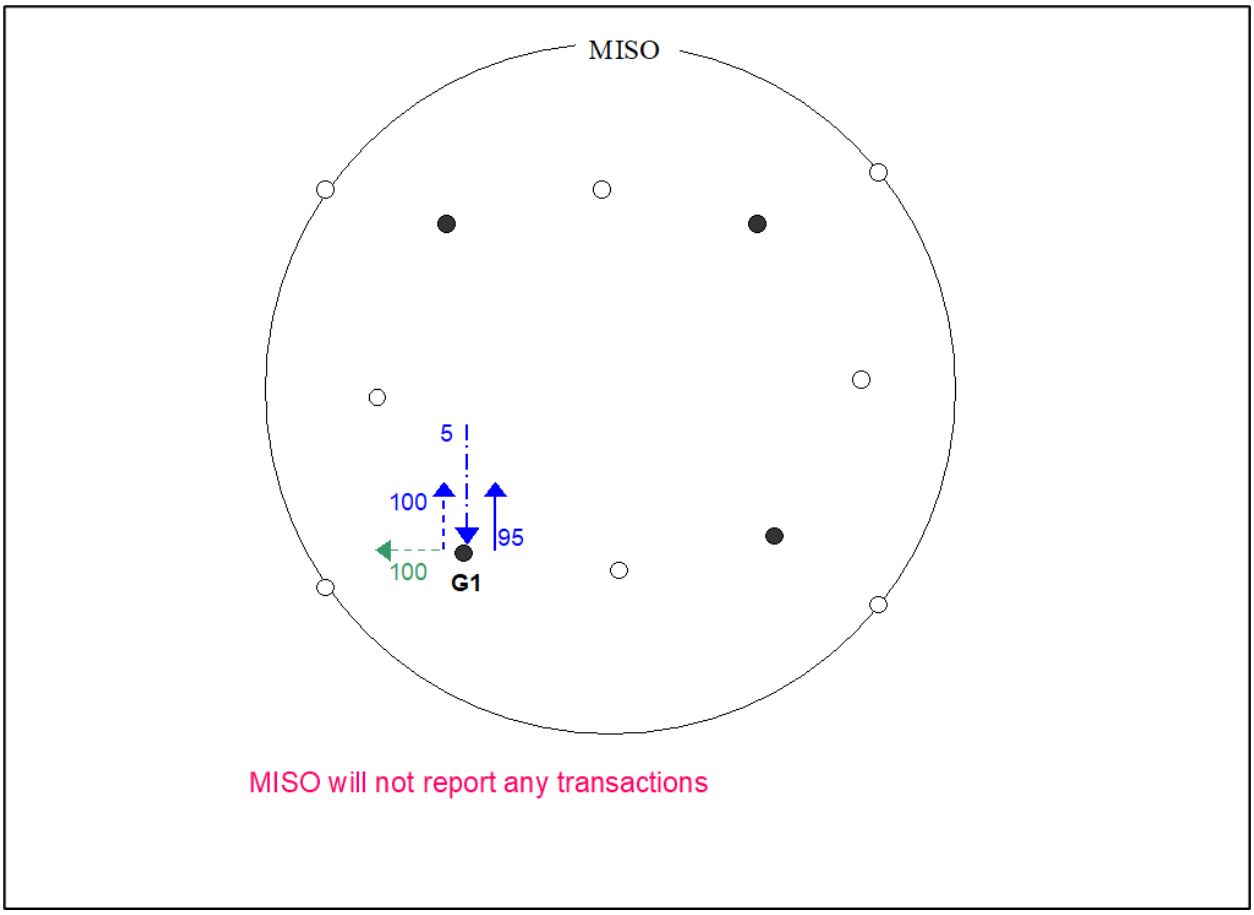


Exhibit C- 18: RT -105 MW Sale at G1

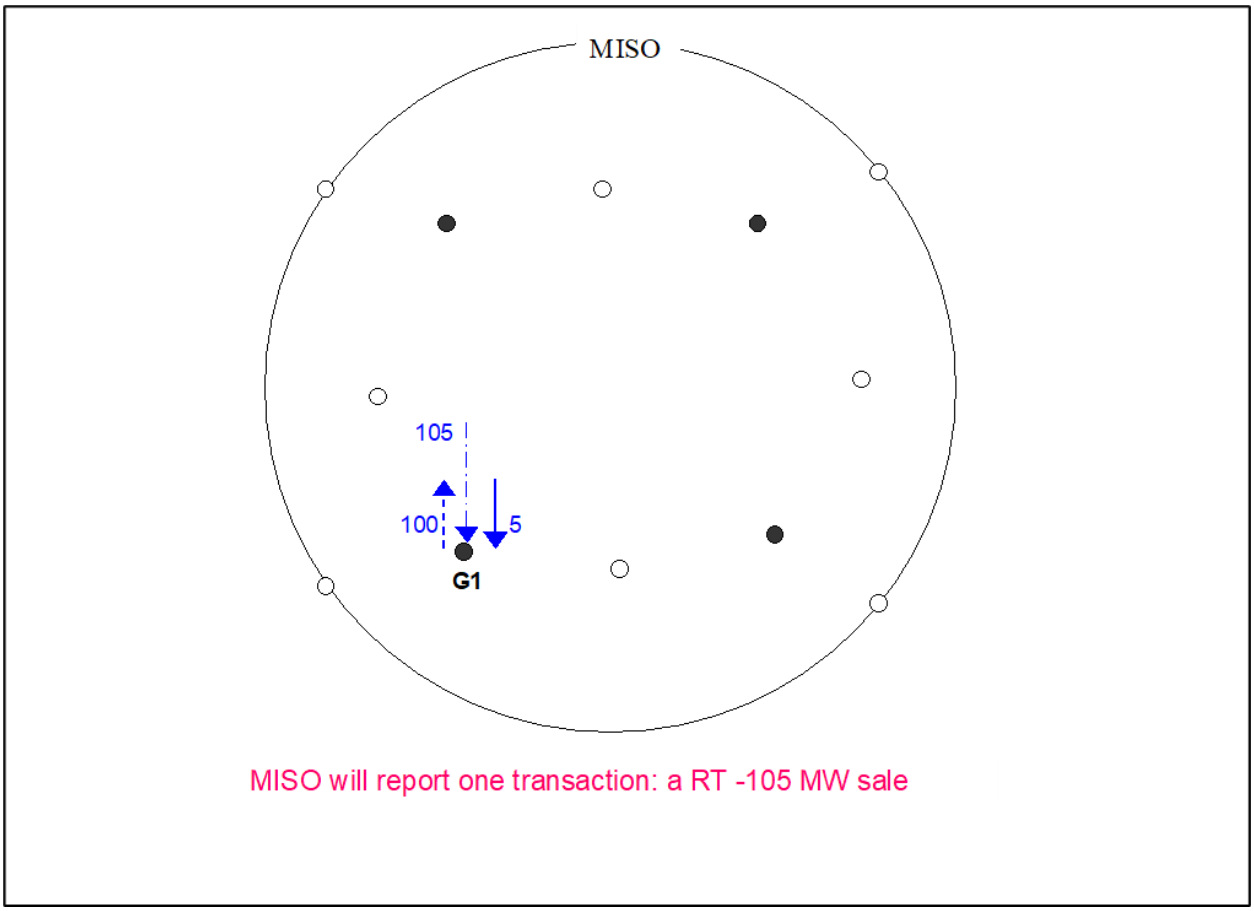
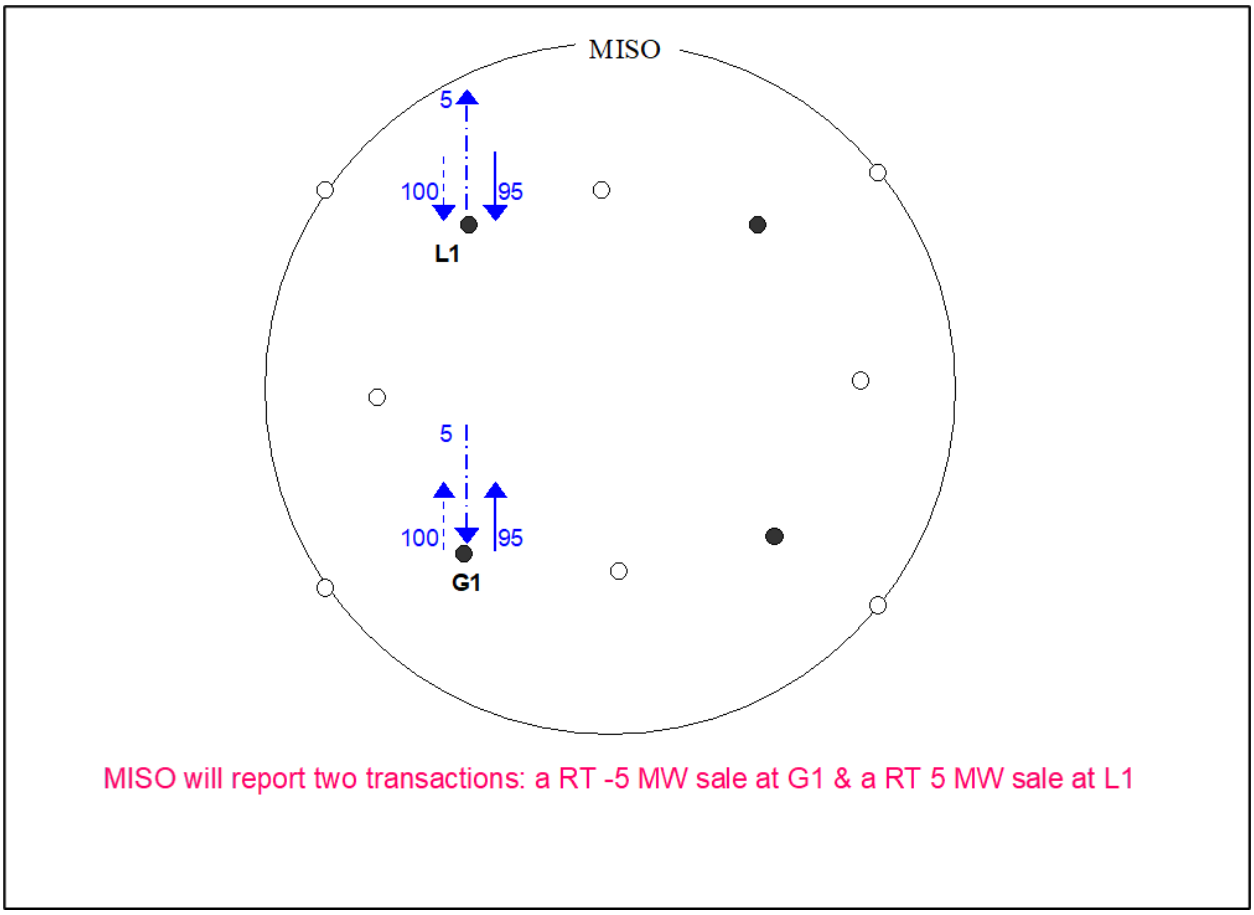


