



MARKET MANUAL

**Market Manual 9: Day-Ahead
Commitment Process**

**Part 9.4: Real-Time
Integration of the DACP**

Issue 7.0

This document provides guidance to Market Participants on the submission of dispatch data in the Real-Time Energy and Operating Reserve Markets.

Disclaimer

The posting of documents on this website is done for the convenience of *market participants* and other interested visitors to the *IESO* website. Please be advised that, while the *IESO* attempts to have all posted documents conform to the original, changes can result from the original, including changes resulting from the programs used to format the documents for posting on the website as well as from the programs used by the viewer to download and read the documents. The *IESO* makes no representation or warranty, express or implied that the documents on this website are exact reproductions of the original documents listed. In addition, the documents and information posted on this website are subject to change. The *IESO* may revise, withdraw or make final these materials at any time at its sole discretion without further notice. It is solely your responsibility to ensure that you are using up-to-date documents and information.

This *market manual* may contain a summary of a particular *market rule*. Where provided, the summary has been used because of the length of the *market rule* itself. The reader should be aware, however that where a *market rule* is applicable, the obligation that needs to be met is as stated in the "*Market Rules*". To the extent of any discrepancy or inconsistency between the provisions of a particular *market rule* and the summary, the provision of the *market rule* shall govern.

Document ID	IESO_MAN_0079
Document Name	Part 9.4: Real-Time Integration of the DACP
Issue	Issue 7.0
Reason for Issue	Issue released for Baseline 44.1
Effective Date	December 2, 2020

Document Change History

Issue	Reason for Issue	Date
For changes prior to 2015, refer to versions 5.0 and prior		
4.0	Issue released in advance of Baseline 33.1 to update IESO logo	March 31, 2015
5.0	Issue released for Baseline 34.1	December 2, 2015
6.0	Issue released in advance of Baseline 44.0	June 29, 2020
7.0	Updated to meet accessibility requirements pursuant to the <i>Accessibility for Ontarians with Disabilities Act</i> .	December 2, 2020

Table of Contents

List of Tables	iii
Table of Changes	iv
1. Market Manuals	1
2. About this Manual	2
2.1 Conventions	2
3. Introduction	3
3.1 Purpose	3
3.2 Scope.....	3
4. Post Day-Ahead Commitment Processes	4
4.1 Observing Day-Ahead Commitments in Real Time.....	4
4.1.1 Reliability Constraints	4
4.1.2 Passing DACP Commitments to Real Time.....	4
4.2 De-commitment and Withdrawal	6
4.2.1 Withdraw Dispatch Data	6
4.2.2 IESO De-commitment of Dispatchable Generation Facilities	7
4.2.3 Day-Ahead Production Cost Guarantee Impact	8
4.3 Day-Ahead Intertie Transactions	8
4.4 Real-Time Market Integration	8
4.4.1 Pseudo Unit Offer Submission—Real Time	8
4.4.2 Minimum Loading Point Price Cap	9
4.5 Submit Dispatch Data	9
4.5.1 Non-dispatchable Generation Facilities	9
4.5.2 Dispatchable Loads and Dispatchable Generation Facilities	9
4.5.3 Imports and Exports	10
4.5.4 Hourly Demand Response Resources.....	10
4.5.5 Availability Declaration Envelope for Dispatchable Generation Facilities and Dispatchable Loads.....	11
4.5.6 Submit Outage Requests	12
4.5.7 Submit Non-Performance Events	13
4.5.8 Submit Outage Cancellation Requests	13
4.6 Synchronize Units Committed in the Day-Ahead	13

5. Procedures for Real-Time Integration of the DACP	14
5.1 Withdraw Offers for a Committed Resource	14
5.1.1 Withdraw Offers for a Committed Resource – Procedure	14
5.1.2 Workflow for Withdraw Offers for a Committed Resource	14
5.1.3 Procedural Steps for Withdraw Offers for a Committed Resource	16
5.2 Respond to IESO Request for De-commitment	19
5.2.1 Respond to IESO Request for De-commitment— Procedure	19
5.2.2 Work Flow for Respond to IESO Request for De- commitment	19
5.2.3 Procedural Steps for Respond to IESO request for De- commitment	20

List of Figures

Figure 5-1: Withdraw Offers for a Committed Resource	15
Figure 5-2: Workflow for Respond to IESO Request for De-commitment.....	19