Exhibit C- 19: RT -5 MW Sale at G1 & 5 MW Sale at L1



MISO will report two transactions: a RT -5 MW sale at G1 & a RT 5 MW sale at L1

Exhibit C- 20: RT 5 MW Sale at L1

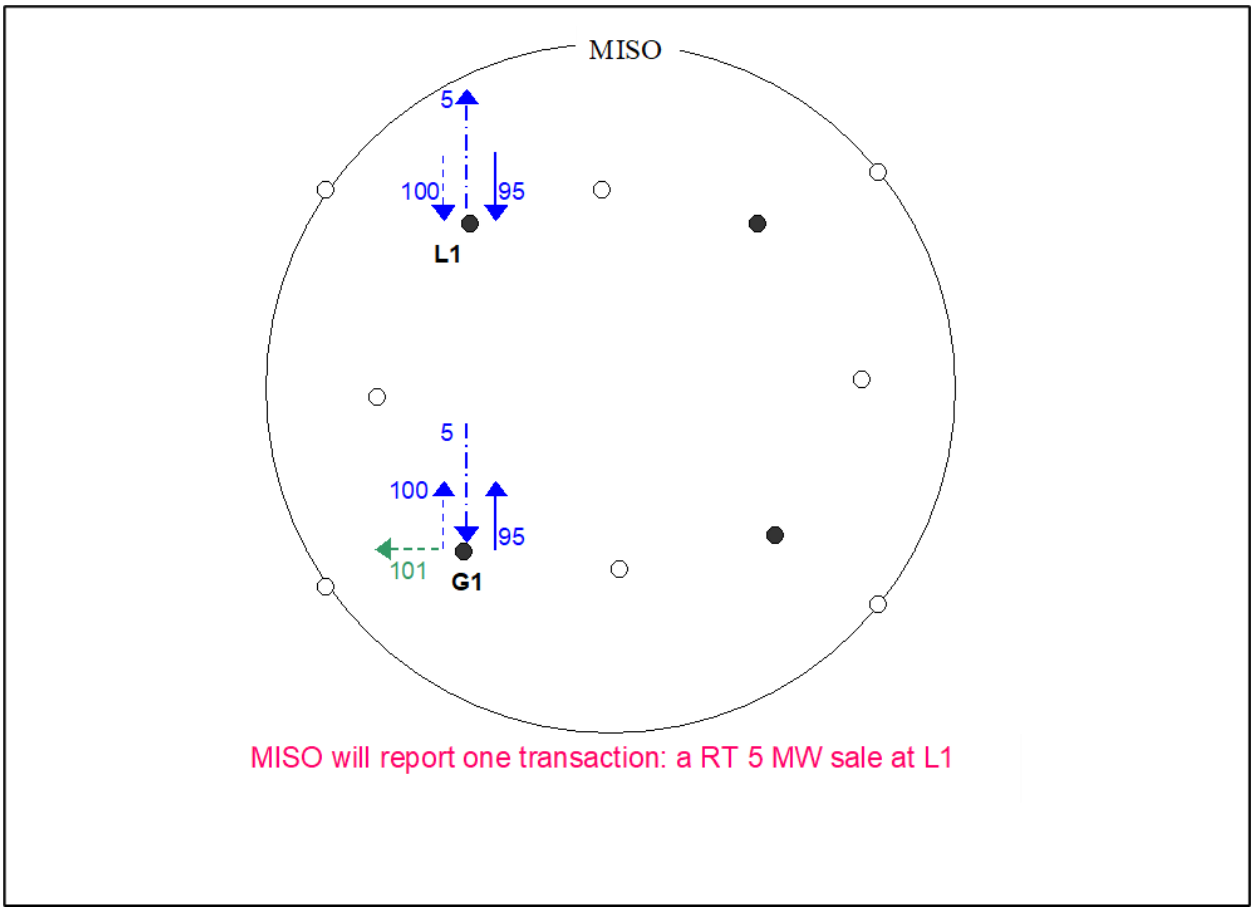


Exhibit C- 21: RT -5 MW Sale at G1 & 5 MW Sale at L1

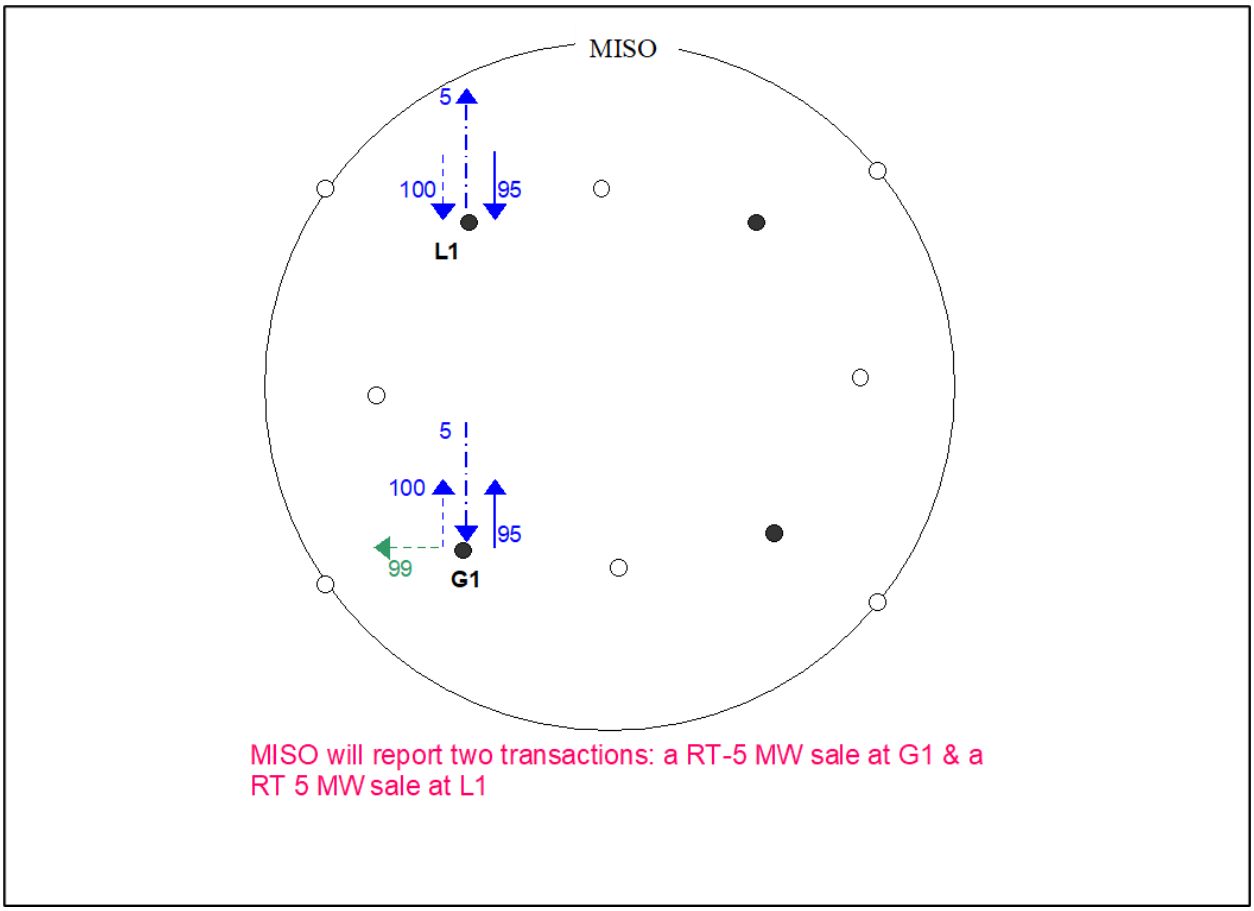


Exhibit C- 22: RT 5 MW Sale at G1 & 5 MW Sale at L1

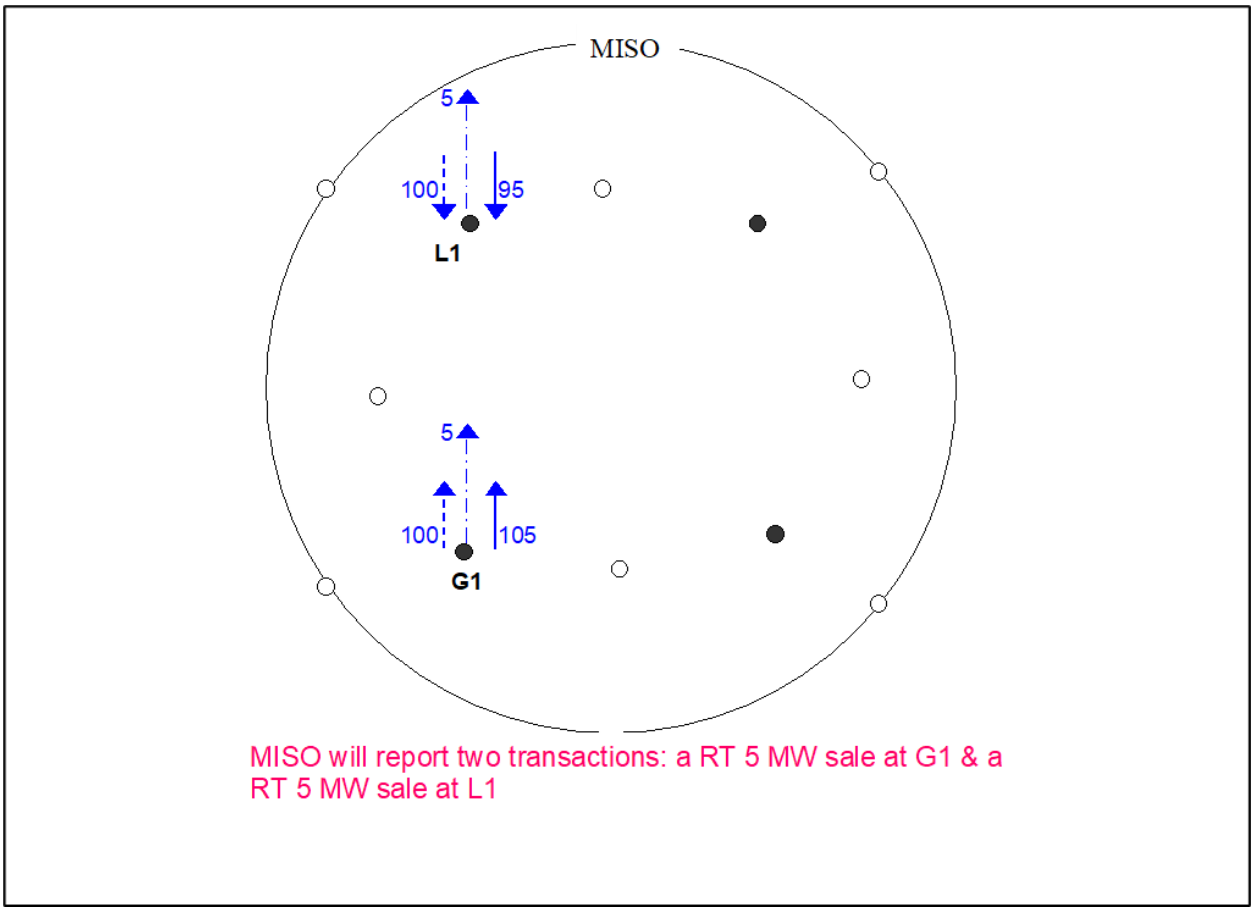


Exhibit C- 23: RT -5 MW Sale at G1

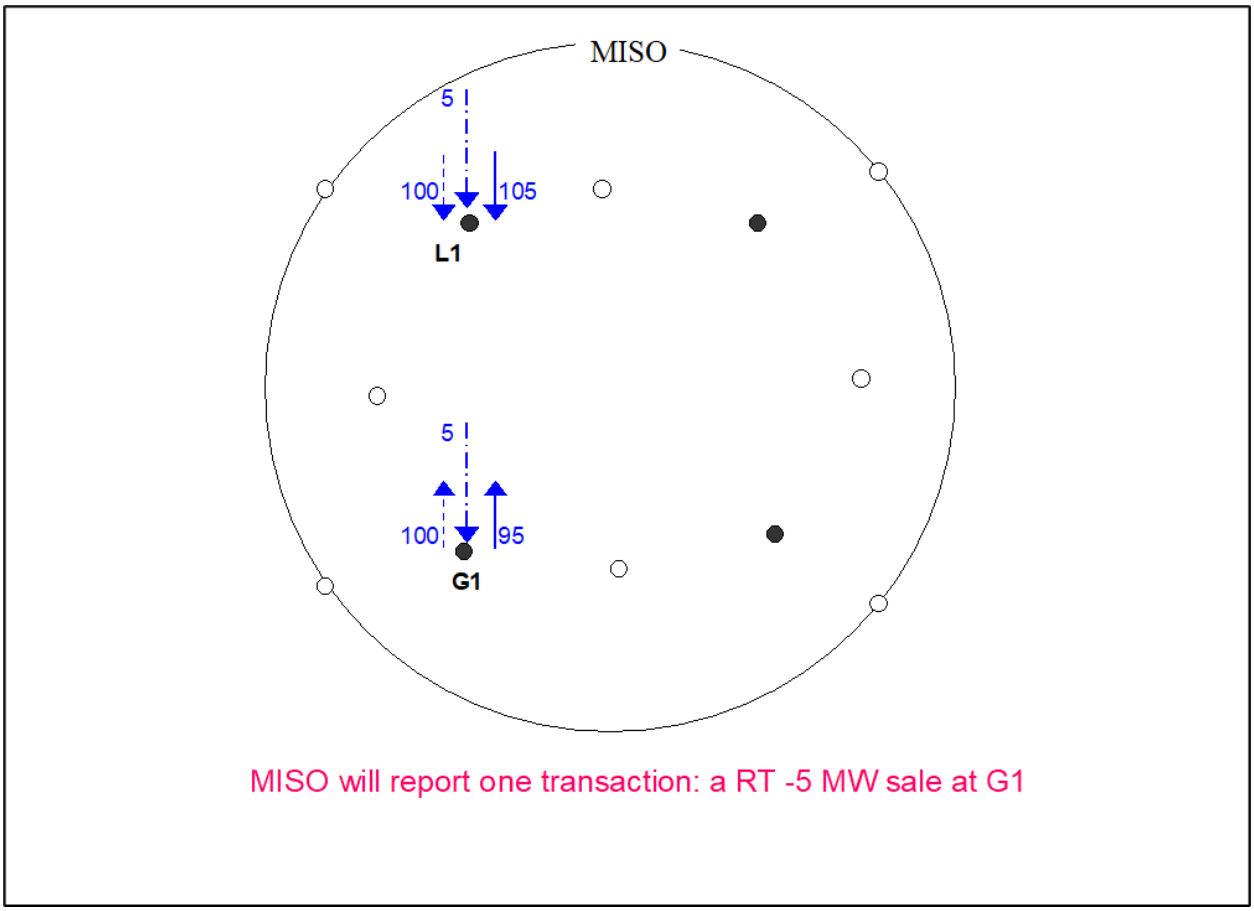


Exhibit C- 24: No RT Transactions Reported Scenario #2

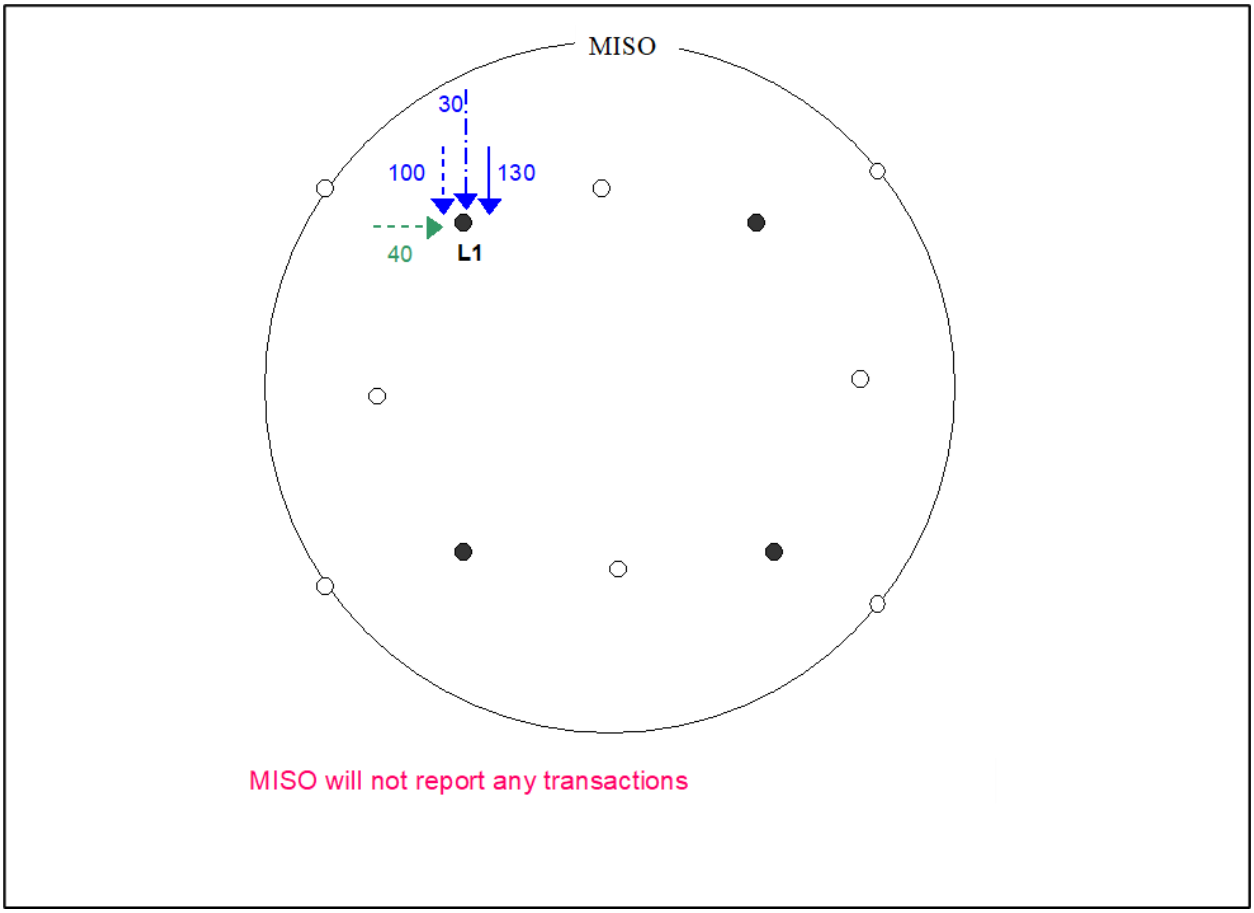


Exhibit C- 25: RT -30 MW Sale at L1

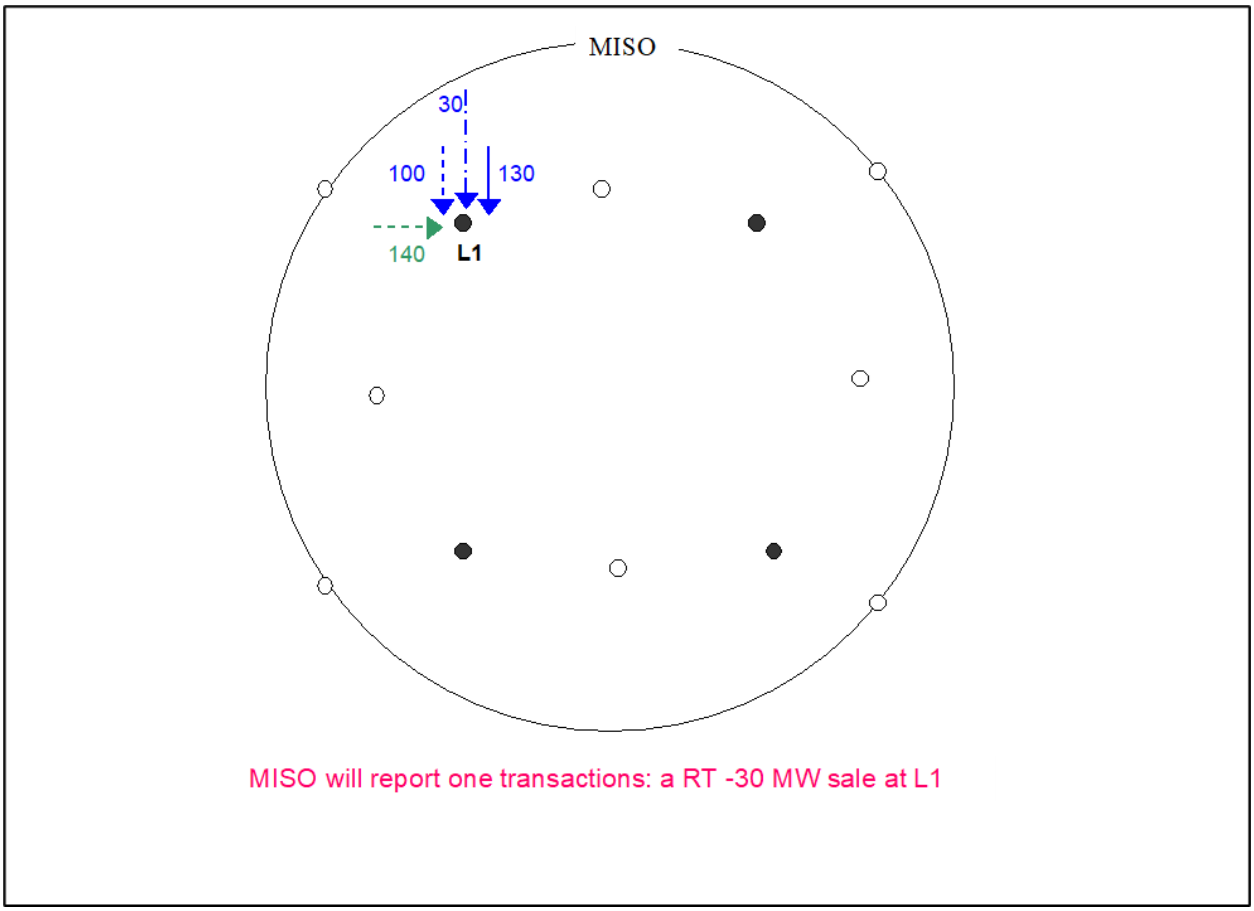


Exhibit C- 26: RT -10 MW Sale at L1

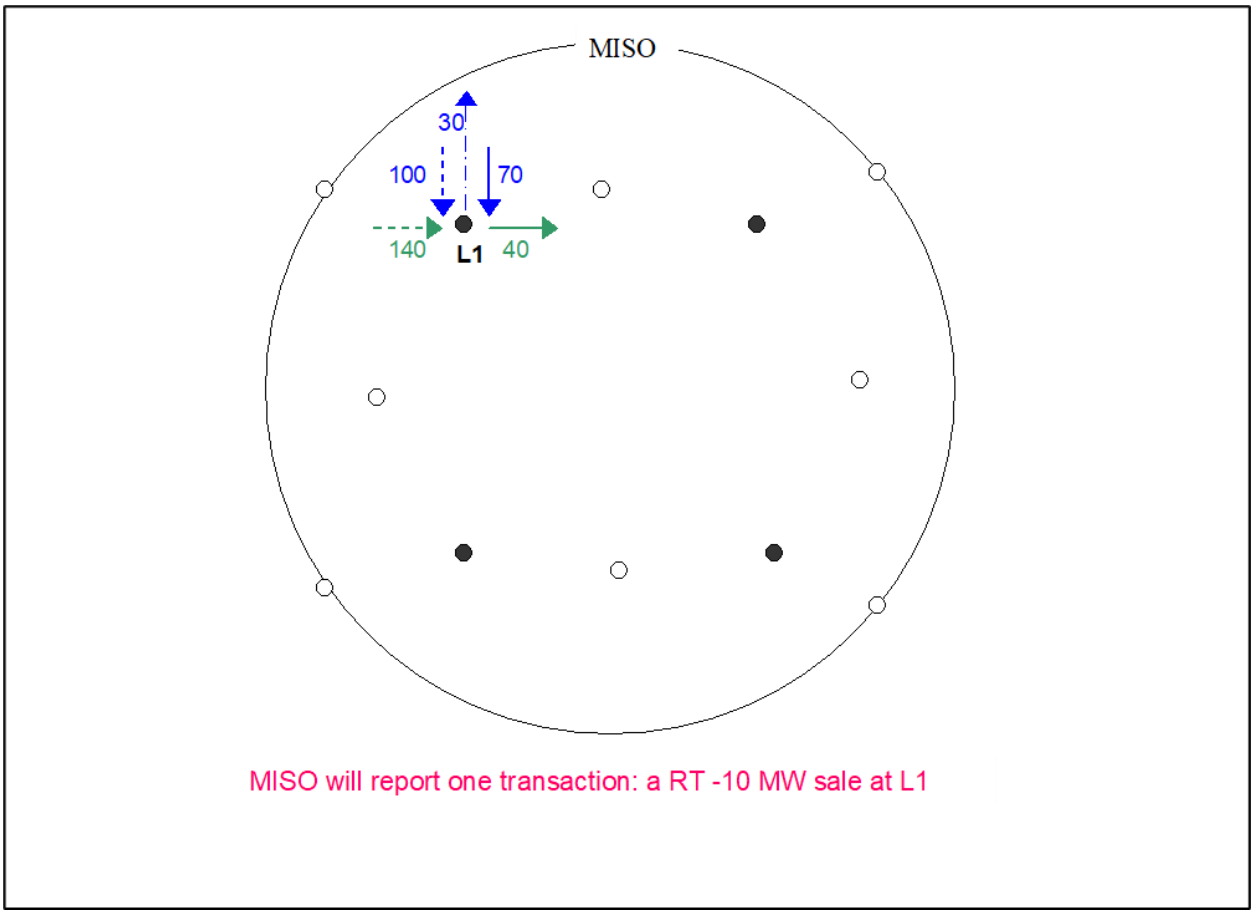


Exhibit C- 27: No RT Transactions Reported Scenario #3

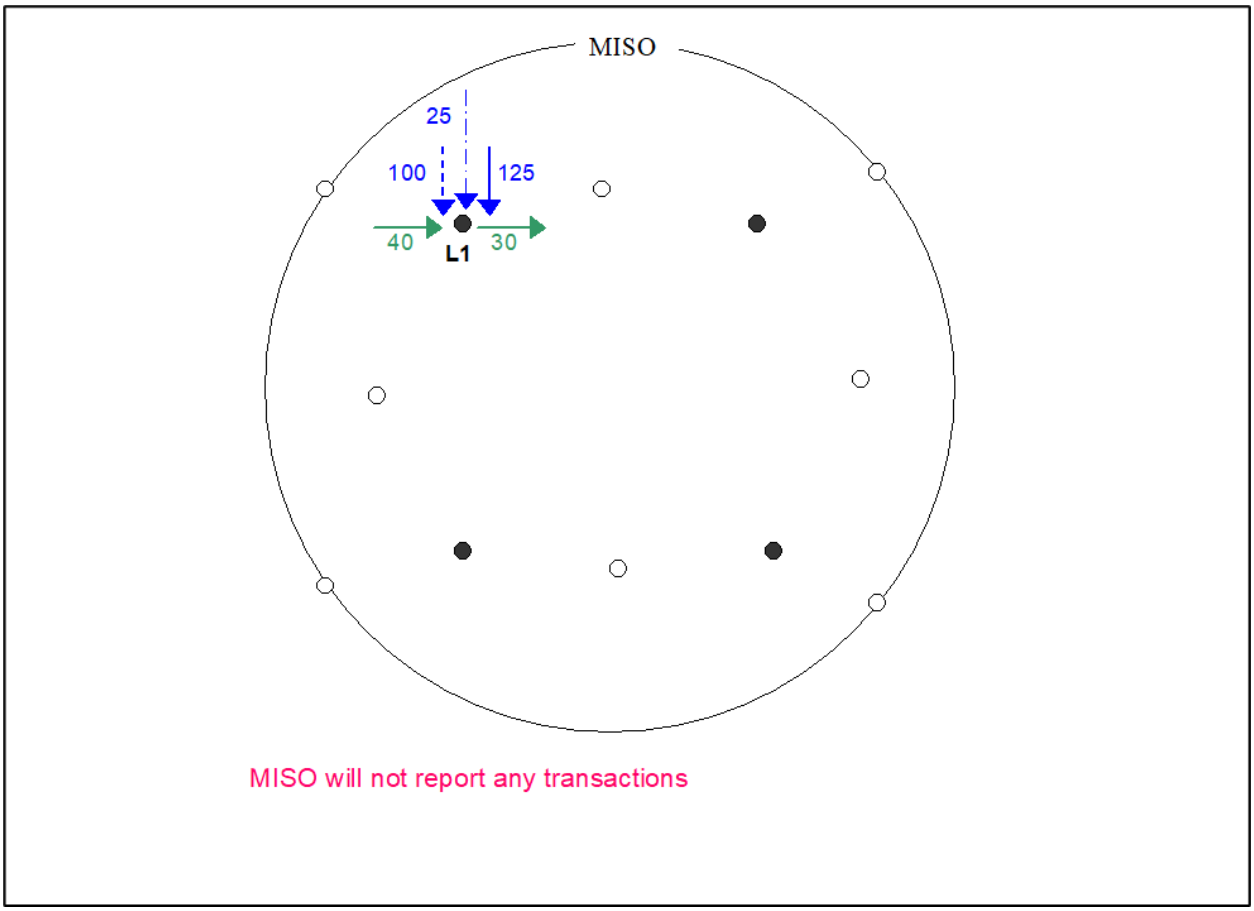


Exhibit C- 28: RT 85 MW Sale at L1

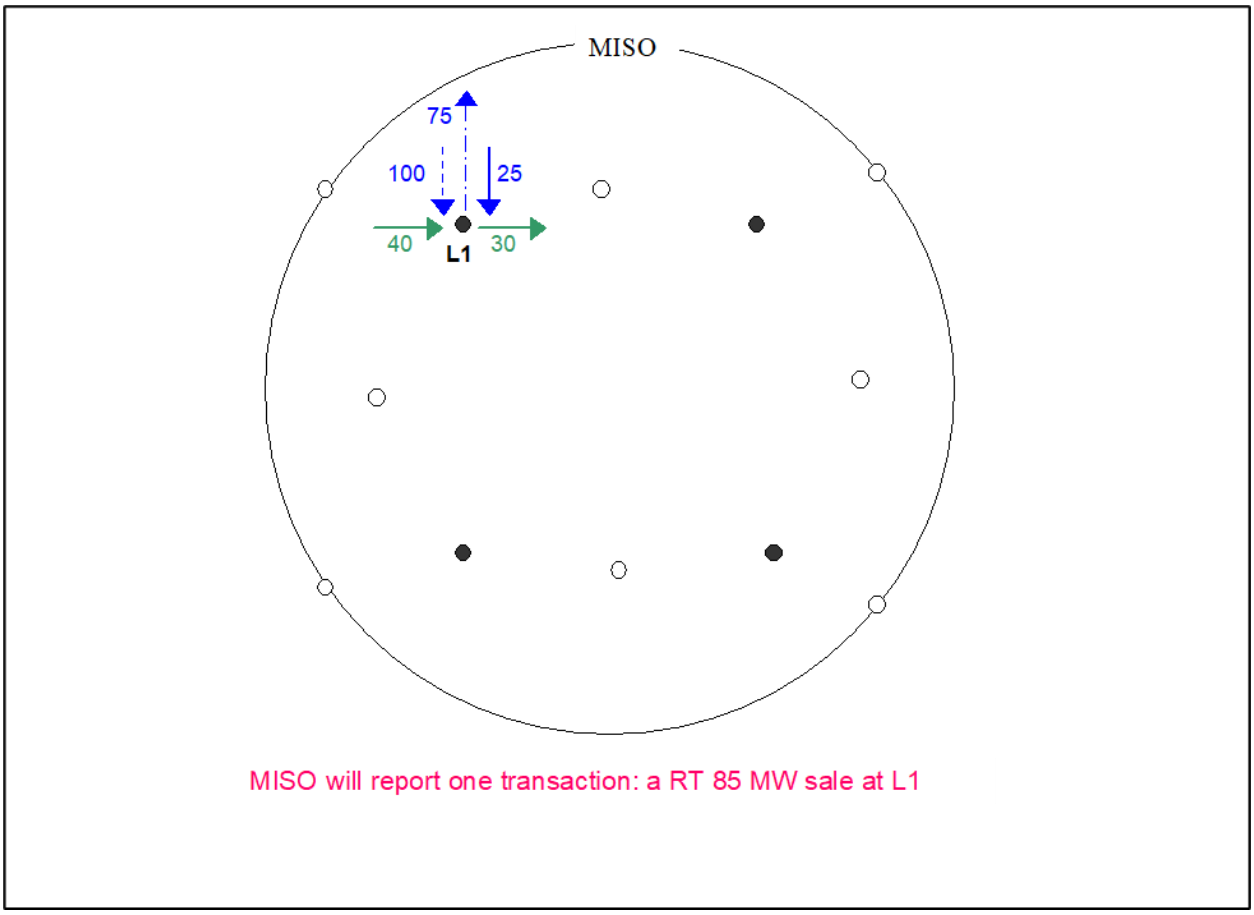


Exhibit C- 29: RT 10 MW Sale at G1

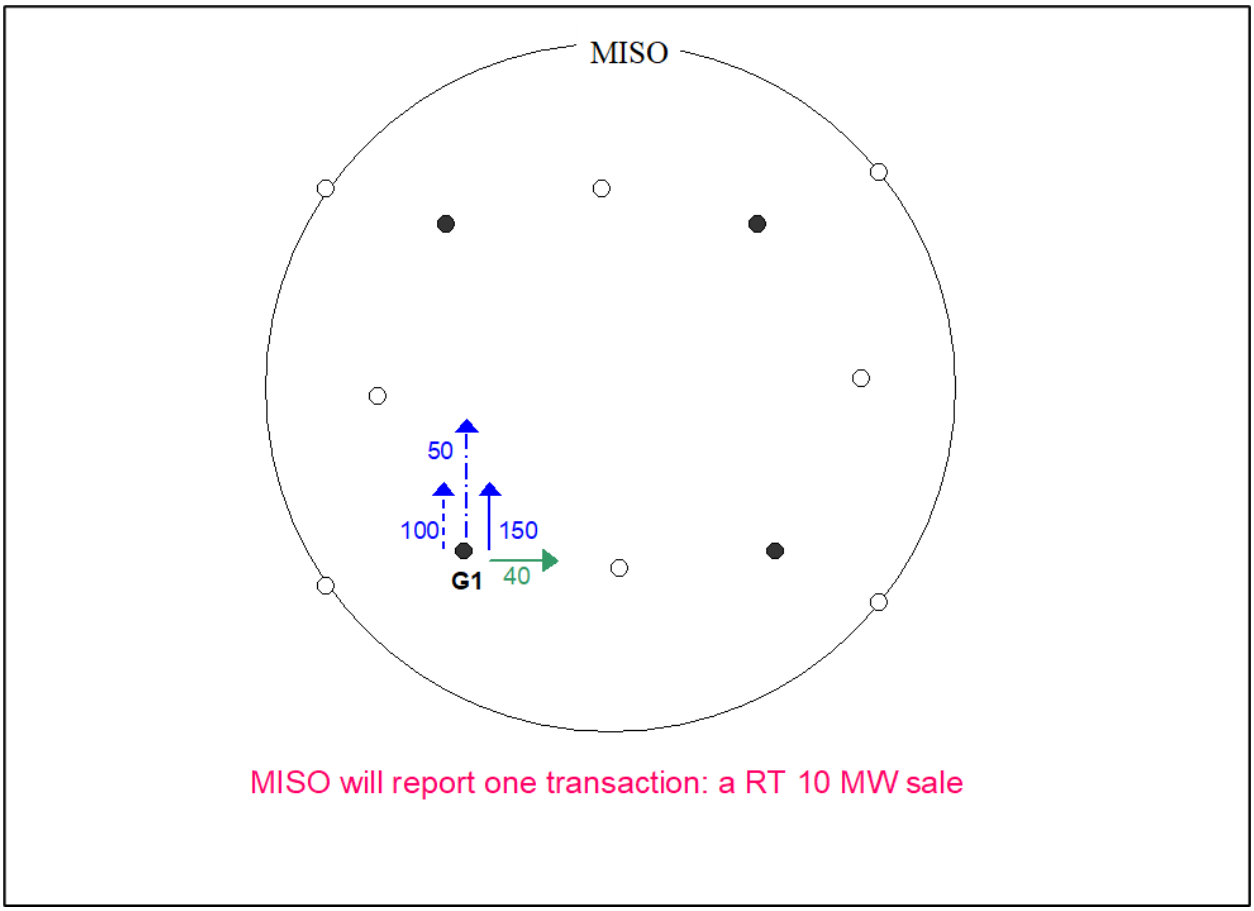


Exhibit C- 30: RT -15 Sale at G1

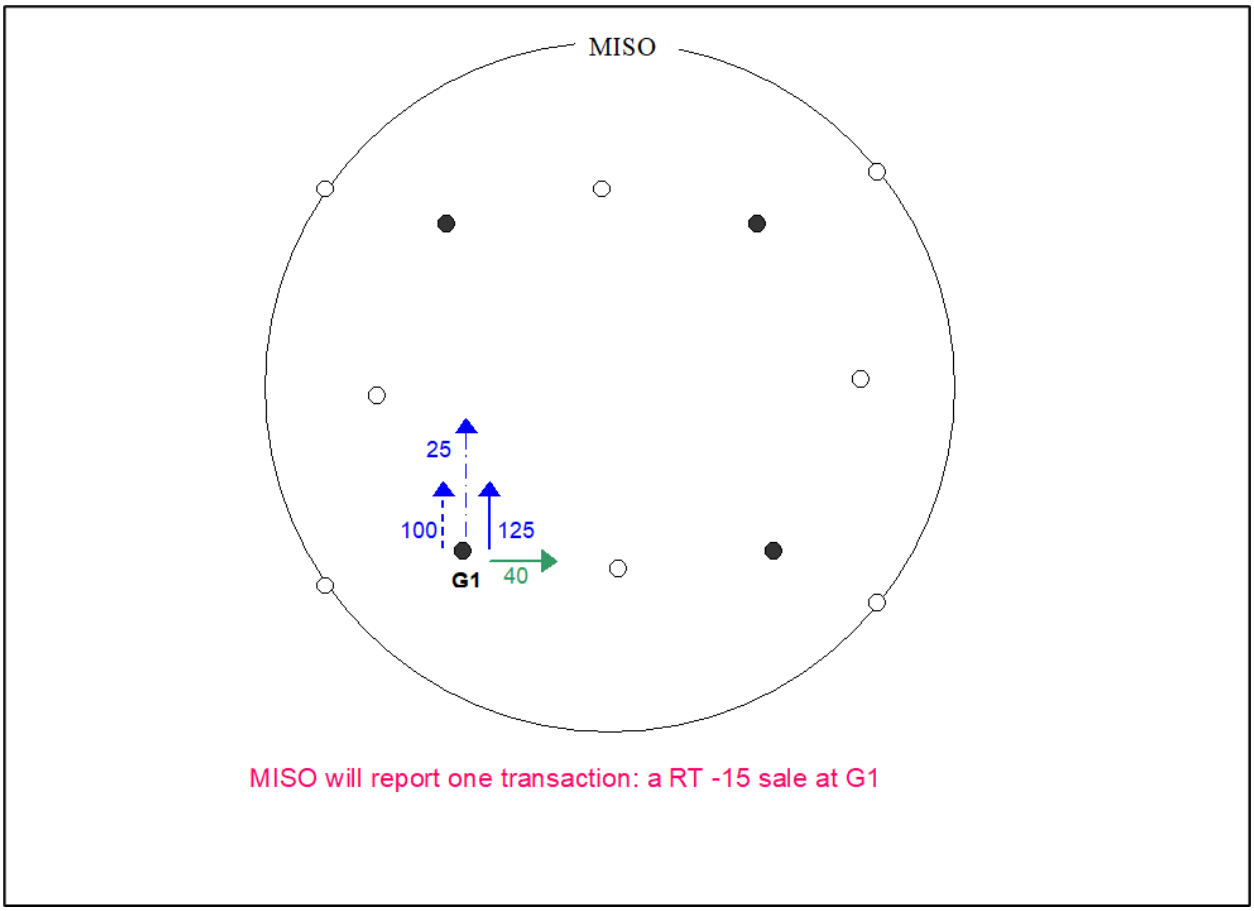


Exhibit C- 31: RT -65 Sale at G1

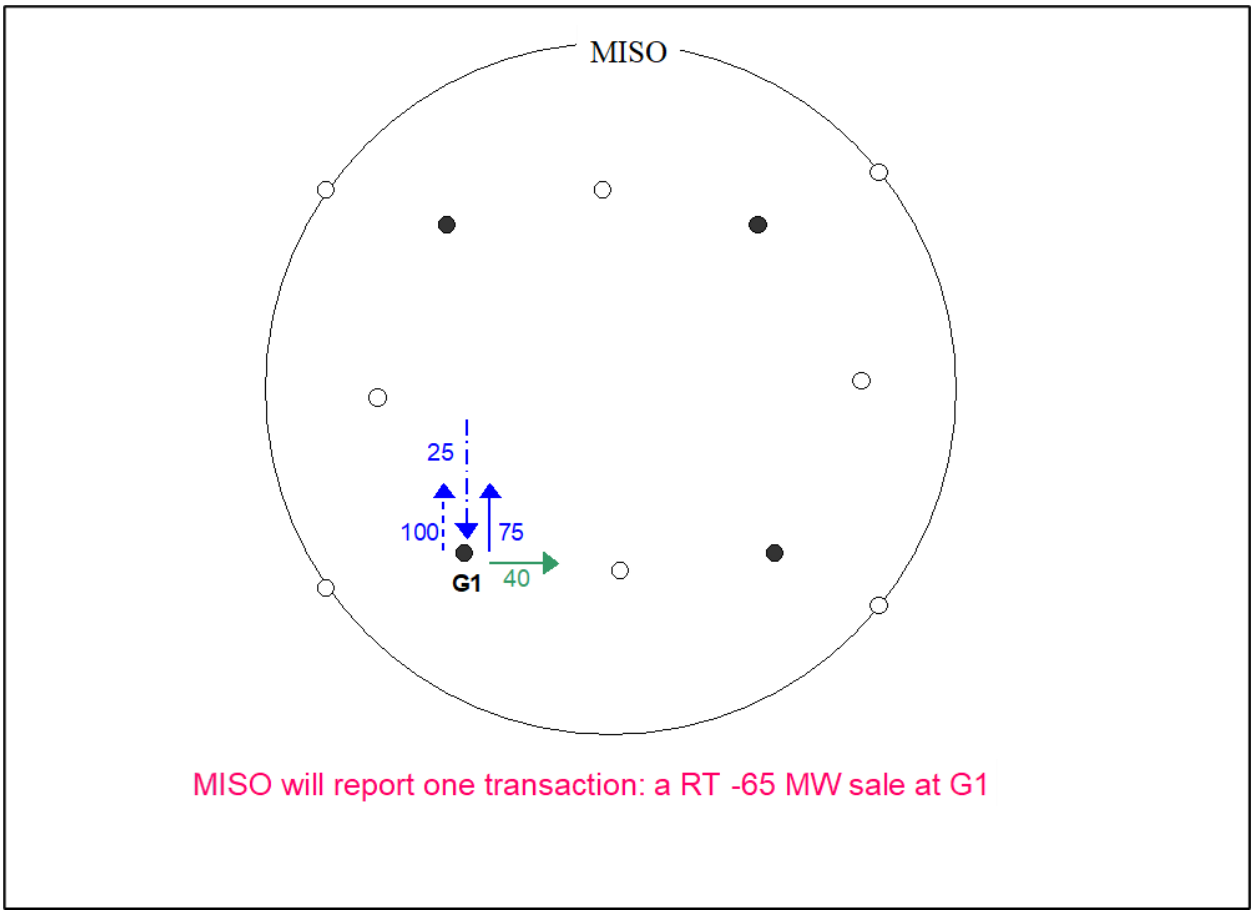


Exhibit C- 32: RT -15 Sale at G1

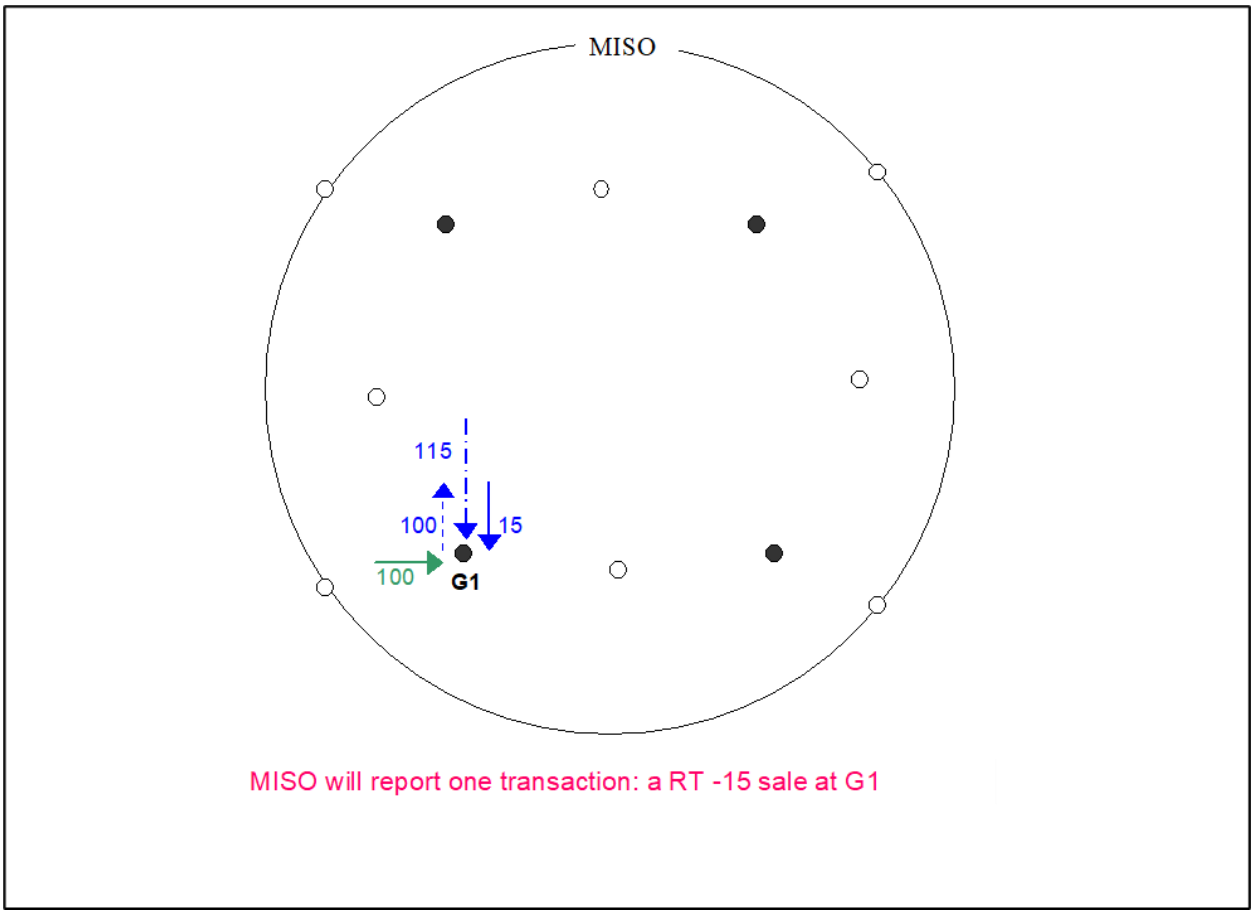


Exhibit C- 33: RT 85 MW Sale at G1

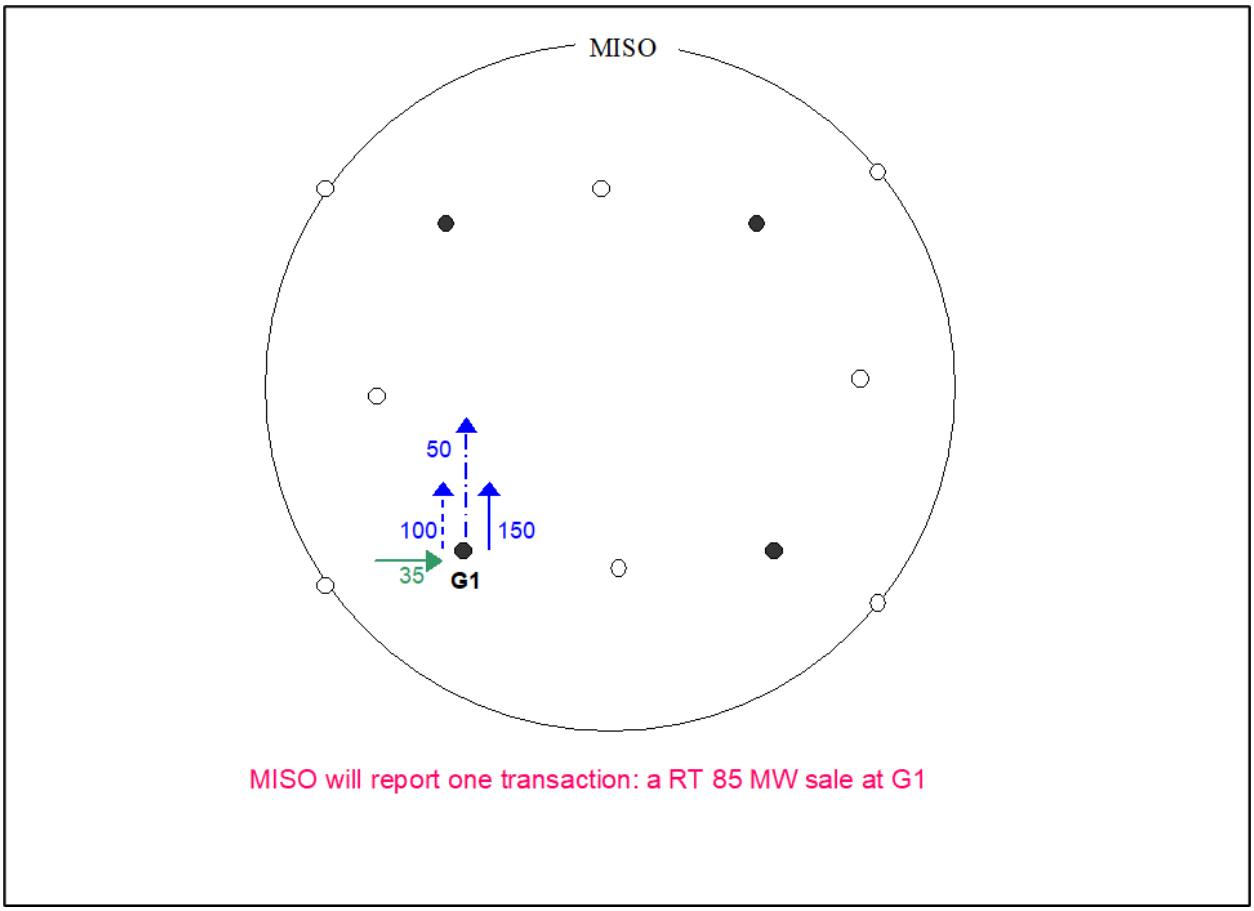


Exhibit C- 34: RT 5 MW Sale at G1