List of Tables

Table 2-1: Table of Contents—Market Manual 9.0	2
Table 4-1: Combined Cycle Plant DACP Commitments	6
Table 5-1: Workflow Diagram Legend.....	14
Table 5-2: Procedural Steps Legend.....	16
Table 5-3: Procedural Steps for Withdraw Offers for a Committed Resource....	16
Table 5-4: Procedural Steps for Respond to IESO Request for De-commitment	20

Table of Changes

Reference (Paragraph and Section)	Description of Change
Throughout	Updated to meet accessibility requirements pursuant to the <i>Accessibility for Ontarians with Disabilities Act</i> .

1. Market Manuals

The *market manuals* consolidate the market procedures and associated forms, standards, and policies that define certain elements relating to the operation of the *IESO-administered markets*. Market procedures provide more detailed descriptions of the requirements for various activities than is specified in the "*Market Rules*". Where there is a discrepancy between the requirements in a document within a *market manual* and the *market rules*, the *market rules* shall prevail. Standards and policies appended to, or referenced in, these procedures provide a supporting framework.

– End of Section –

2. About this Manual

The “Day-Ahead Commitment Process” is Volume 9 of the *market manuals*, where this document forms “Part 9.4: Real-Time Integration of the Day-Ahead Commitment Process”.

The “Day-Ahead Commitment Process Manual” is composed of the following document set:

Table 2-1: Table of Contents—Market Manual 9.0

Document ID	Part No.	Name of Procedure Document
IESO_MAN_0041	9.0	Day-Ahead Commitment Process Overview
IESO_MAN_0077	9.2	Submitting Operational and Market Data for the Day-Ahead Commitment Process
IESO_MAN_0078	9.3	Operation of the Day-Ahead Commitment Process
IESO_MAN_0079	9.4	Real-Time Integration of the Day-Ahead Commitment Process
IESO_MAN_0080	9.5	Settlement of the Day-Ahead Commitment Process

For information on submitting registration data for the Day-Ahead Commitment Process, refer to Market Manual 1.5: Market Registration Procedures.

2.1 Conventions

The *market manual* standard conventions are as defined in “Part 9.0: Day-Ahead Commitment Process”, Section 2.4 Conventions.

– End of Section –

3. Introduction

3.1 Purpose

This document provides you with the procedures associated with the interaction of the Day-Ahead Commitment Process with real time. These procedures describe the *market participant* actions required to manage the commitments received from the Day-Ahead Commitment Process (DACP) in real time.

3.2 Scope

This *market manual* provides a summary of the steps and interfaces between you and the *IESO* after the completion of the DACP. The procedural workflows and steps described in this document serve as a roadmap for you and the *IESO*, and reflect the requirements set out in the *market rules* and applicable *IESO* policies and standards.

The overview information in Section 4 is provided for context purposes only and includes the main actions of the procedures as set out in Section 5.

This *market manual* describes the procedures to withdraw from a commitment received during the DACP and to interact with the *IESO* when you are required to de-commit a *generation unit*.

– End of Section –

4. Post Day-Ahead Commitment Processes

This section describes the processes that take place after the Day-Ahead Commitment Process (DACP) and their interaction with real time.

4.1 Observing Day-Ahead Commitments in Real Time

If you are eligible for the Day-Ahead Production Cost Guarantee (DA-PCG) and you submitted *offers* into the DACP, you are deemed to have accepted the DA-PCG for your resources. You cannot call the IESO to reject the guarantee to remove the day-ahead constraints on your resources. To remove constraints, you must complete the withdrawal process as described in Section 4.2.

DA-PCG eligible dispatchable *generation facilities* that are committed by the Day-Ahead Calculation Engine (DACE) have constraints applied that will be observed in the *Pre-dispatch* and *real-time scheduling* processes. For each committed *generation facilities*, we apply a minimum constraint for its submitted *minimum loading point* (DGD MLP) for the hours where it received a day-ahead schedule.

Therefore, the resource will be scheduled and *dispatched* to a quantity no lower than its *minimum loading point* (MLP). A committed *generation facility* will not be *dispatched* below its MLP unless we approve a withdrawal request or require de-commitment for *reliability*.