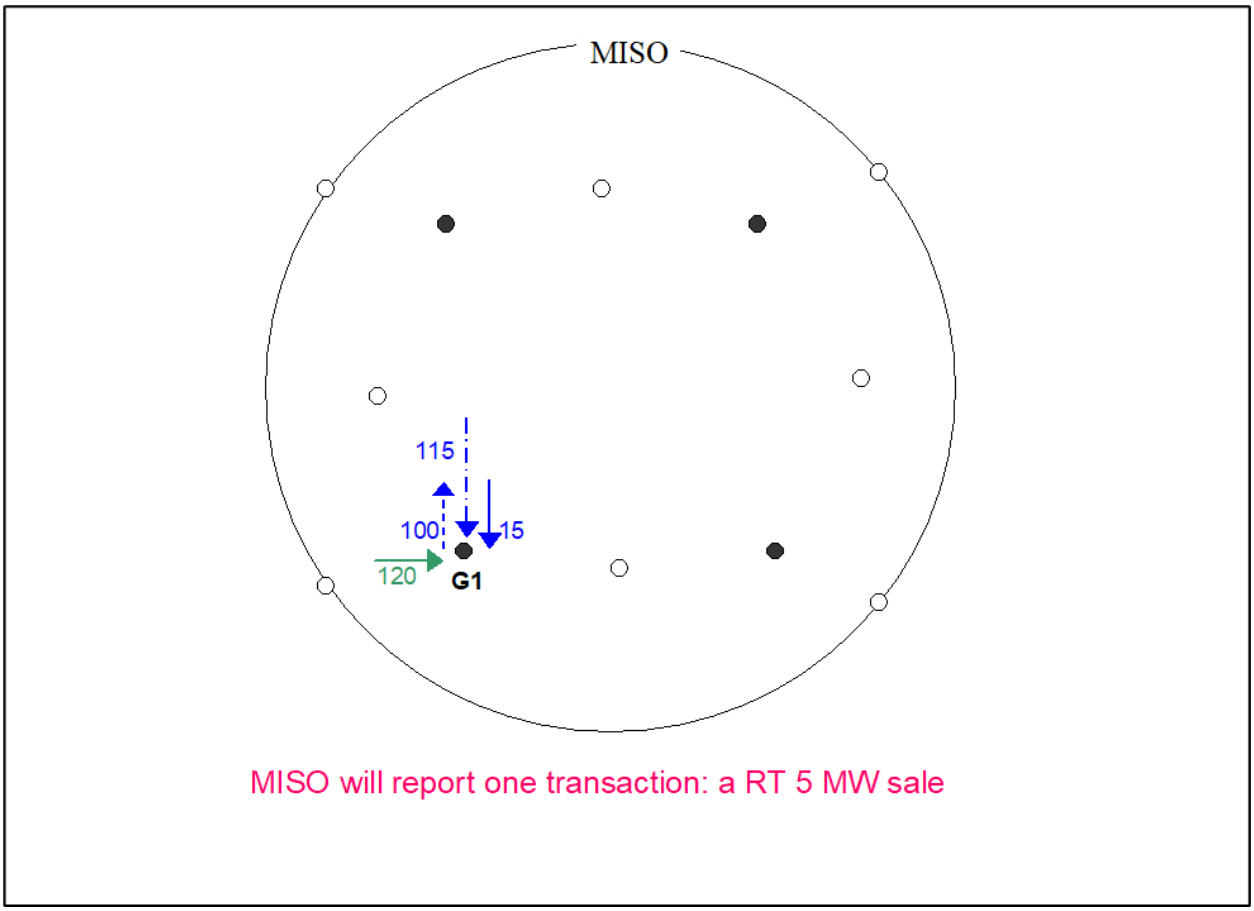


Exhibit C- 35: RT 15 MW Sale at G1

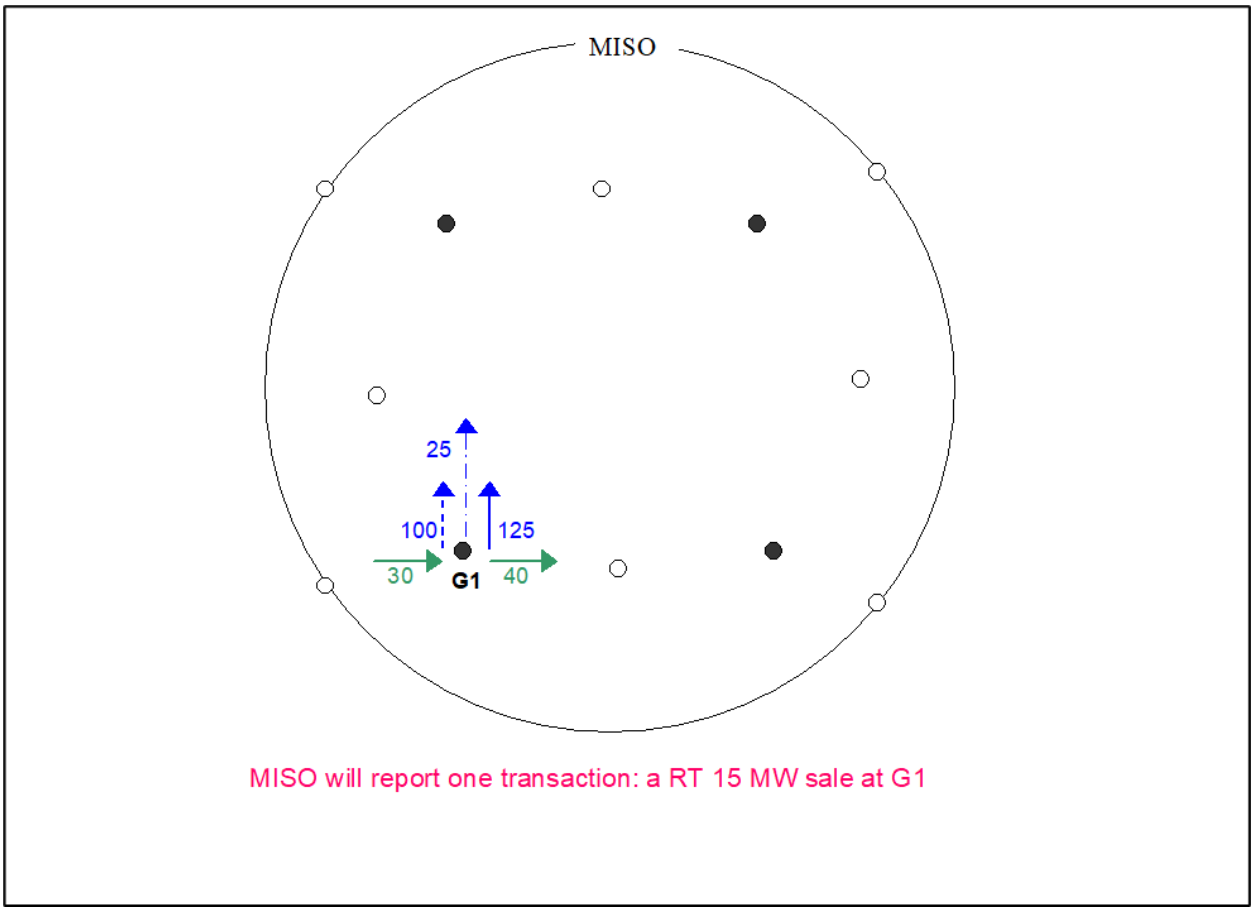


Exhibit C- 36: RT -35 MW Sale at G1

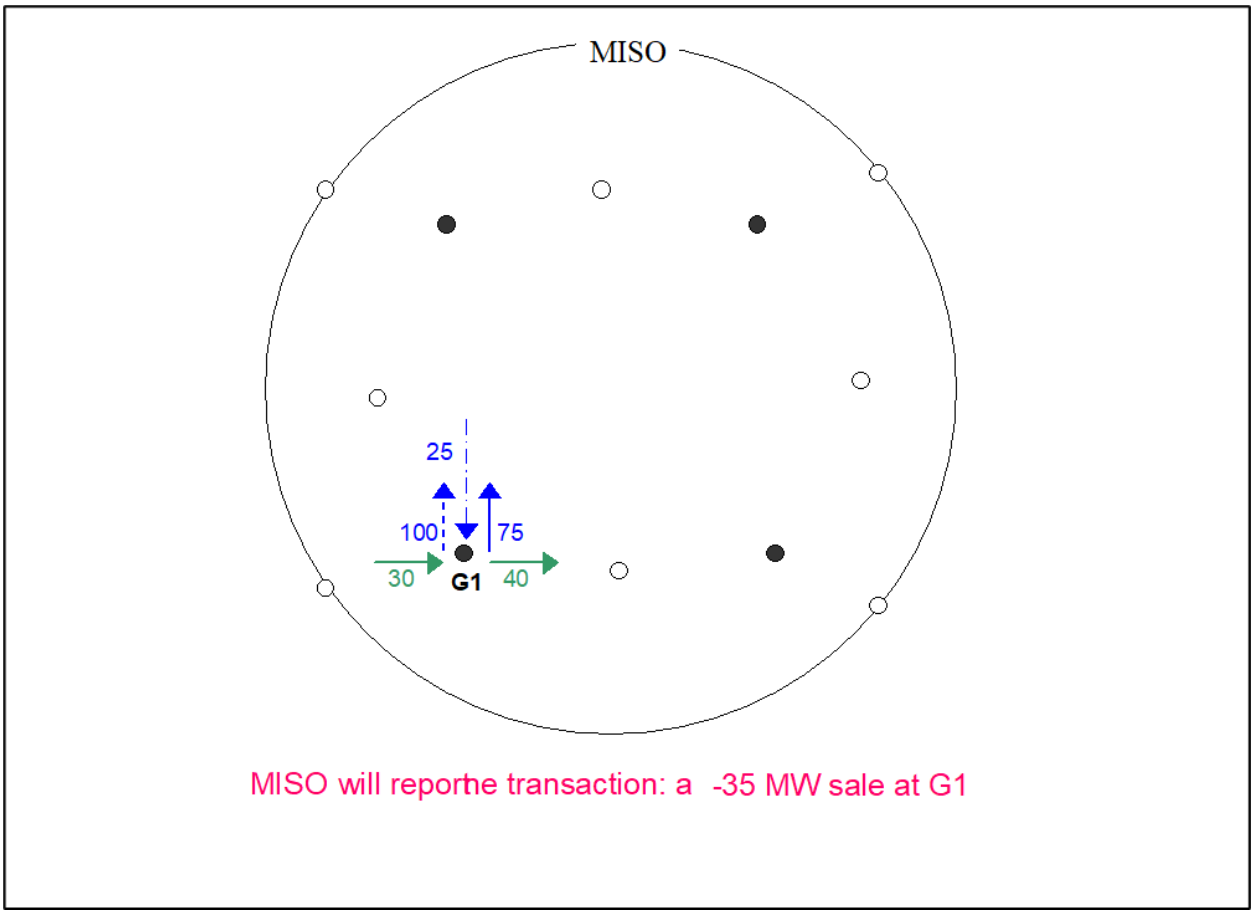


Exhibit C- 37: RT 80 MW Sale at G2

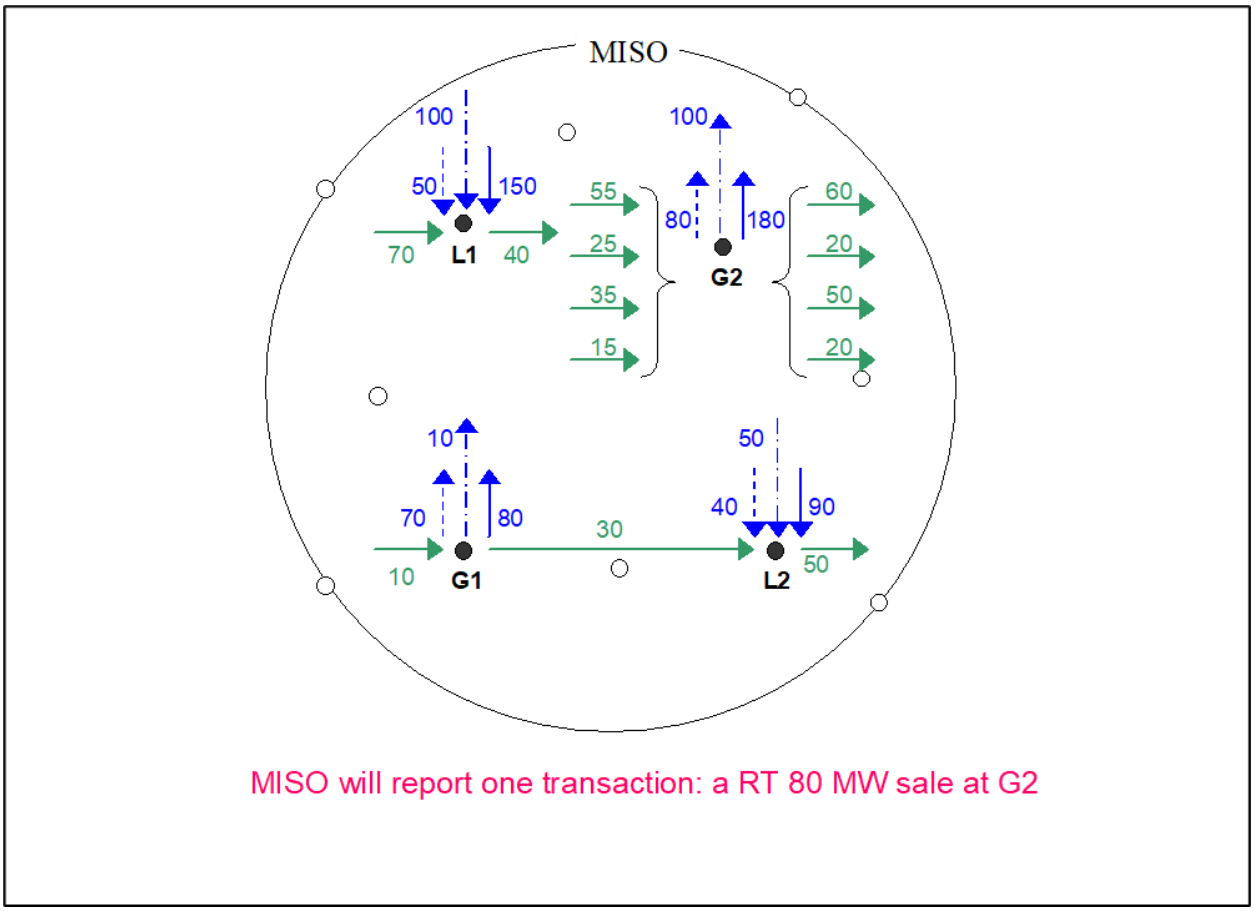


Exhibit C- 38: RT -100 MW Sale at G1 & RT 100 MW Sale at L1 & RT 80 MW Sale at G2

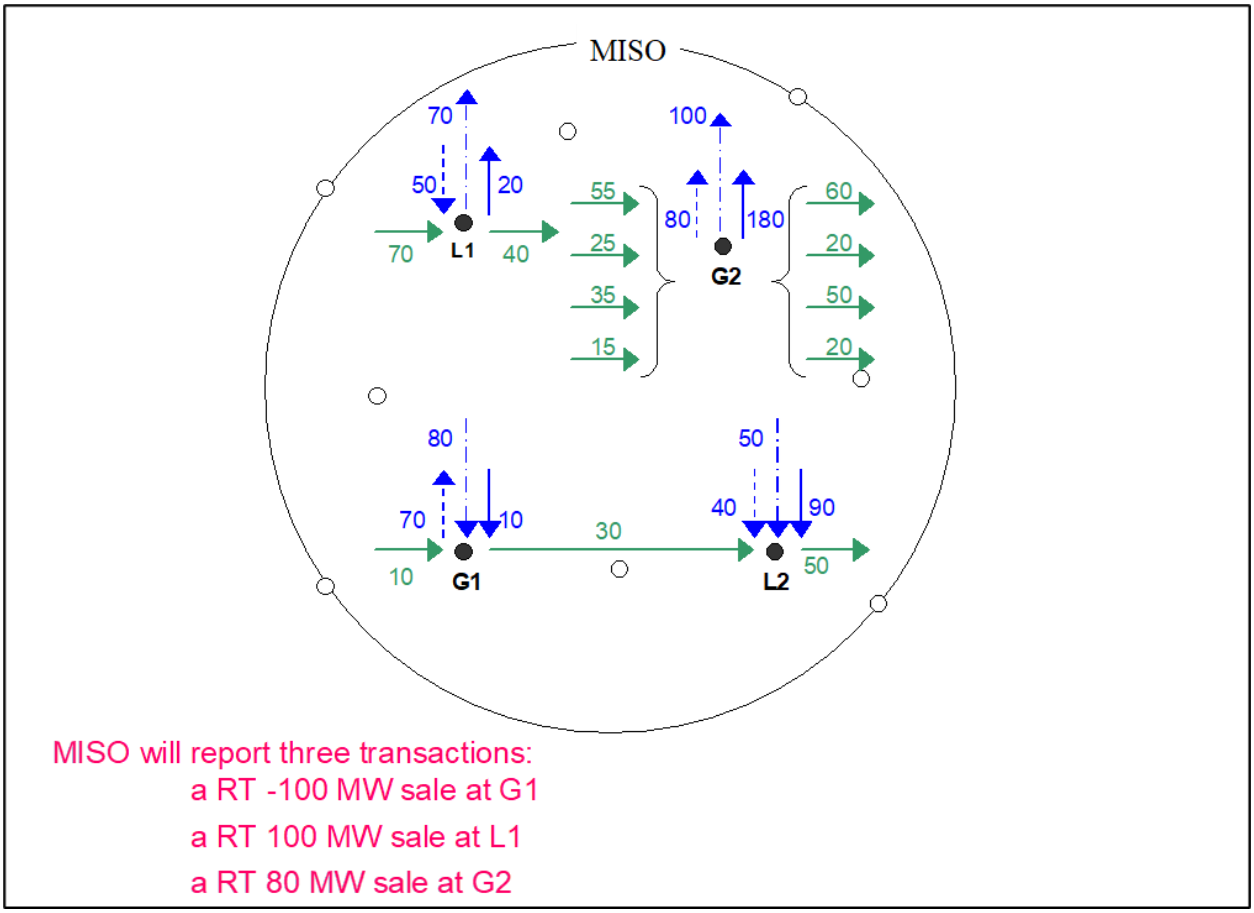
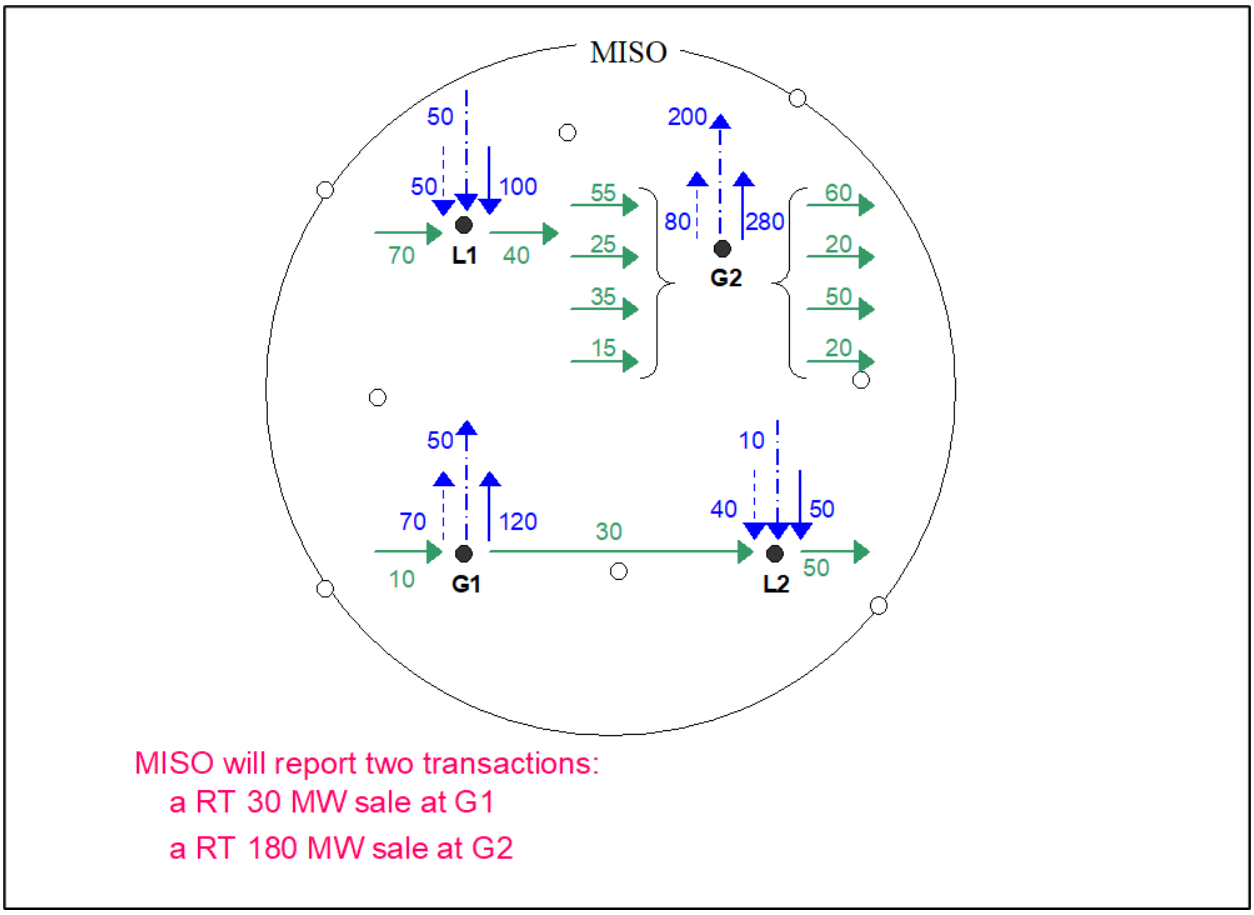


Exhibit C- 39: RT 30 MW Sale at G1 & RT 180 MW Sale at G2



C.1.5 Real-Time MW at an Interface

The following exhibits provide examples of MISO reporting scenarios for Real-Time MW at an Interface.

Exhibit C- 40: RT -5 MW Sale at I2

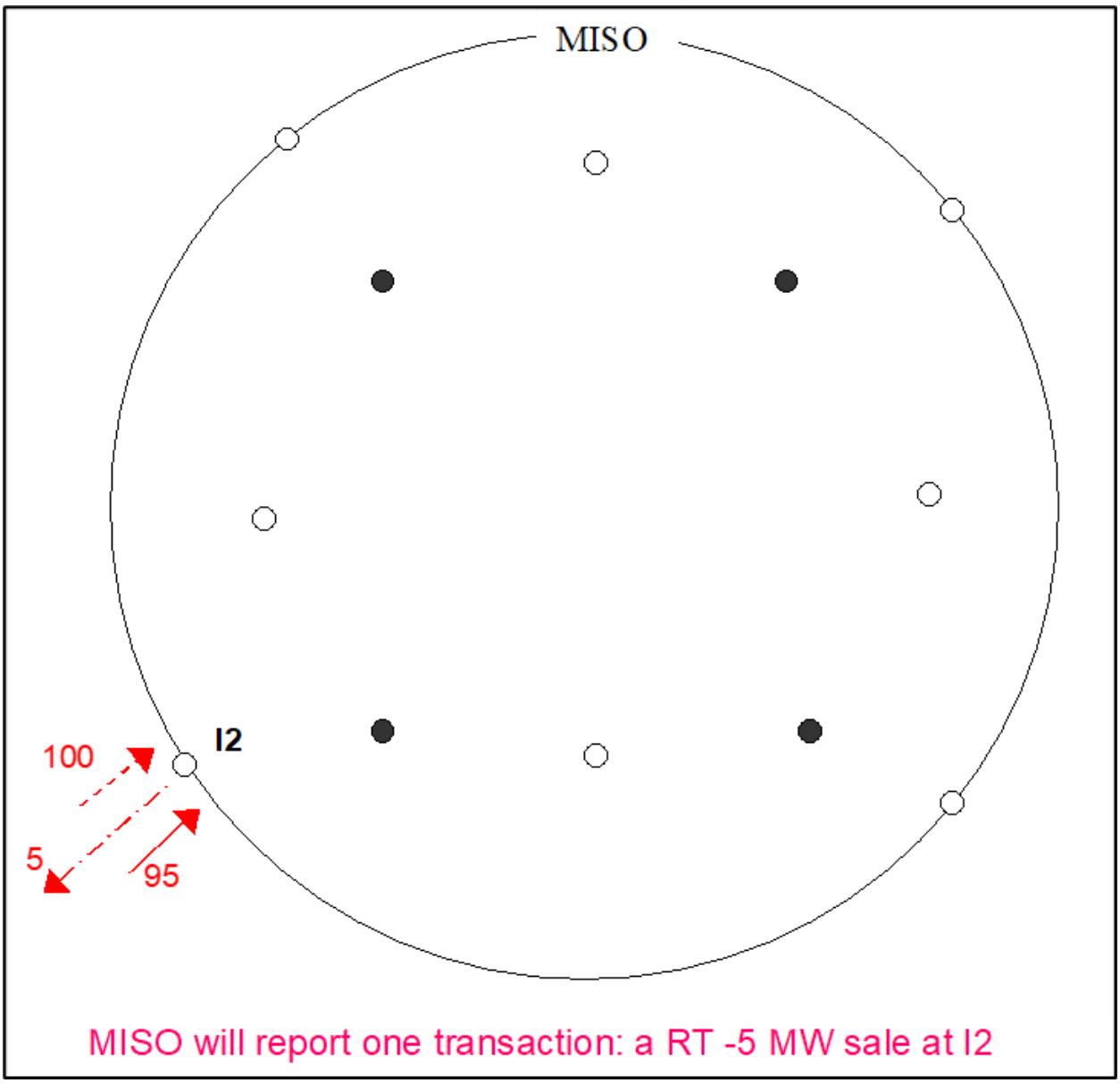


Exhibit C- 41: RT -100 MW Sale at I2

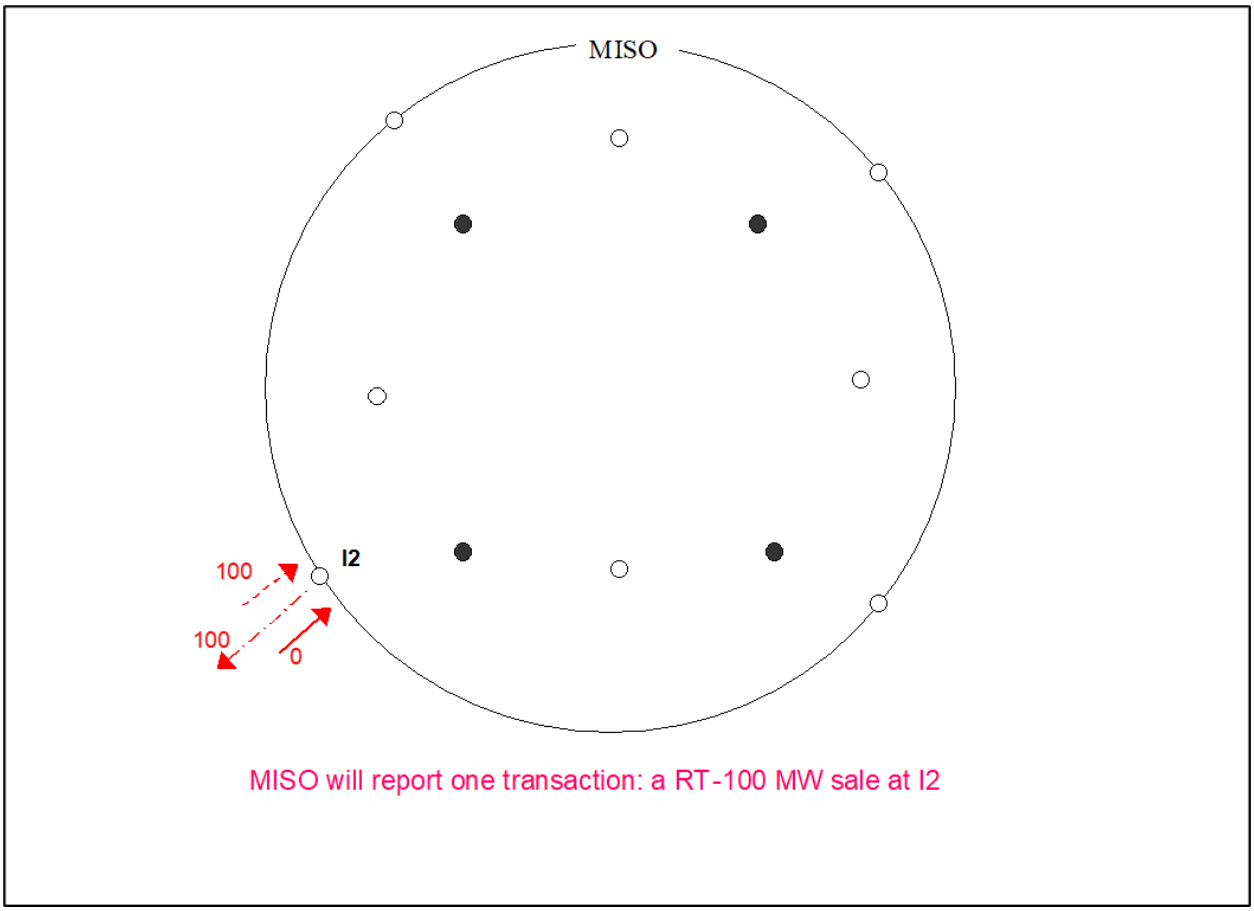


Exhibit C- 42: RT -10 MW Sale at I2

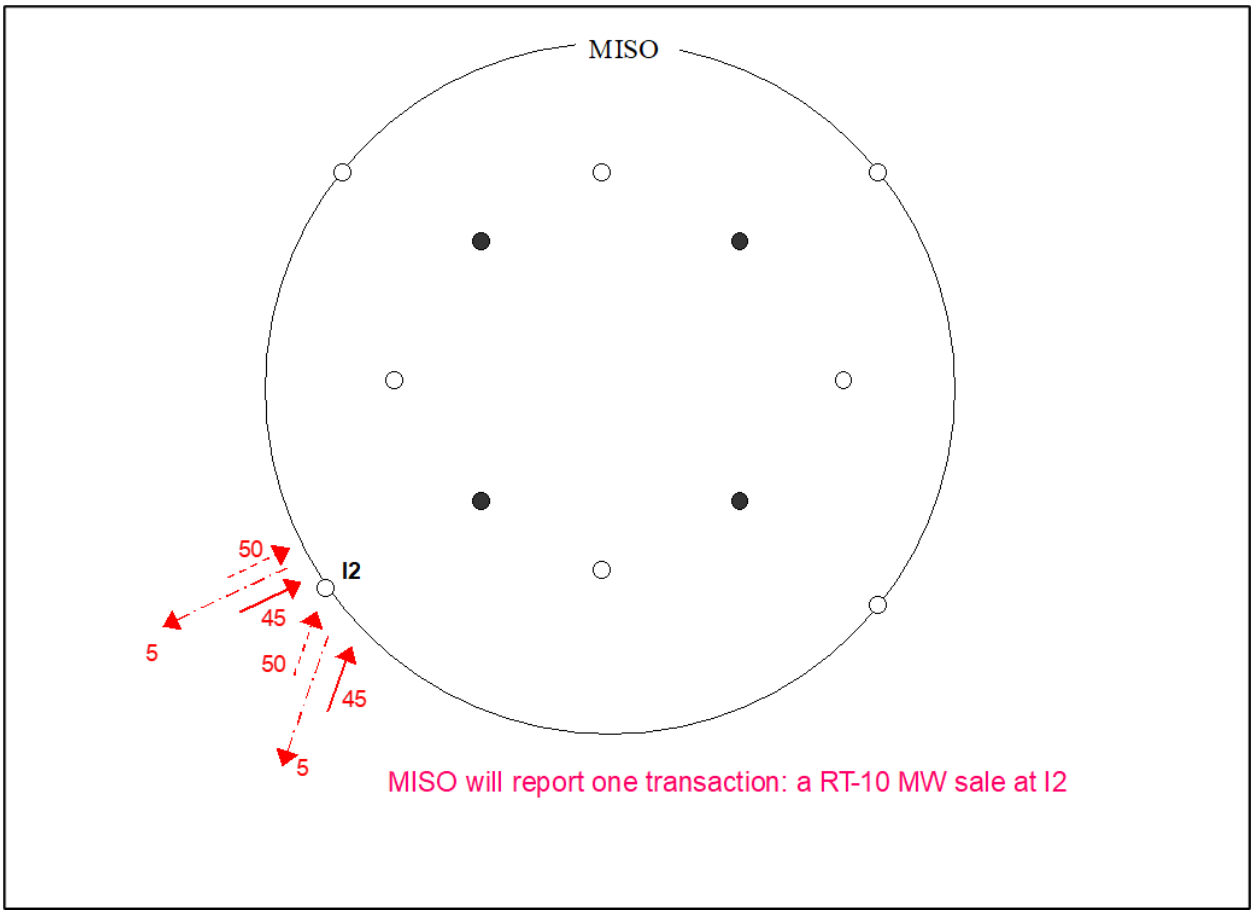


Exhibit C- 43: RT 10 MW Sale at I2

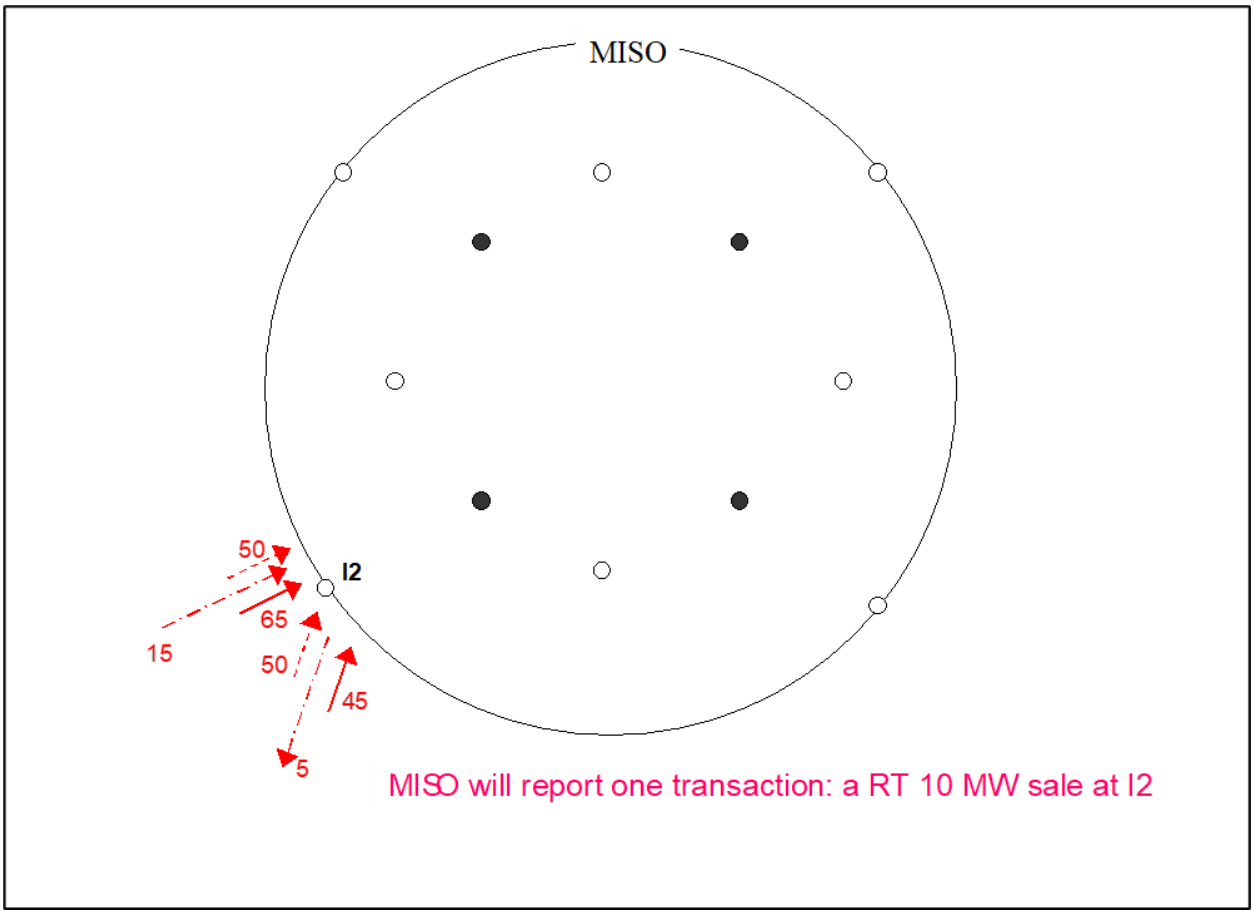


Exhibit C- 44: RT 20 MW Sale at I2

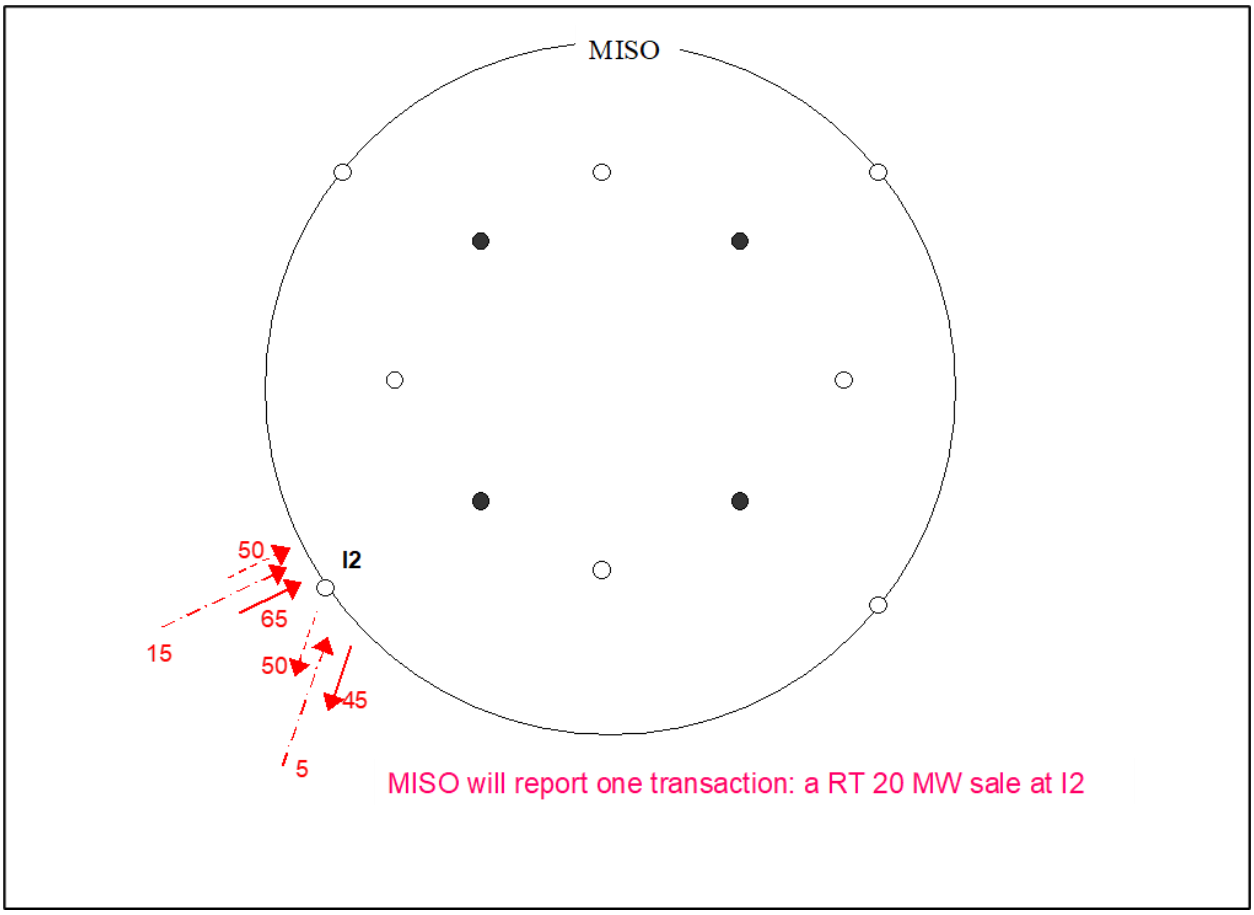


Exhibit C- 45: No RT Transactions Reported #1

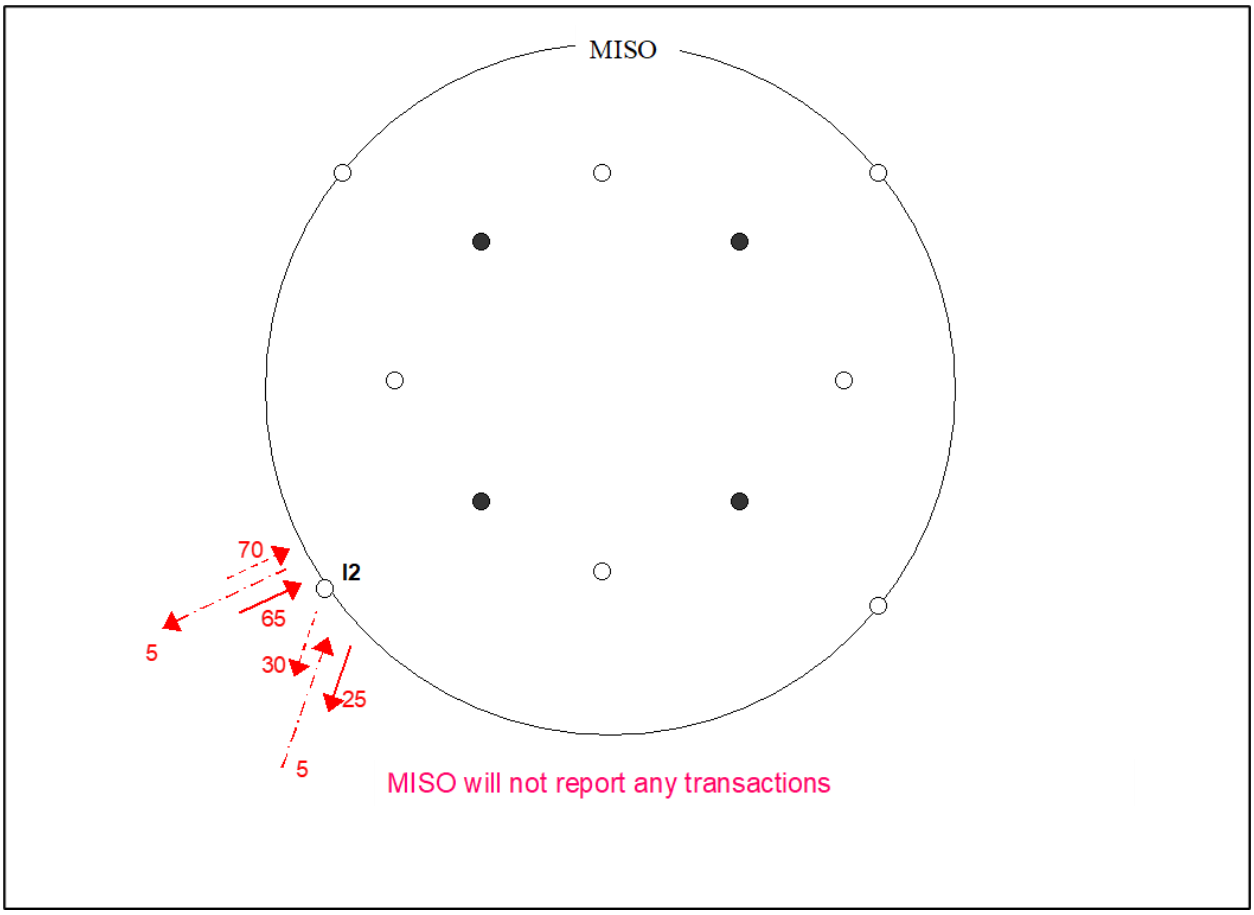


Exhibit C- 46: RT 20 MW Sale at I2

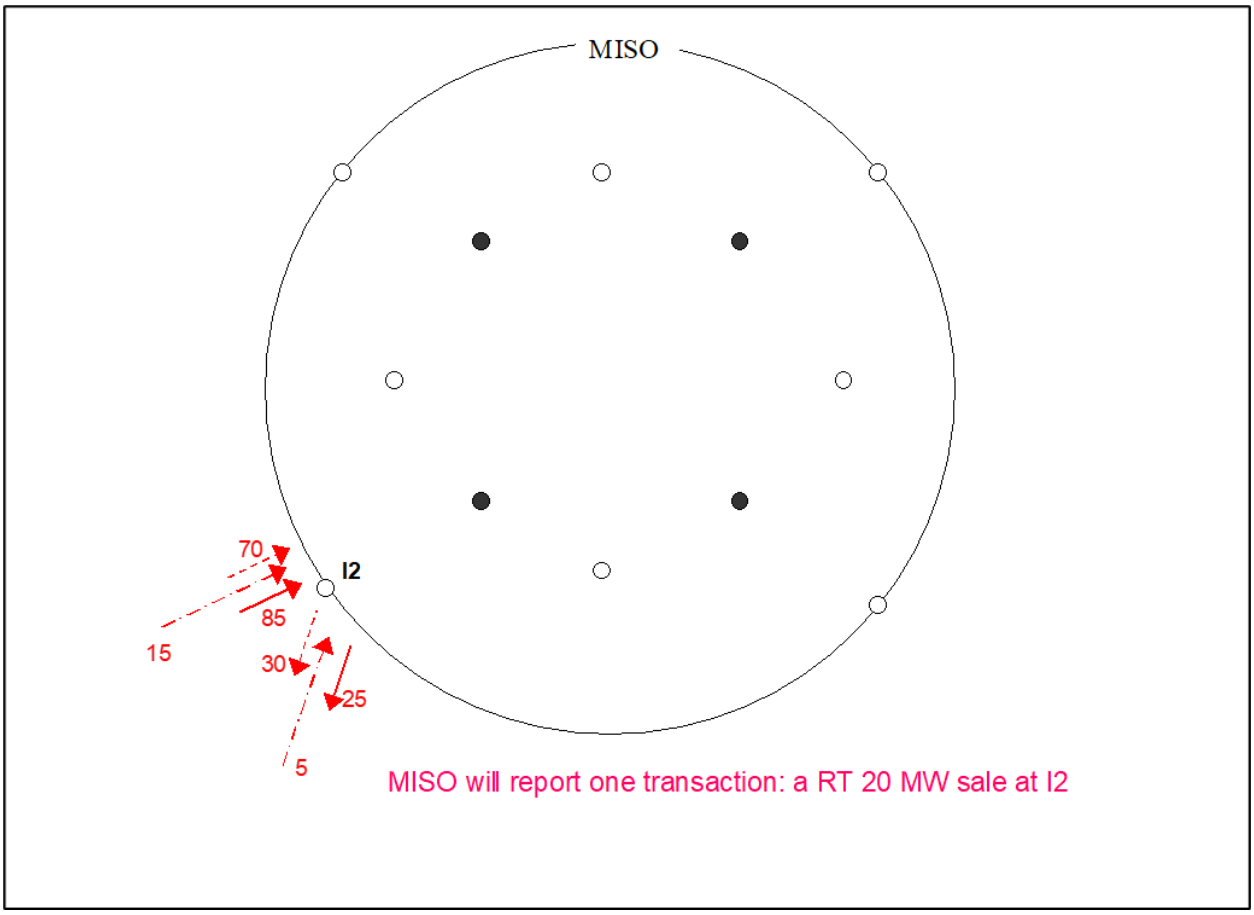


Exhibit C- 47: RT 100 MW Sale at I2

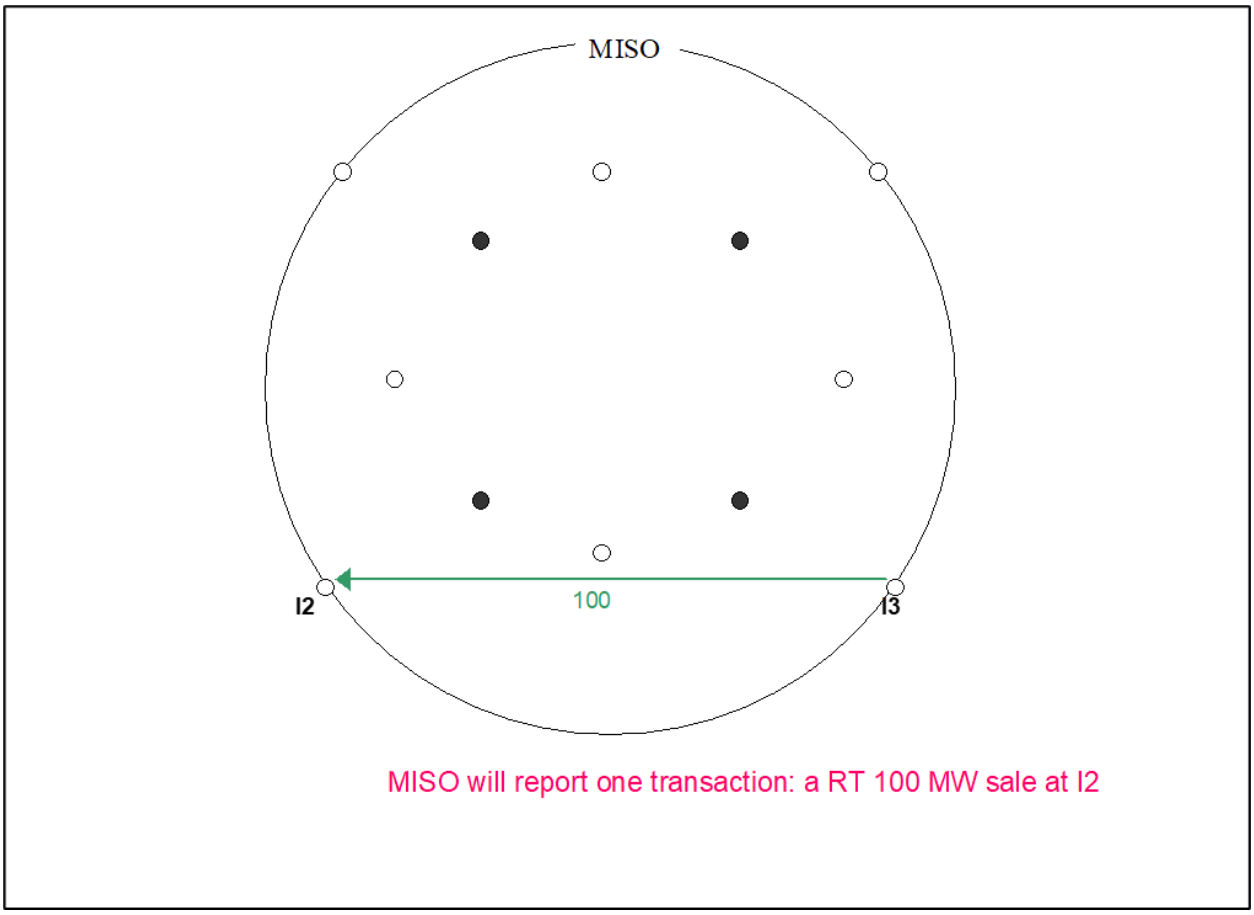


Exhibit C- 48: RT 10 MW Sale at I2

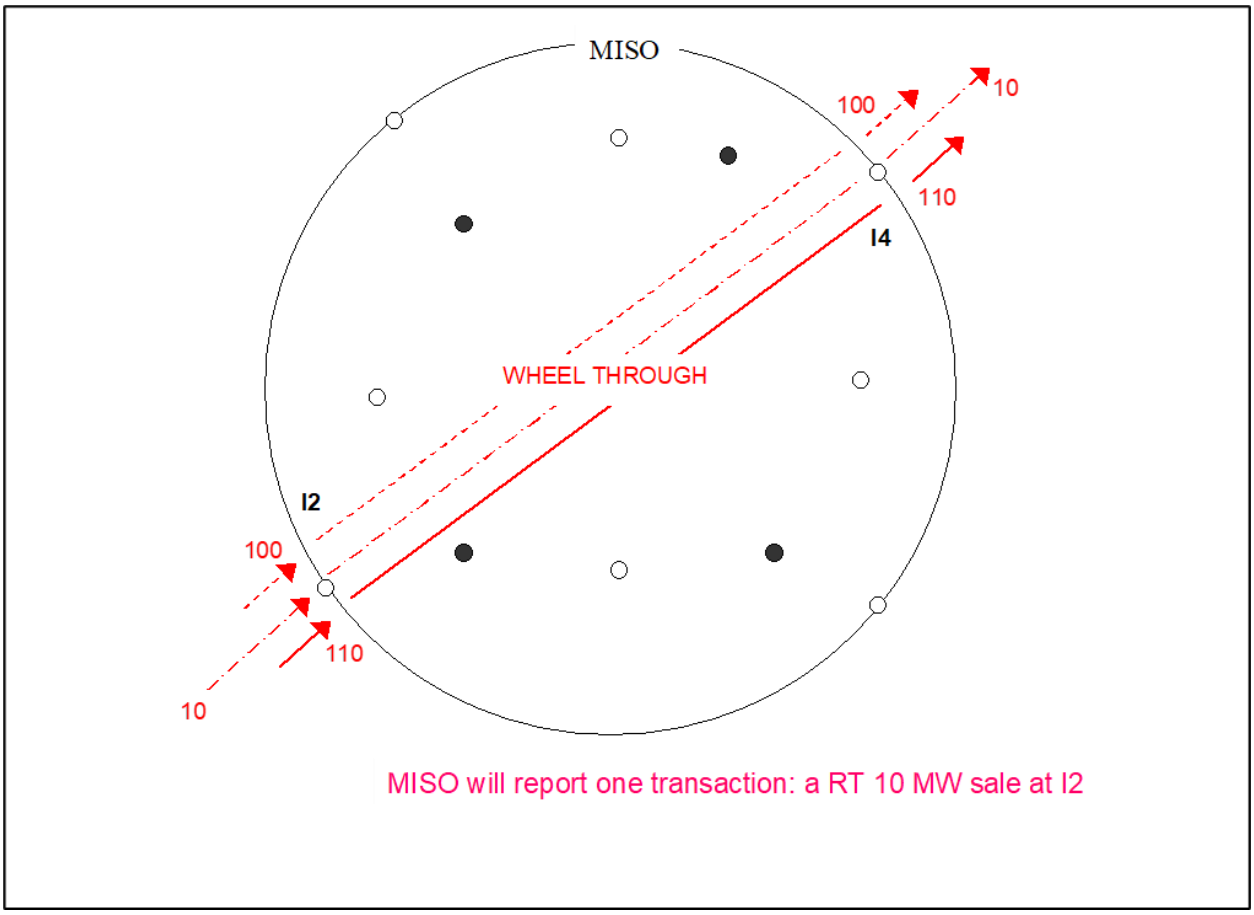


Exhibit C- 49: No RT Reportable Transactions #2

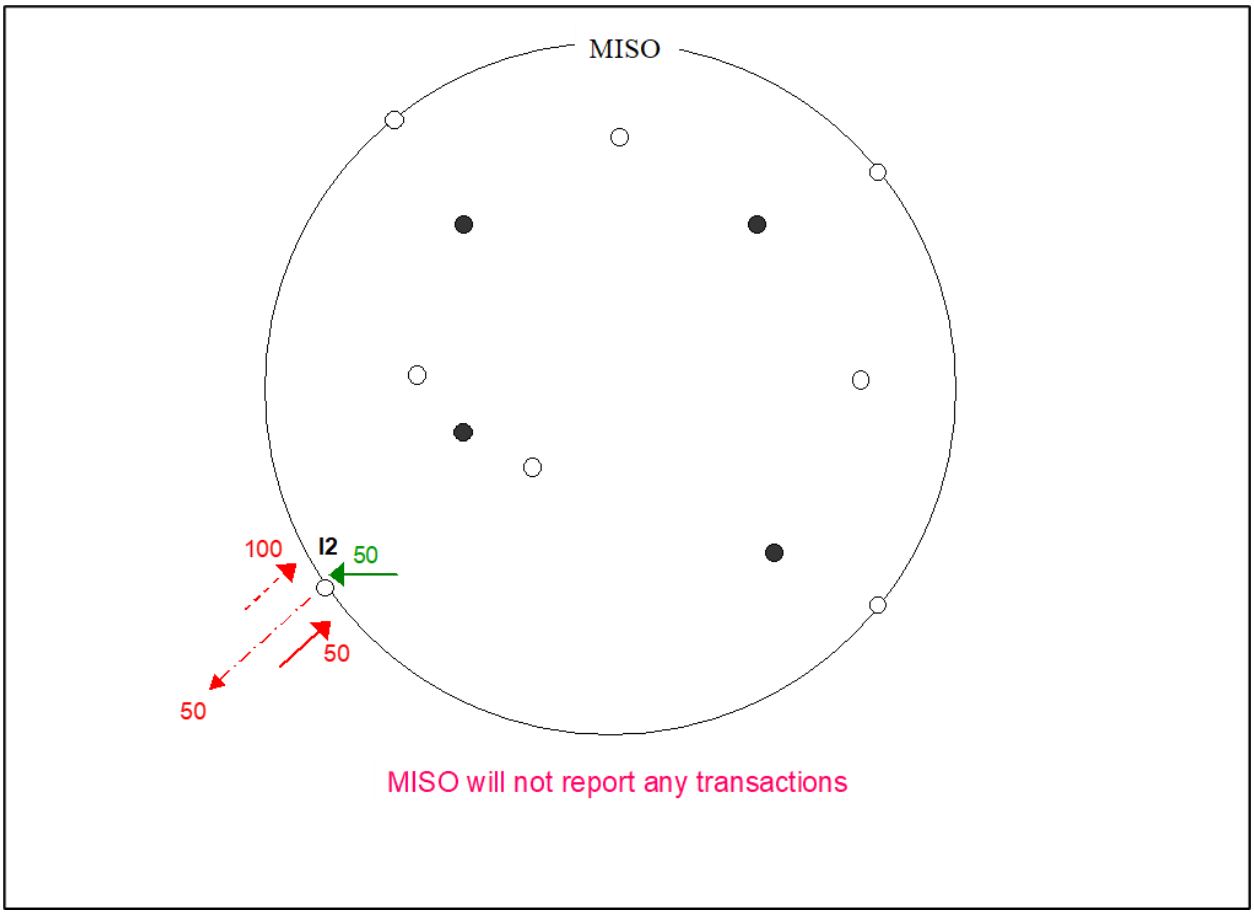


Exhibit C- 50: RT -10 MW Sale at I2 & RT 10 MW Sale at I4

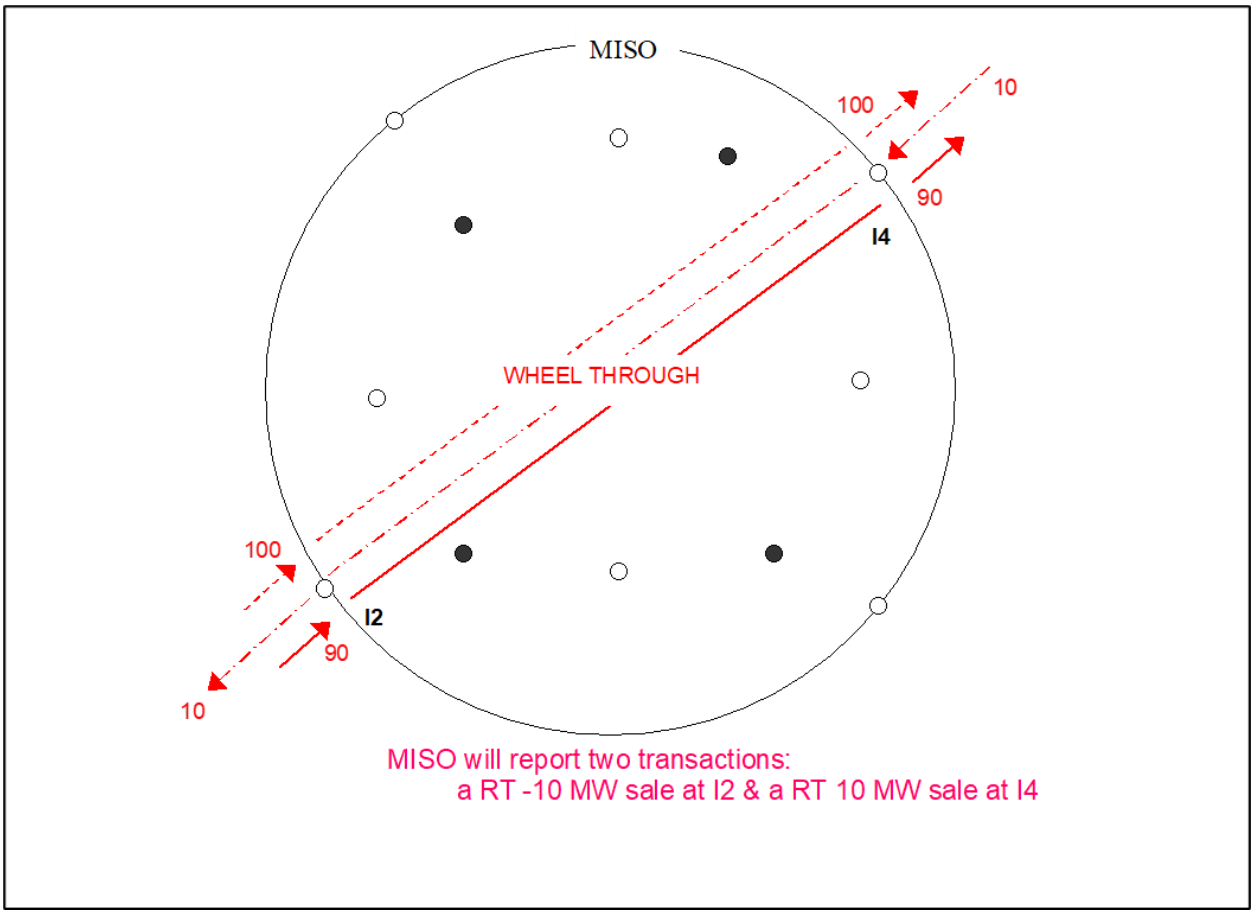


Exhibit C- 51: RT -10 MW Sale at I2

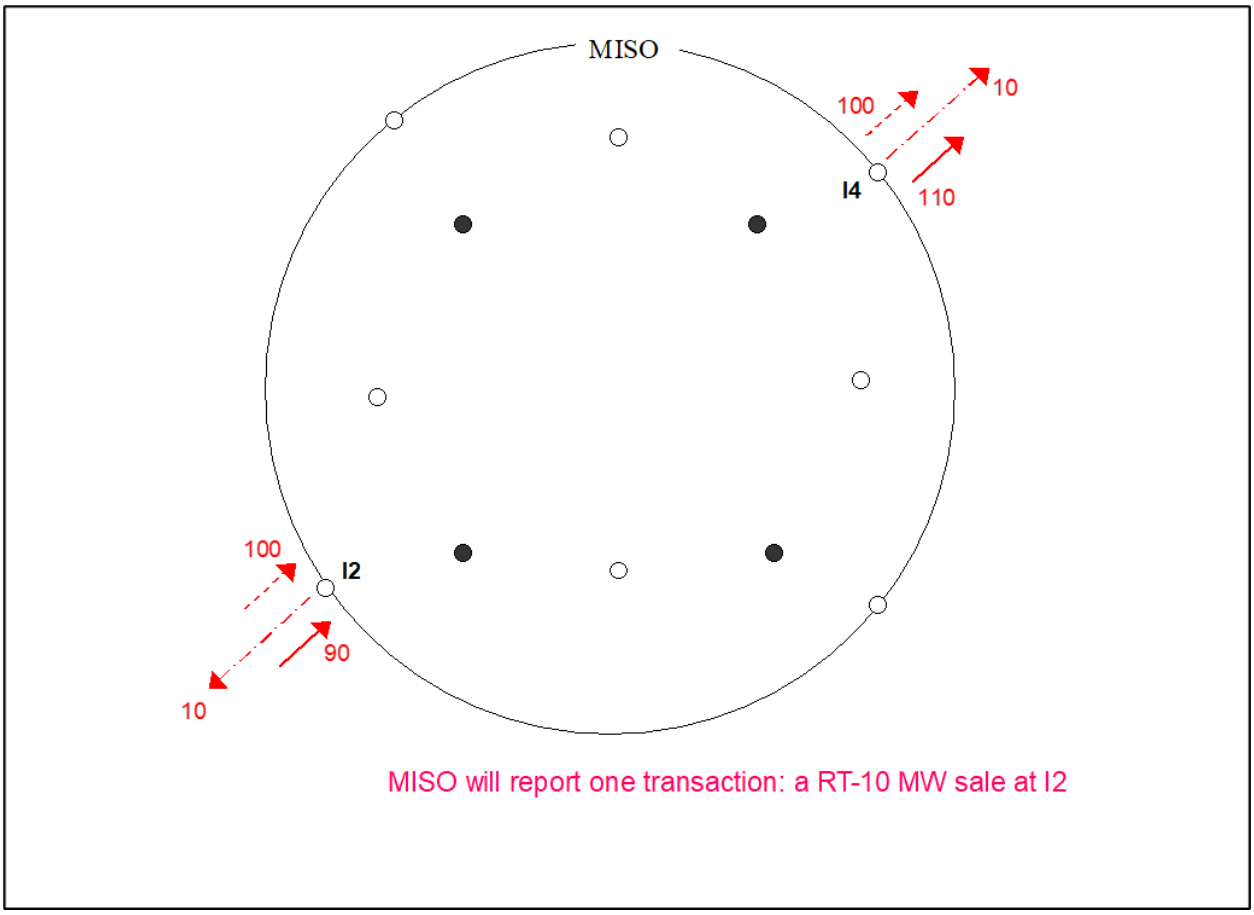


Exhibit C- 52: RT 10 MW Sale at I2 & RT 10 MW Sale at I4

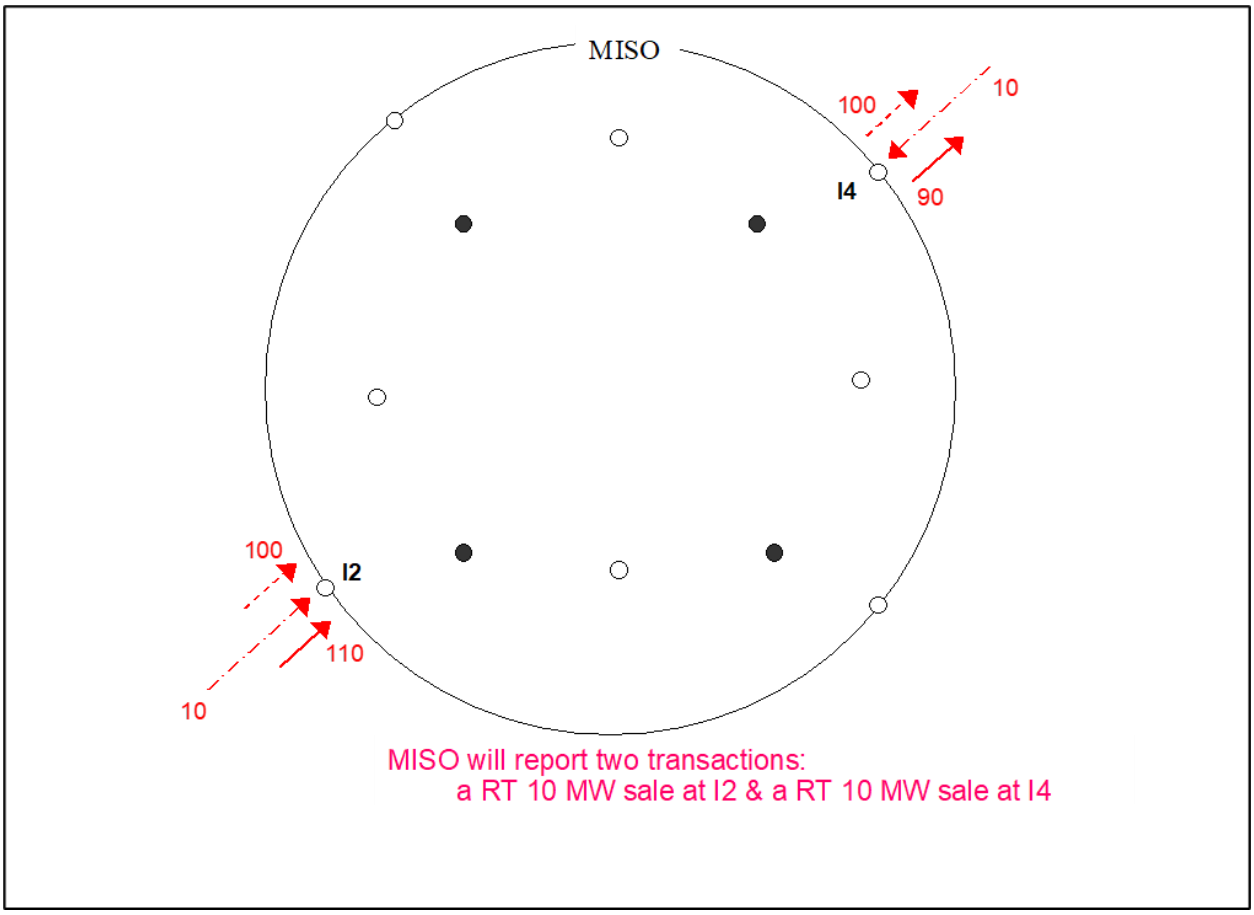


Exhibit C- 53: RT 10 MW Sale at I4

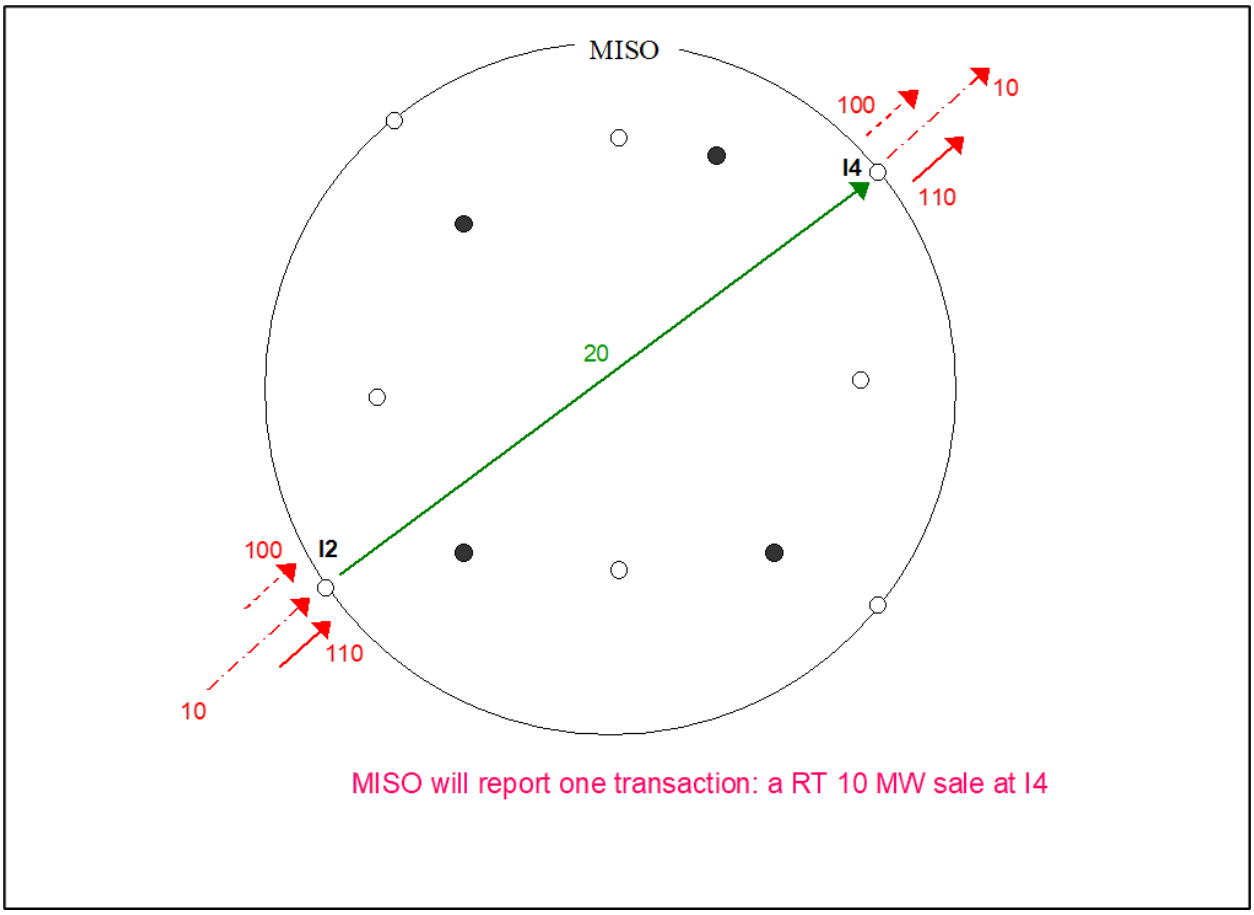


Exhibit C- 54: RT 10 MW Sale at I2