4.1.1 Reliability Constraints

We will only apply *reliability* constraints if we consider our intervention necessary in order to ensure or maintain *reliability*¹. We will allow the market to try to resolve any identified adequacy issues prior to applying *reliability* constraints.

Reliability constraints for *adequacy* are not applied until after the DACP process has completed.

4.1.2 Passing DACP Commitments to Real Time

When passing DACP commitments to real time (RT), committed production cost guarantee (PCG) eligible *generation facilities* have constraints applied in the *Pre-dispatch* and the RT scheduling processes. We apply minimum constraints for the *generation facility's* submitted DGD MLP for a period equal to its day-ahead schedule, as per DACP *Schedule of Record*. These constraints will be available for use in the *Pre-dispatch* starting with the 15:07 run. You cannot reject the DACP commitment in order to remove the constraints.

If IESO tool problems prevent us from making your day-ahead commitments available for the 15:07 pre-dispatch run, we will notify you of the delay and your commitments report will not be issued.

¹ *Reliability* means *security* and *adequacy* (both local and global).

When our tools are made available, we will make your commitments available to *pre-dispatch* by applying the necessary constraints and your commitments report will be issued at that time.

In the period when your day-ahead commitments are not available to *pre-dispatch*, you should *offer* in a way that will result in a *pre-dispatch* and real-time schedule that reflects your day-ahead commitment and will result in the desired DA-PCG treatment.

DACP Commitments – PCG-Eligible Generation Facilities (Not a Combined Cycle Plant)

PCG-eligible resources (including physically aggregated resources) that have not been identified as a part of a combined cycle plant can be determined by the following:

- A set of *generation facilities* deemed PCG-eligible through registration
- Minus the *generation facilities* recorded to be a steam turbine (ST) of a combined cycle plant
- Minus the *generation facilities* deemed to have an association with ST resources.

Every *generation facilities* that has been identified as PCG-eligible but is not part of a combined cycle plant will have constraints applied based on the daily generation data (DGD) *MLP*. The constraints are applied for every hour in which the *generation facility* has a non-zero day-ahead schedule in the DACP *Schedule of Record*.

DACP Commitments—PCG-Eligible Generation Facilities (Combined Cycle Plant)

Physically aggregated combined cycle plants will have constraints applied based on the DGD *MLP*. We apply constraints for every hour in which the *generation facility* has a non-zero day-ahead schedule in the DACP *Schedule of Record (SOR)*.

The remainder of this section applies to PCG-eligible *generation facilities* that are combined cycle plants and not physically aggregated.

Resources at a combined cycle plant that are scheduled by the DACE will be committed for use in real time. Every combustion turbine (CT) *generation unit* that is PCG-eligible and is part of a combined cycle plant has constraints applied. The applied constraints are based on the DGD *MLP* for every hour in which they have a non-zero day-ahead schedule in the DACP *Schedule of Record*. Every ST *generation unit* that is PCG-eligible and is part of a combined cycle plant will have constraints applied for every hour in which it has a non-zero day-ahead schedule in the DACP *SOR*. The constraint amount will vary by hour and is based on the number of associated CTs at the combined cycle plant, scheduled in a given hour.

The constraint will be equal to:

- For STs not using the pseudo unit (PSU) model:
 - The 1-on-1 ST DGD *MLP* whenever an associated CT is not present in the schedule² in a given hour, or where only a single associated CT is scheduled in a given hour along with the ST.

² It is possible to economically schedule a ST with no CT at a combined cycle *facility*, even though this configuration is physically impossible.

- The n -on-1 ST DGD *MLP* whenever n number of associated CTs ($n > 1$) are scheduled in a given hour along with the ST, and the ST received a day-ahead schedule equal to or greater than the n -on-1 ST DGD *MLP*. If the ST received a day-ahead schedule that is less than the n -on-1 ST DGD *MLP*, the ST constraint will be equal to the next lowest ST DGD *MLP* for which it was economic (lowest possible outcome is the 1-on-1 ST DGD *MLP*).
- For STs using the PSU model:
 - The n -on-1 ST DGD *MLP* where n represents the number of PSUs operating in combined cycle mode that are scheduled in a given hour.