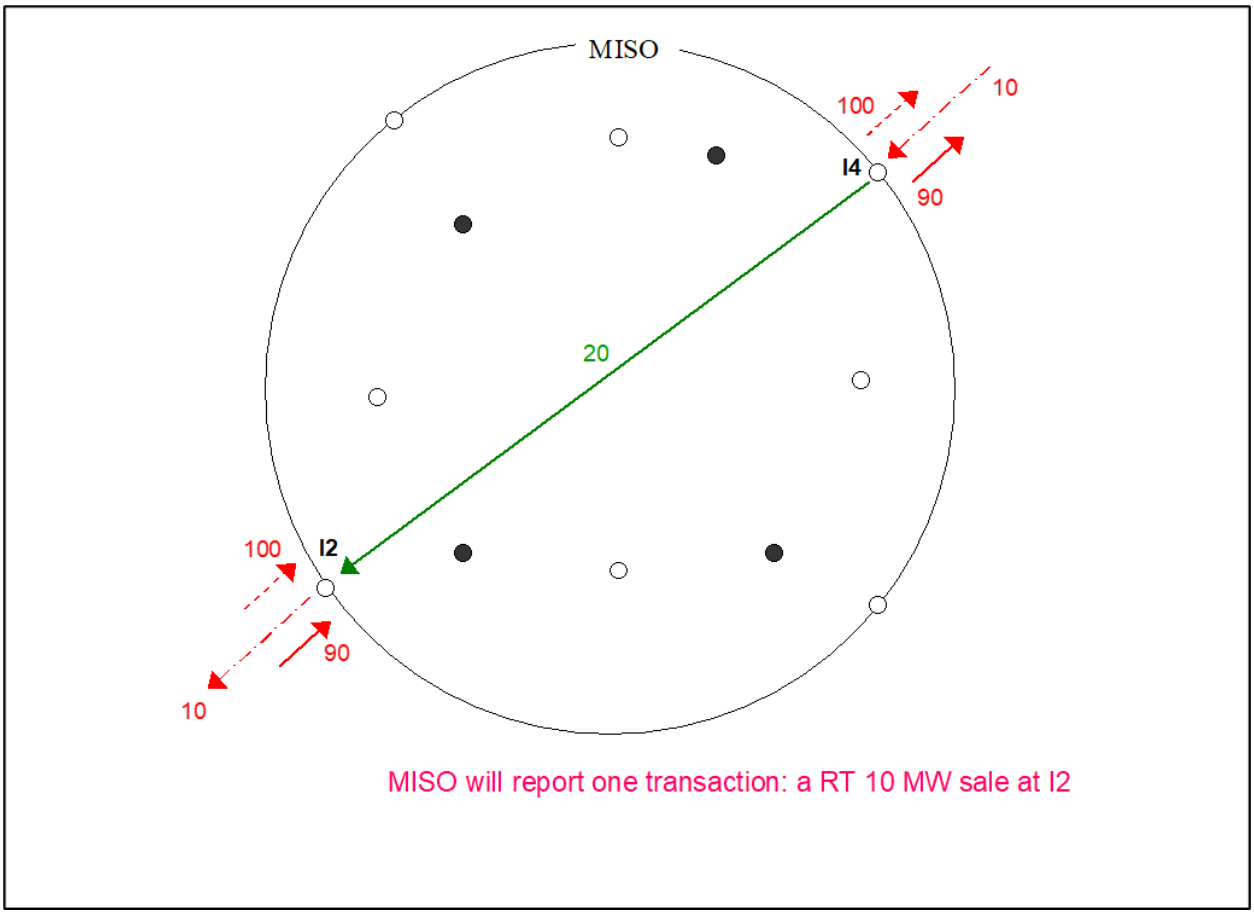


Exhibit C- 55: RT -5 MW Sale at I2 & RT 5 MW Sale at I4

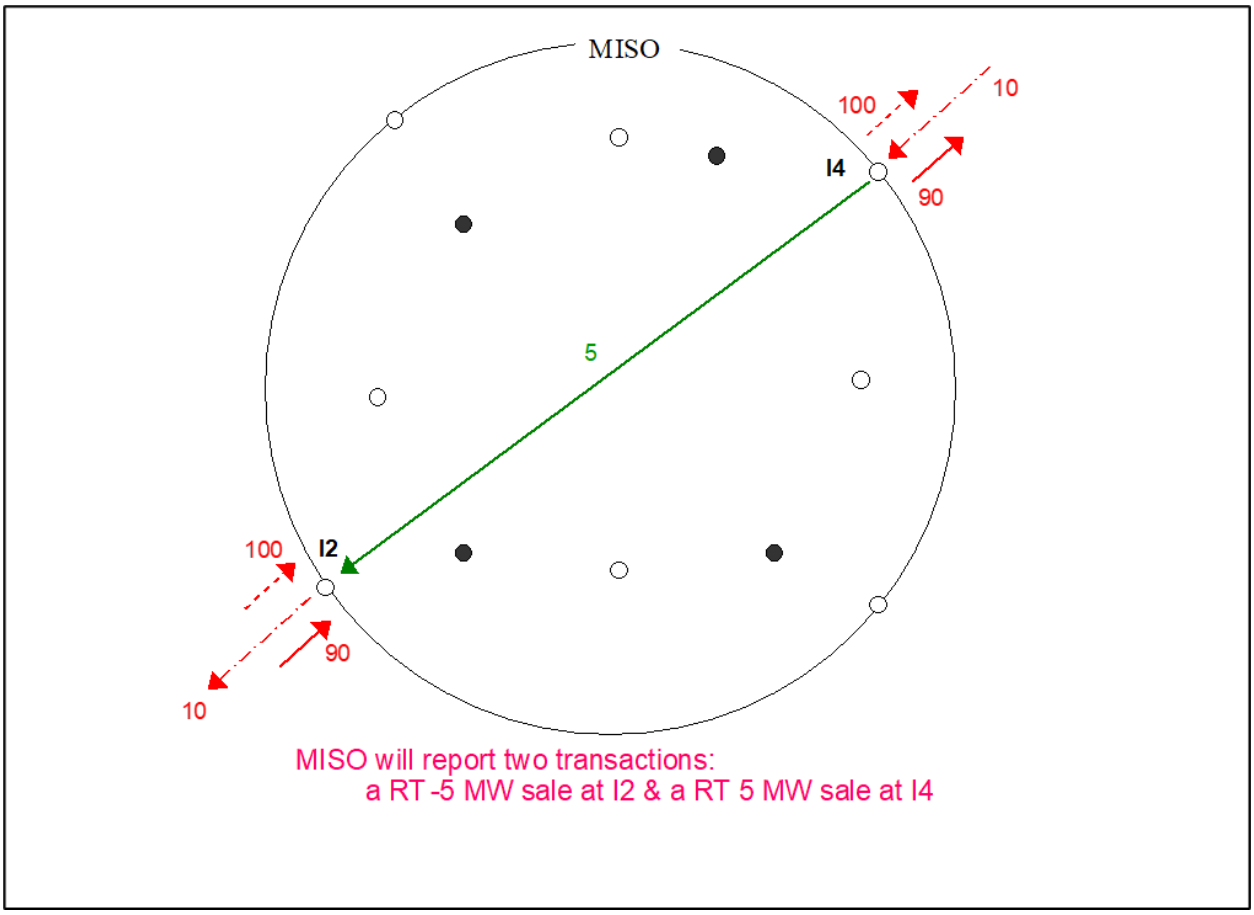


Exhibit C- 56: RT -5 MW Sale at I2 & a RT -15 MW Sale at I4

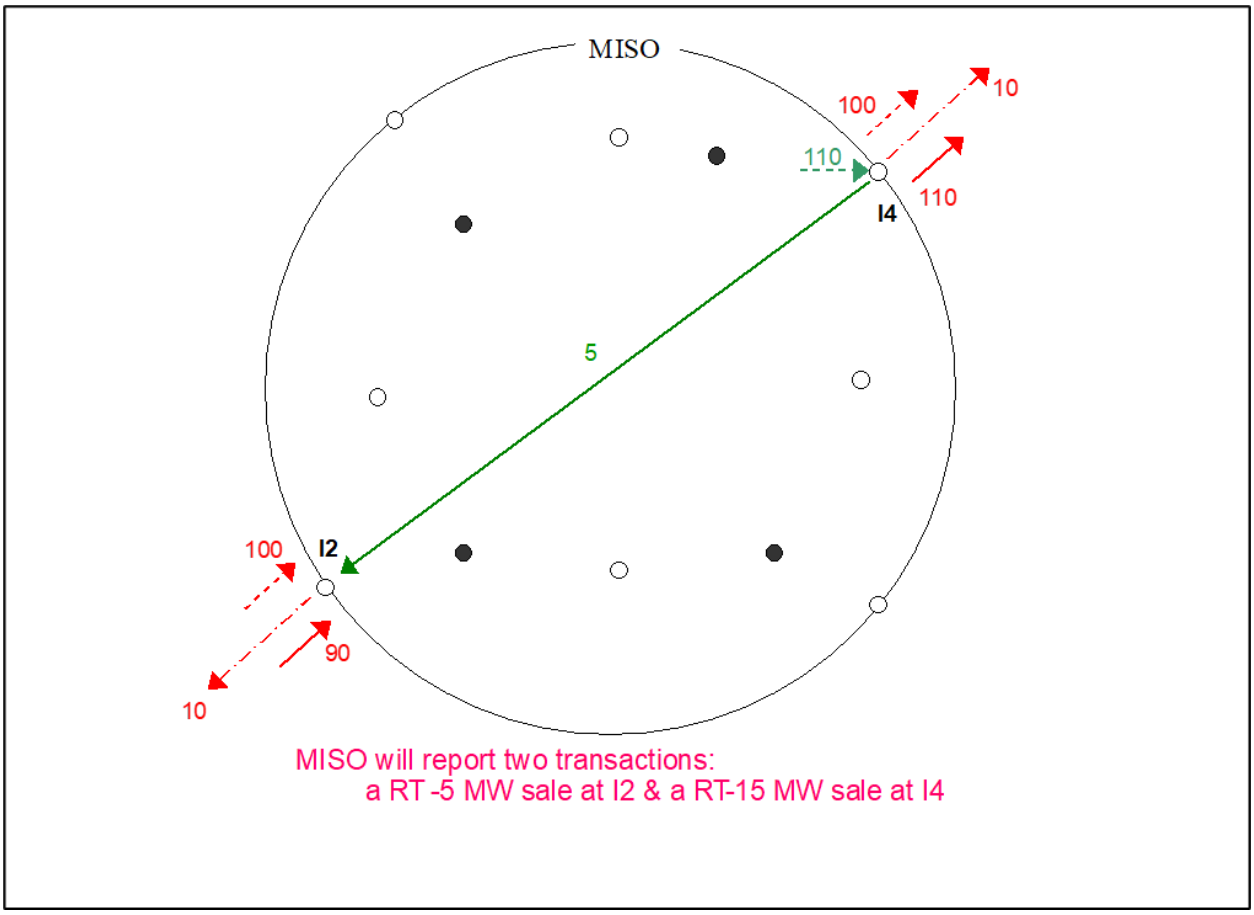


Exhibit C- 57: No RT Transactions Reported #3

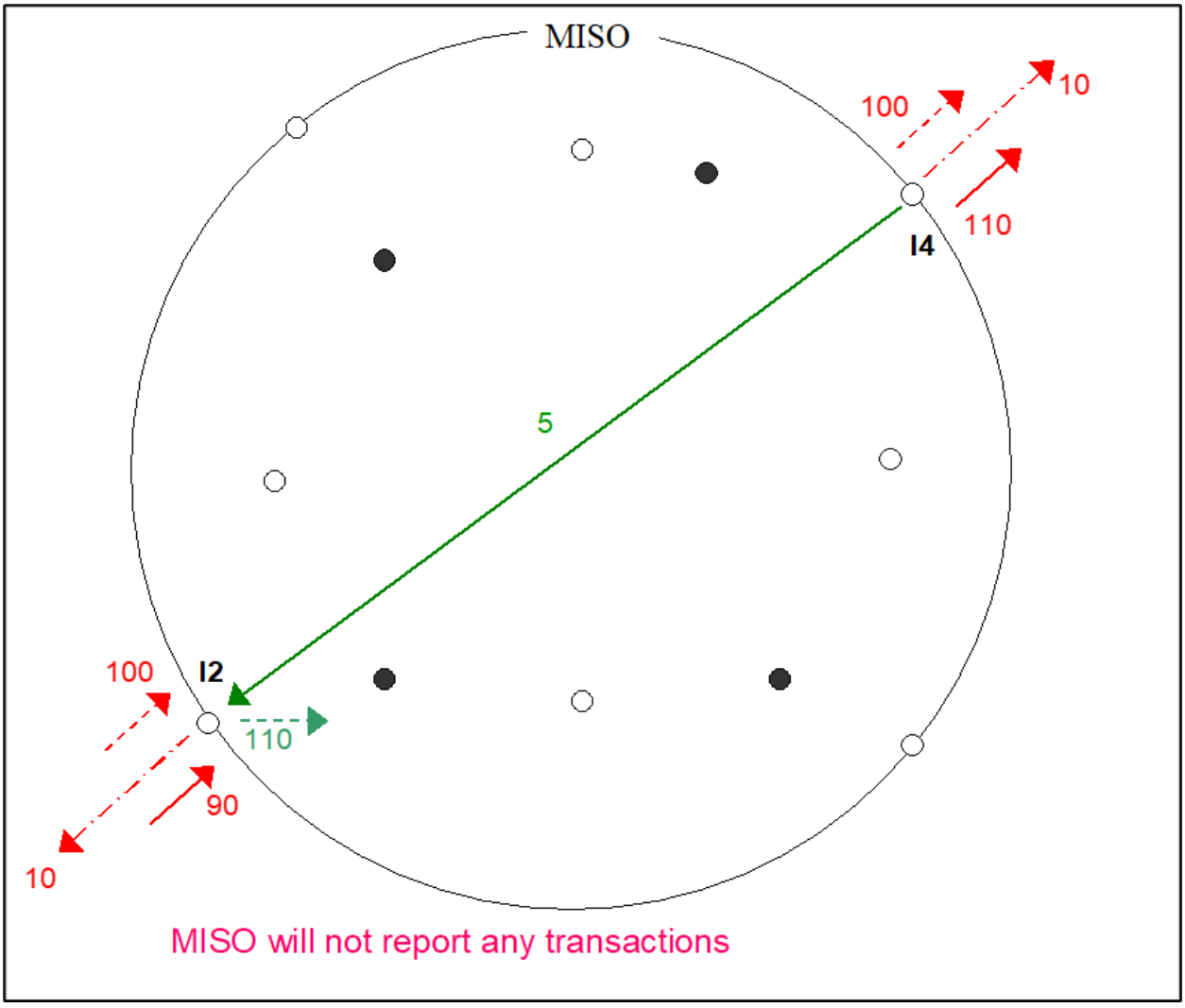


Exhibit C- 58: RT -5 MW Sale at I2, Scenario #1

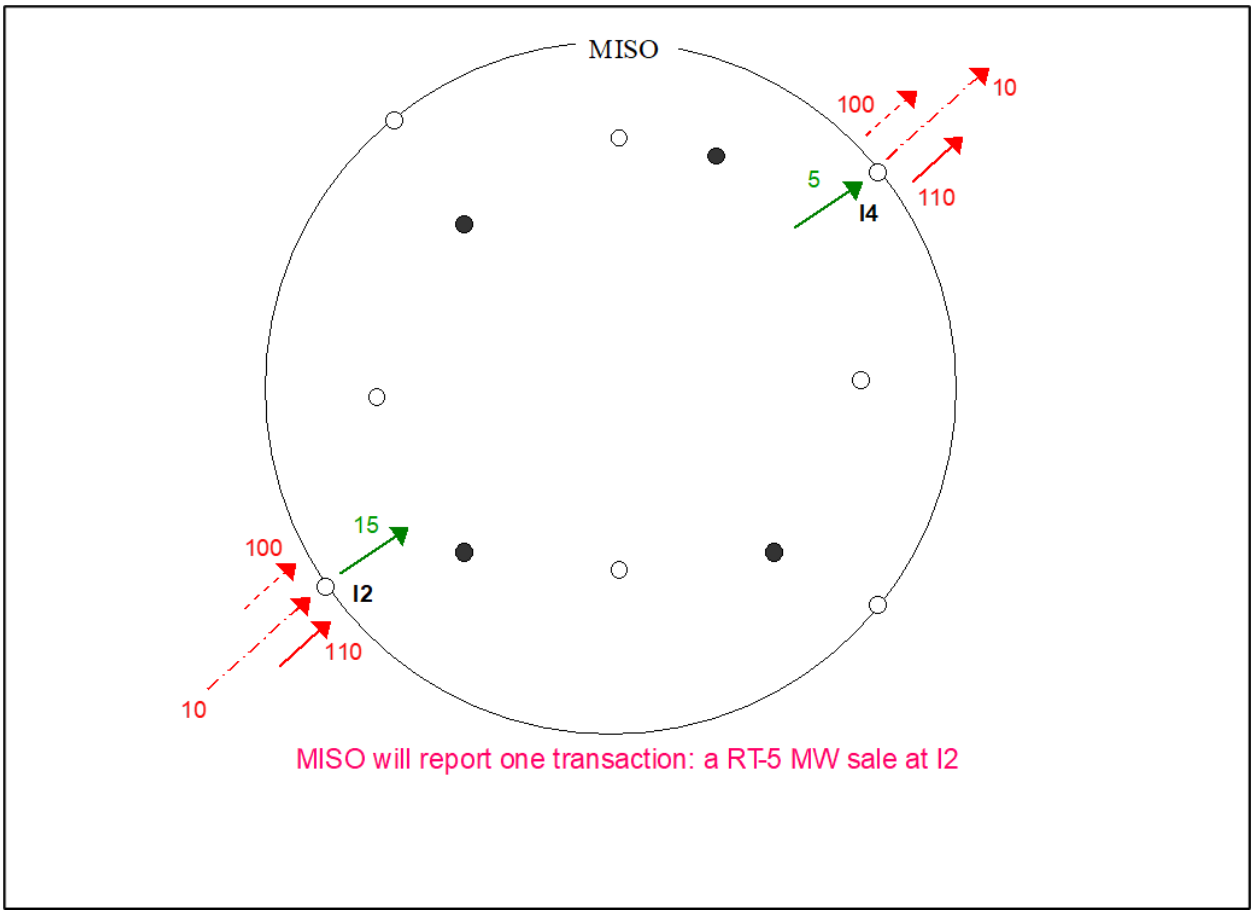


Exhibit C- 59: RT -5 MW Sale at I2, Scenario #2

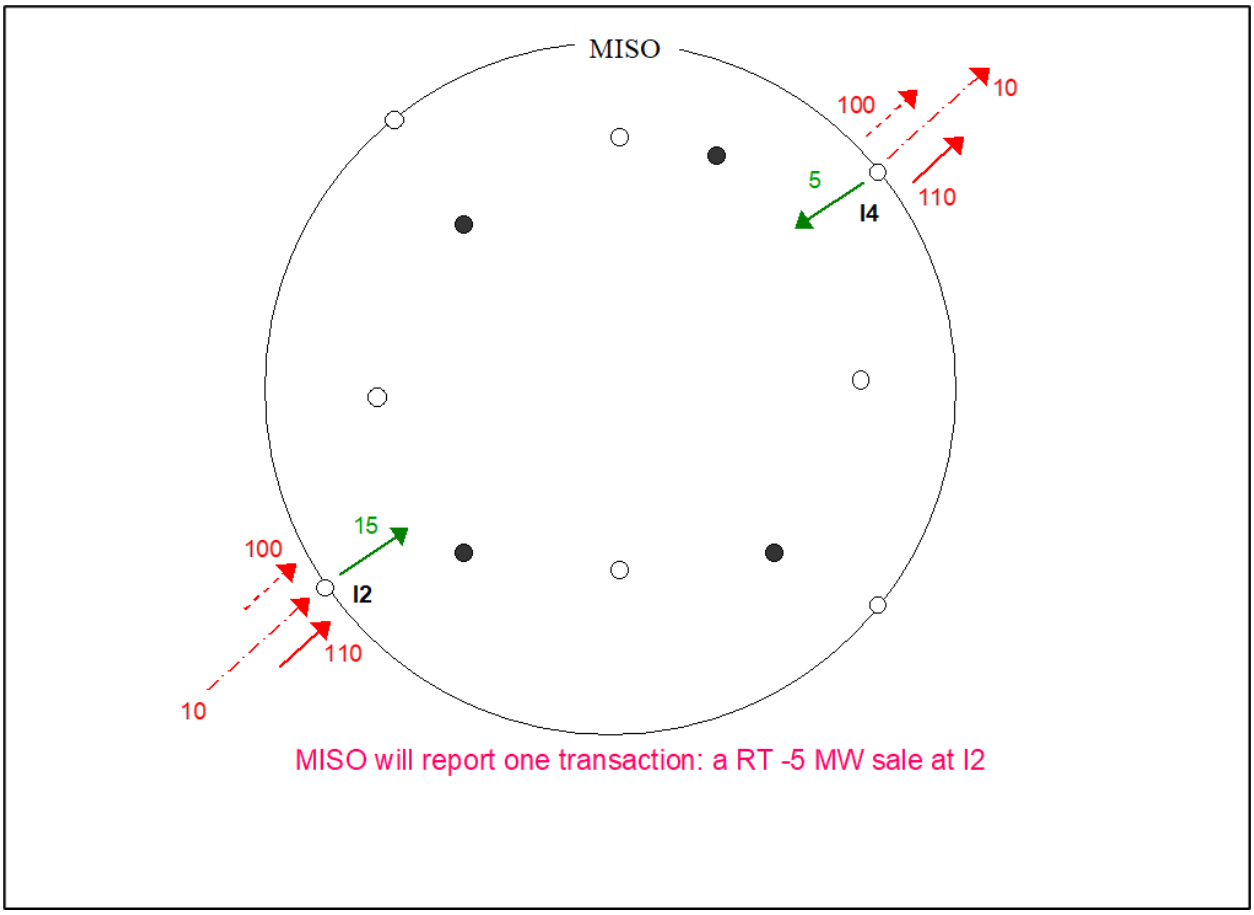


Exhibit C- 60: RT 5 MW Sale at I2

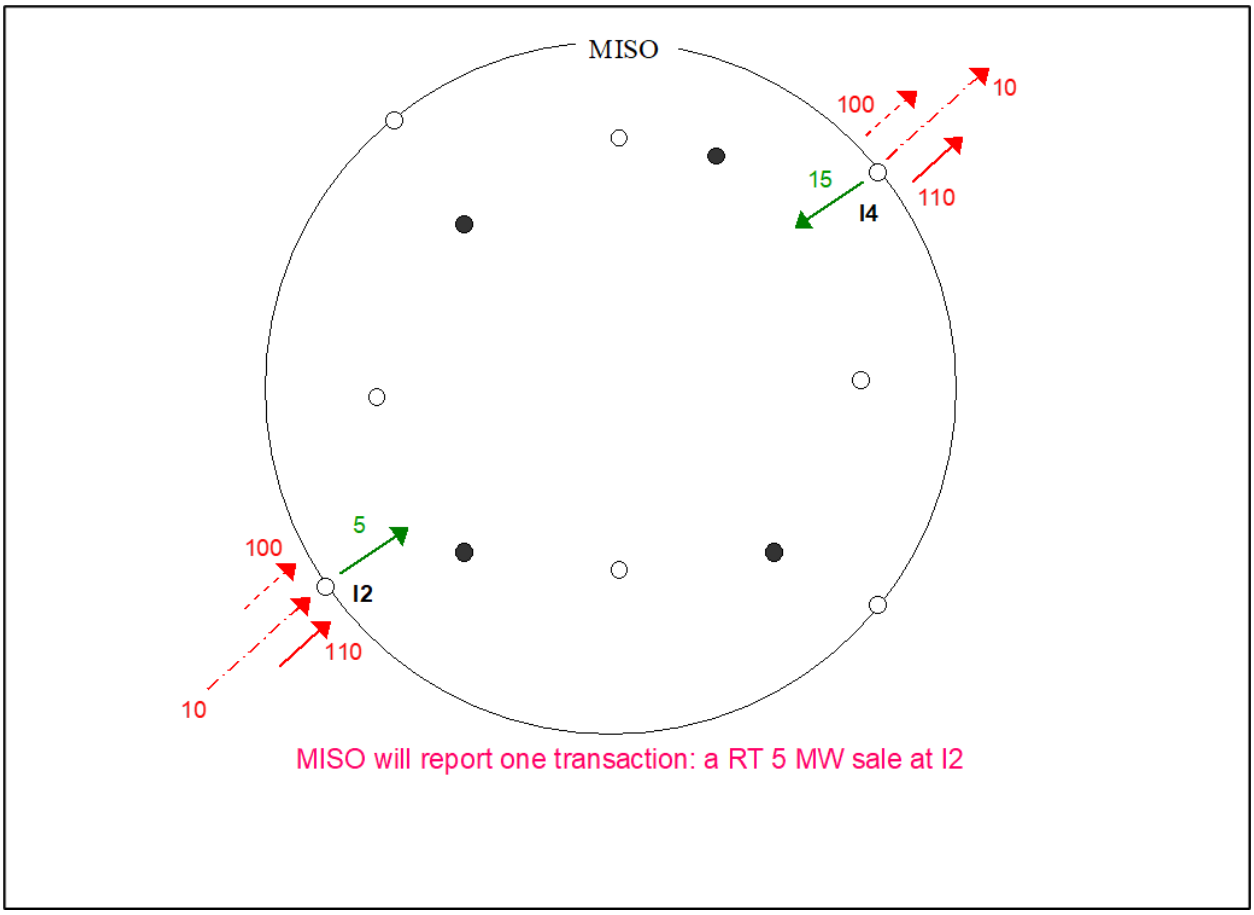


Exhibit C- 61: RT 10 MW Sale at I4

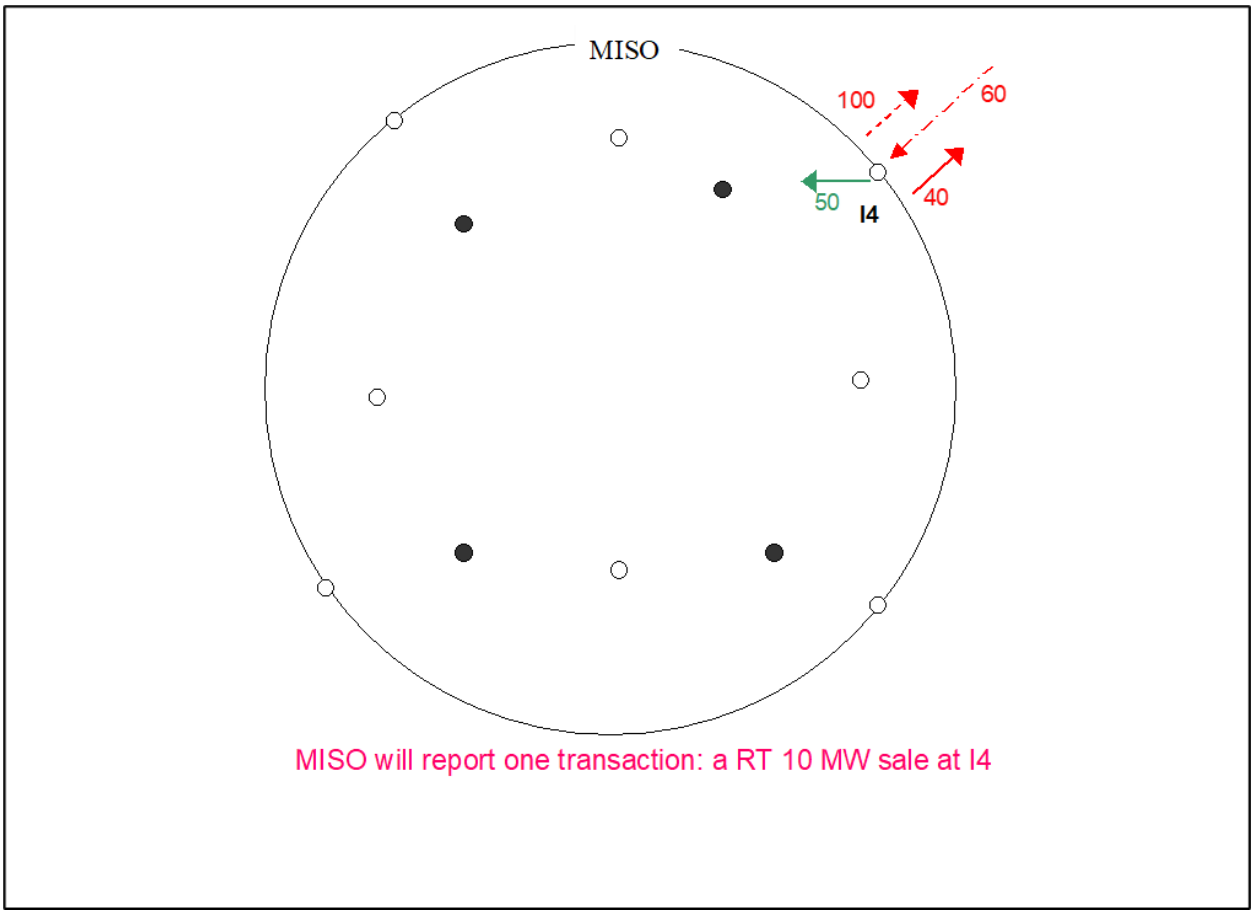


Exhibit C- 62: RT 80 MW Sale at I1 & RT -85 MW Sale at I2

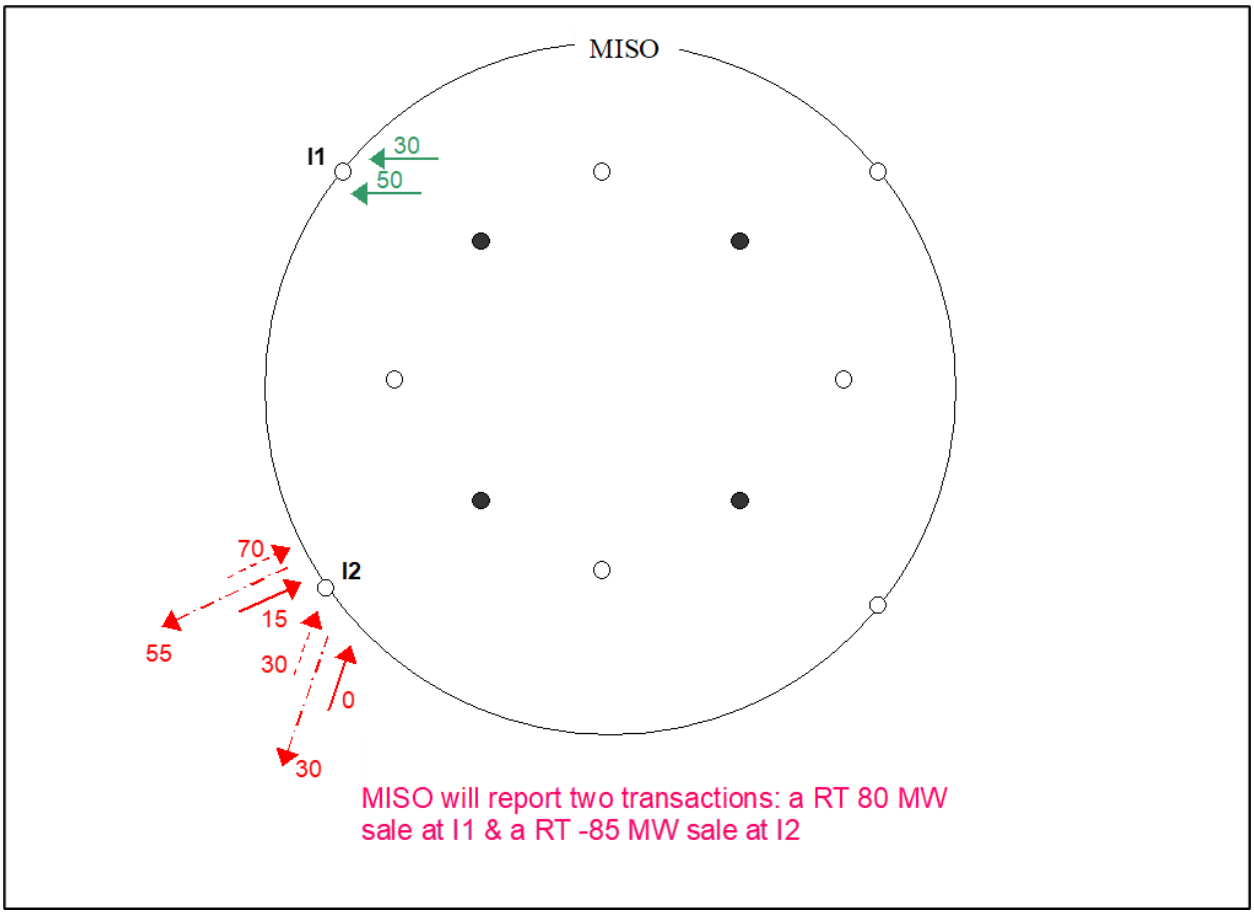


Exhibit C- 63: RT -40 MW Sale at I2

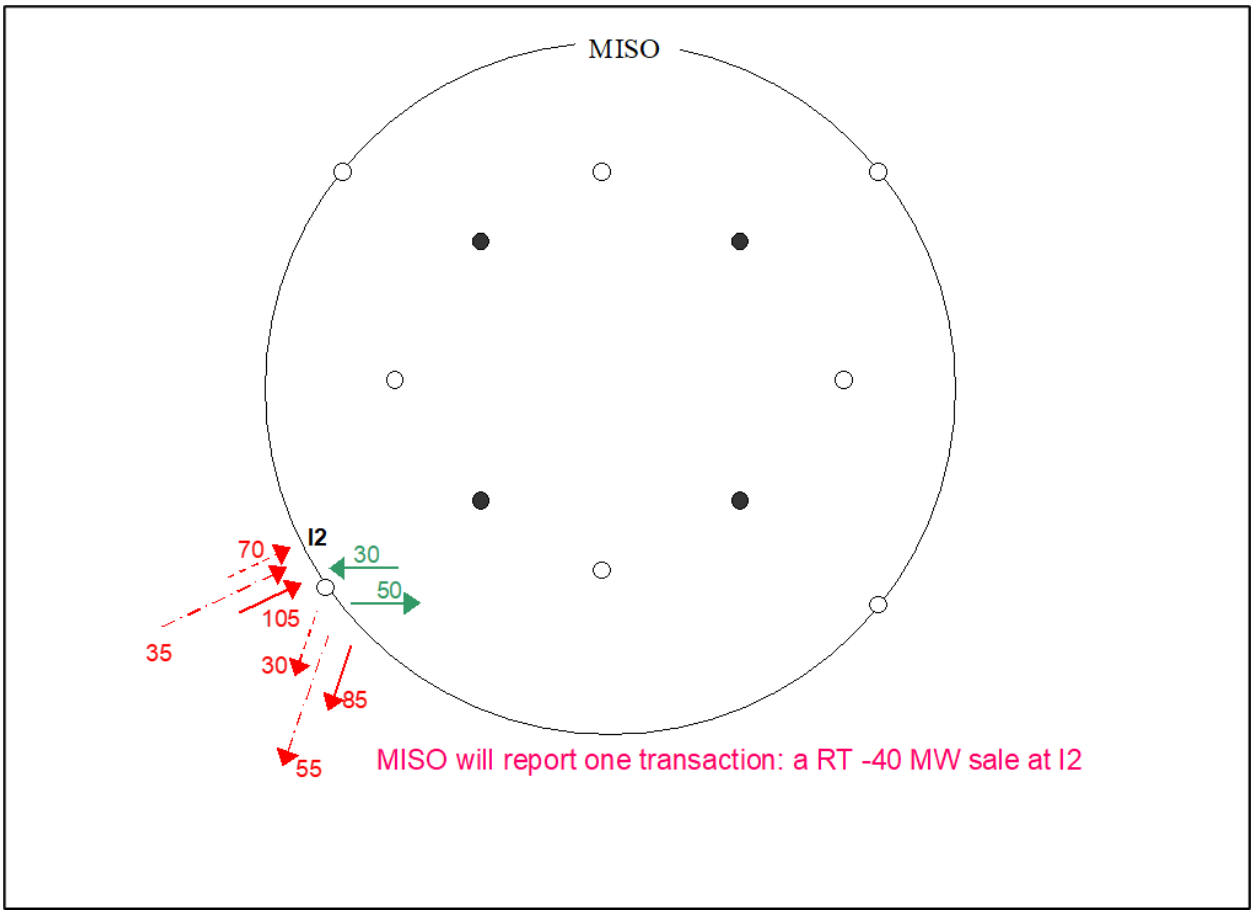


Exhibit C- 64: RT -100 MW Sale at I2

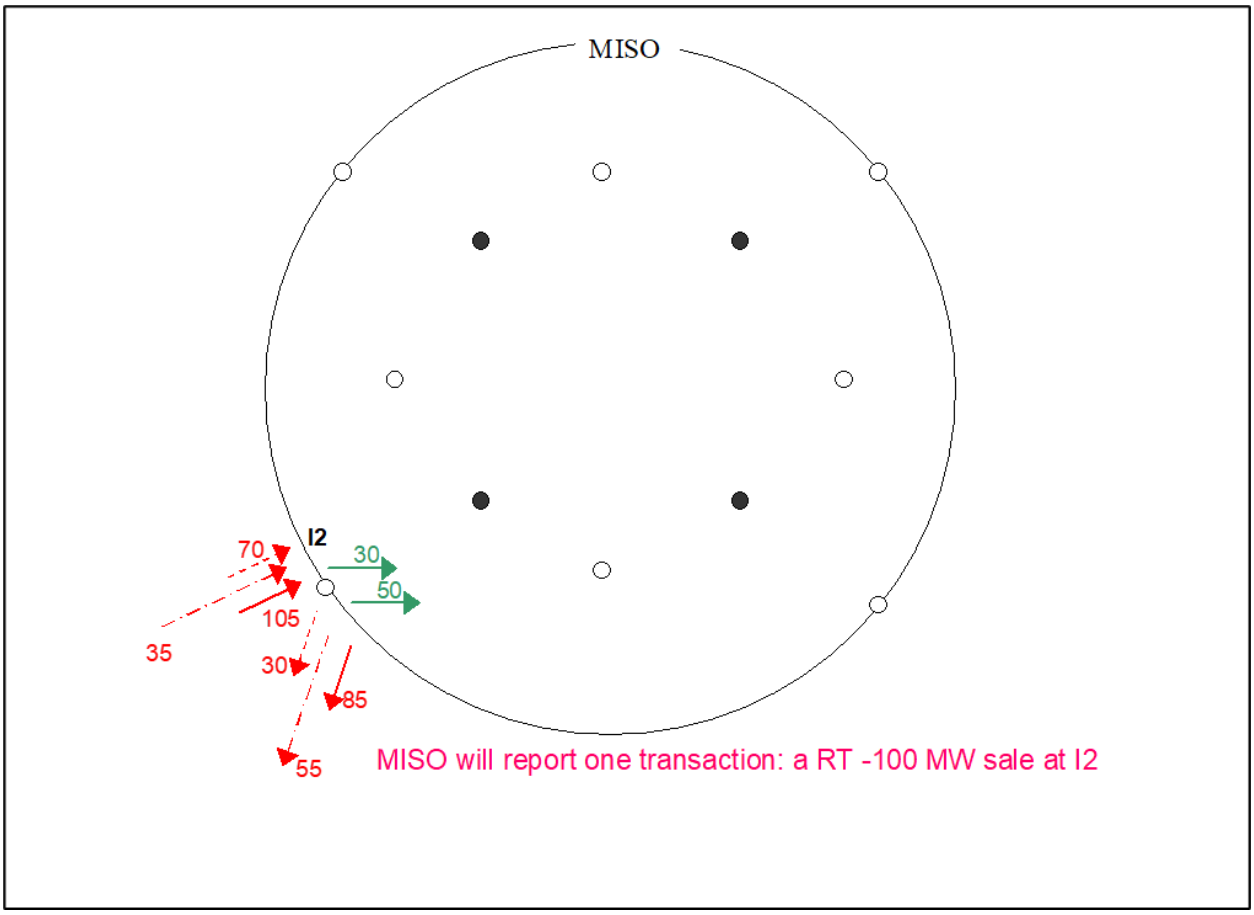
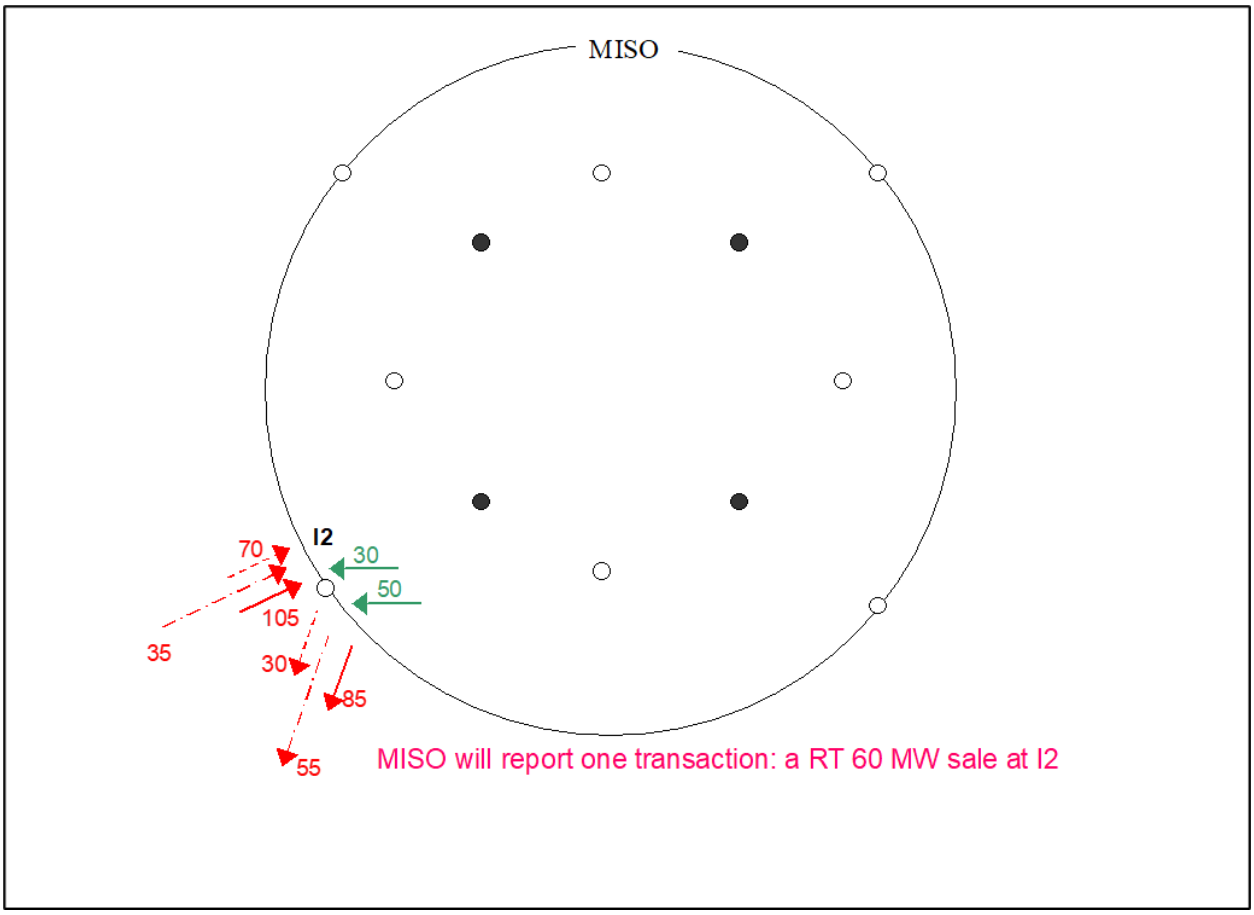
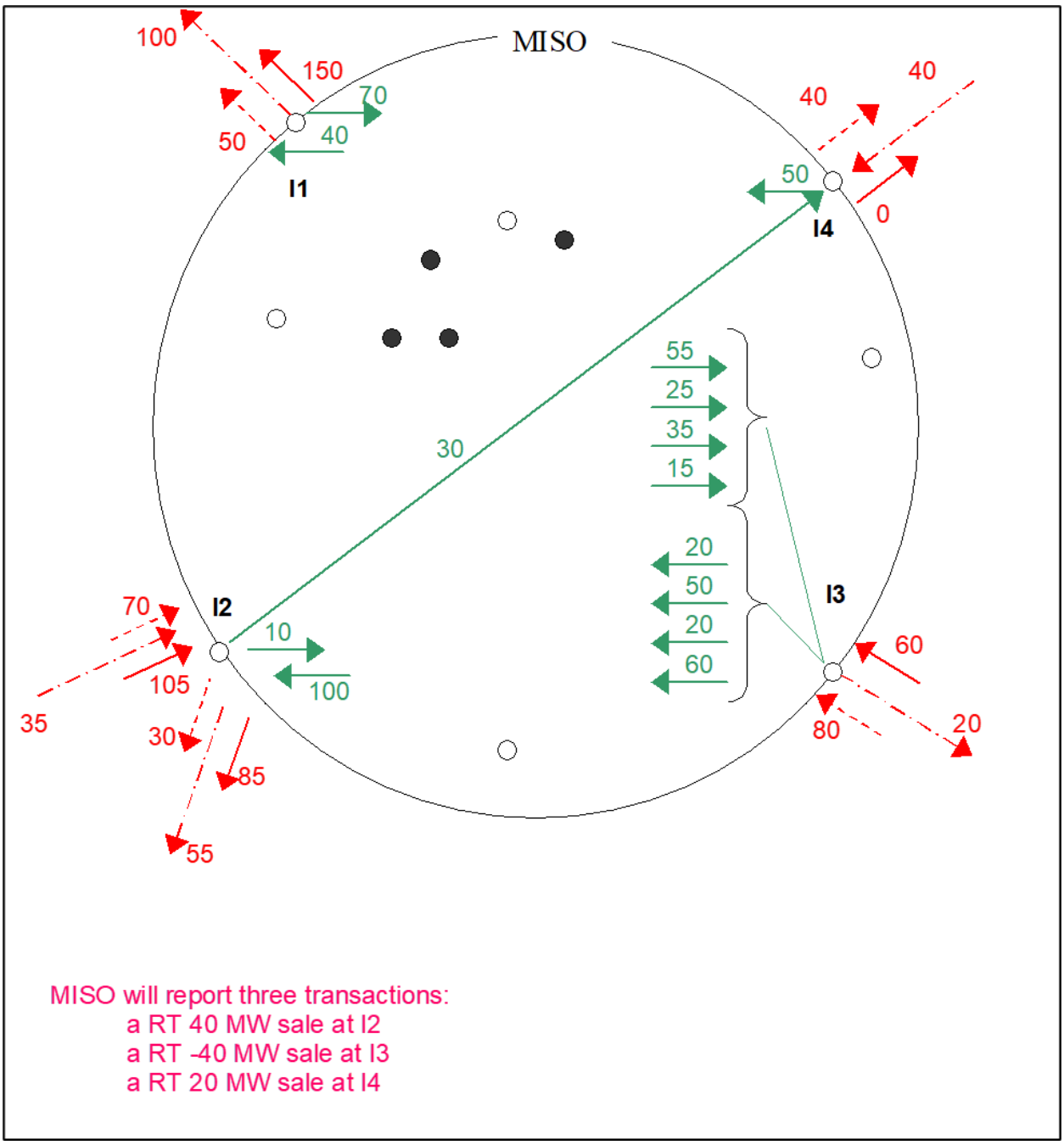


Exhibit C- 65: RT 60 MW Sale at I2



C.1.6 Real-Time MW at a common Commercial Pricing Node

Exhibit C- 66: RT 40 MW Sale at I2 & RT -40 MW Sale at I3 & RT 20 MW Sale at I4



MISO will report three transactions:
a RT 40 MW sale at I2
a RT -40 MW sale at I3
a RT 20 MW sale at I4

The following exhibits provide examples of MISO reporting scenarios for Real-Time MW at a common CPNode.

Exhibit C- 67: RT 20 MW Sale at O4

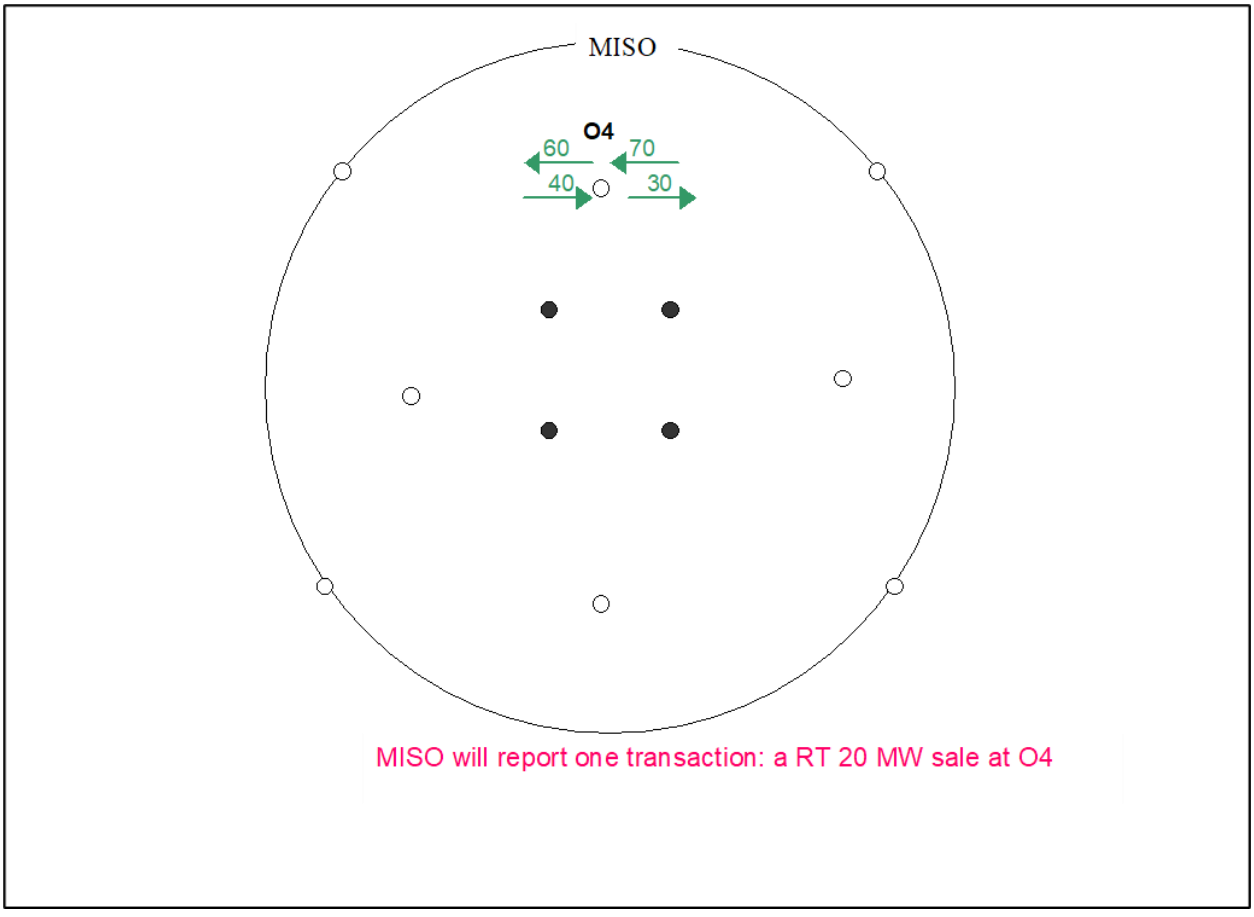
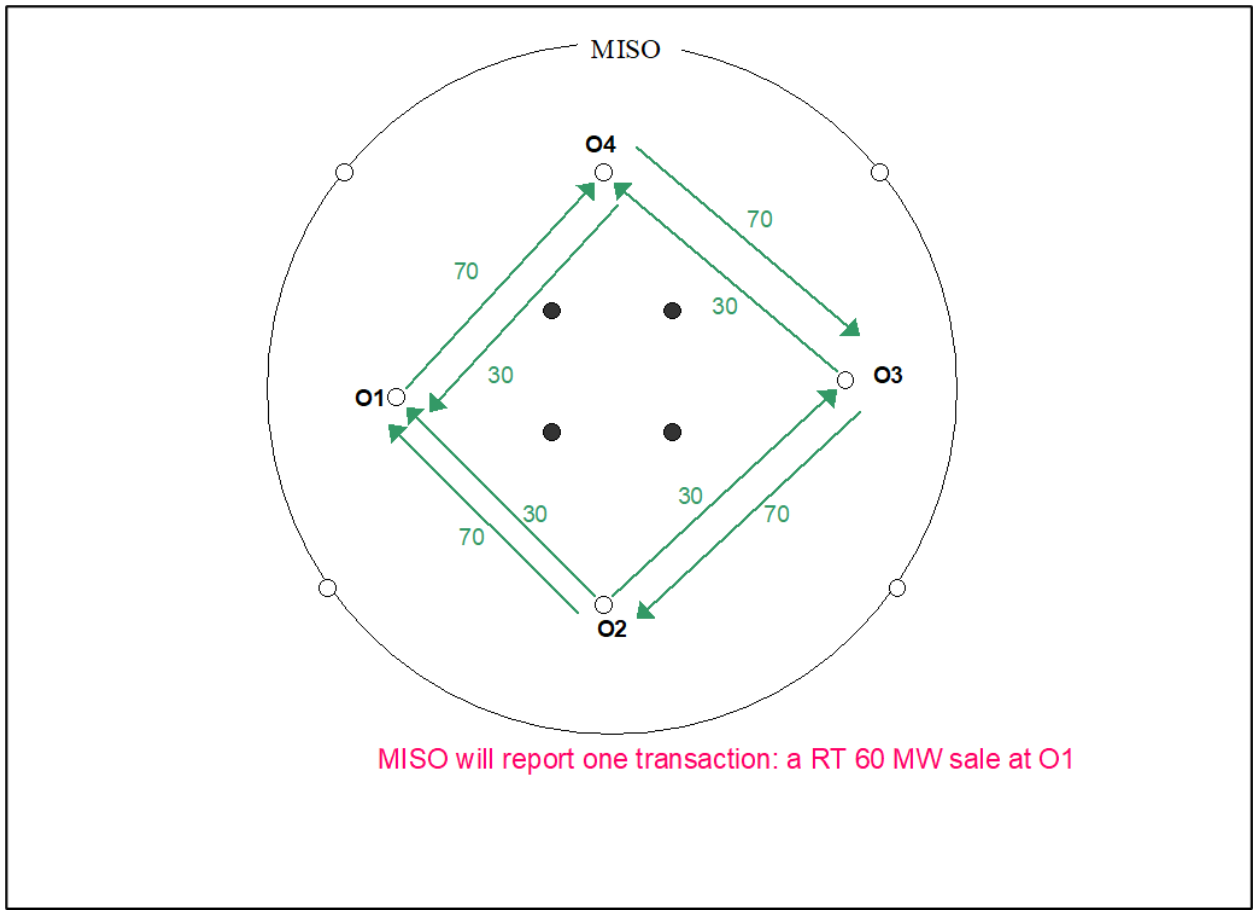


Exhibit C- 68: RT 60 MW Sale at O1



H Disclaimer

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I Revision History

Doc Number	Description	Revised by:	Effective Date
MS-OP-030-r15	Annual Review completed. No additional updates necessary.	E. Fjellman	SEP-01-2024
MS-OP-030-r14	Annual Review completed.	E. Fjellman	SEP-01-2023
MS-OP-030-r13	Annual Review completed. No additional updates necessary.	E. Fjellman	SEP-08-2022
MS-OP-030-r12	Annual Review completed. No additional updates necessary.	E. Fjellman	AUG-12-2021
MS-OP-030-r11	Annual Review completed. No additional updates necessary.	E. Fjellman	JUN-16-2020
MS-OP-030-r10	Annual Review completed. No additional updates necessary.	E. Fjellman	JUN-14-2019
MS-OP-030-r9	Annual Review completed. No additional updates necessary.	E. Fjellman	JUN-01-2018

MS-OP-030-r8	Annual Review completed. No additional updates necessary.	E. Fjellman	JUN-01-2017
MS-OP-030-r7	Annual Review completed. No additional updates necessary.	E. Fjellman	JUN-01-2016
MS-OP-030-r6	Annual Review completed. No additional updates necessary.	E. Fjellman	MAR-31-2015
MS-OP-030-r5	Annual Review completed. No additional updates necessary.	O. Kacmar	MAR-31-2014
MS-OP-030-r4	Annual review completed. · No content changes · Updated exhibit numbers Due to manual error in revision numbering ‘a’, ‘b’, and ‘c’ were added to distinguish versions of revision 2.	B. Selear	MAR-01-2013
MS-OP-030-r3	Annual review completed. No content changes	B. Selear	JAN-12-2012
MS-OP-030-r2c	MISO rebranding changes	B. Selear	JAN-06-2010
MS-OP-030-r2b	Annual review completed 12/30/2010. No content changes. Format change to section C.1.6 title only.	E. Fjellman	JAN-06-2010

MS-OP-030-r2a	Annual Review. · Removed Issue Date column in Revision History per Controlled Documents · Changed all BPM-MS-001 references to BPM-005 per Controlled Documents No additional updates necessary.	E. Fjellman	JAN-06-2010
MS-OP-030-r1	Add descriptions of reported EQR data types to Section C	D. Croy	JAN-06-2009
MS-OP-030	Establish separate Controlled Document instead of BPM Attachment B; Update for ASM	R. Terry	JAN-06-2009