Table 4-1: Combined Cycle Plant DACP Commitments

# of CTs Scheduled	ST Committed to
1	MLP ₁₋₁
2	MLP ₂₋₁
...	...
N	MLP _{N-1}

4.2 De-commitment and Withdrawal

The DACE will identify the resources required to be committed for the *dispatch day*. Changes to the set of committed resources after the DACE results are passed to Pre-*dispatch* could impact system *reliability* and *settlement*. The following sections discuss how changes to the commitment are processed.

4.2.1 Withdraw Dispatch Data

If you are a DA-PCG eligible dispatchable *generation facility* that received a schedule in the DACP *Schedule of Record*, you may decide that it is not in your best interest to operate in real time. Therefore, you may request our approval to remove the *offers* for your *generation unit*. You must call and ask for our approval early enough to allow us to assess your request.

A dispatchable *generation facility* committed to supply *energy* cannot remove or cancel its *real-time market offers* without our approval. Removal/cancellation of *offers* for any hour in which a day-ahead commitment was received will be considered a request to withdraw the *offer*. If we determine that your request does not have a detrimental impact on *reliability*, we will approve it and remove the constraints applied on your unit. If you need to remove or revise your *offers*, you must do so within the provisions of Appendix C of Market Manual 4.2: Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets.

For committed dispatchable *generation facility*, the withdrawal request process includes a new withdrawal charge. The charge is levied when the withdrawal is within your control and it did not

provide a benefit to the market as determined by the price impact. If you have done the right thing for the market, you should not receive a withdrawal charge.³

The Day-Ahead Generator Withdrawal Charge (DA-GWC) is based on a formula approach similar to the day-ahead import failure charge. It aligns the treatment of dispatchable *generation facility* withdrawal with the treatment of the import/export failure charge.

The withdrawal charge *settlement amount* is a function of the difference in price between the submitted day-ahead *energy offers* and the Ontario *energy* price and the MLP. The Ontario *energy* price used in the calculation of the DA-GWC depends on the time we received the notification of withdrawal:

- If we receive withdrawal notification at or before 4 hours prior to the first withdrawal hour in real time (PD-4), then the minimum of the hour ahead Pre-*dispatch* (PD-1) Ontario market clearing price and the *real-time market* clearing price is used.
- If withdrawal notification is received later than PD-4, then the *real-time market* clearing price is used.

A DA-PCG eligible *generation facility* withdrawing their *offer* (i.e., cancelling the *offer*) for a reason within their control, from any hour of their day-ahead commitment, must submit revised *offers* with an accompanying reason code. These revised *offers* must be received at least two hours prior to the *dispatch hour* and will be queued for operator approval.

For withdrawals:

- Within your control, a reason code, “withdraw”, is required.
- Not within your control, refer to Market Manual 9.2: Submitting Operational and Market Data for the DACP, Appendix A for the appropriate reason code.

If there is no reason code accompanying the revised *offer*, the submission will be automatically rejected.

4.2.2 IESO De-commitment of Dispatchable Generation Facilities

We will only de-commit dispatchable *generation facilities* or imports due to *reliability* concerns, not for economics. We will respect the *market rules* treatment related to compensation.

A dispatchable *generation facility* that we de-commit is eligible for fuel cost compensation as described in Market Manual 9.5: Settlement of the Day-Ahead Commitment Process.

De-commitment actions

As we approach real time, we may identify *reliability* concerns, such as over-generation caused by failed exports, which can only be resolved by de-committing *generation facilities* that were constrained on in the day-ahead timeframe.

³ Exception conditions include events or circumstances directly related to the *IESO-controlled grid* that are beyond the control of the *generation facility* as listed in *market rules*, CH7, Sec 7.5.3.

De-commitment means that we remove the minimum constraints applied on your dispatchable *generation facility* either before or after synchronization. If, within an hour, we constrain your *generation facility* to zero, we may ask you to remove or revise your *offers* in subsequent hours.

We will de-commit your *generation facility* only for *reliability* reasons and only after we call to inform you of our intention to remove the constraints applied to your *generation facility*.

4.2.3 Day-Ahead Production Cost Guarantee Impact

A dispatchable *generation facility* that is de-committed midway through a day-ahead schedule will receive a PCG for the completed portion of their day-ahead schedule. For more information related to the *settlement* treatment of a de-commitment, refer to Market Manual 9.5: Settlement of the Day-Ahead Commitment Process.

If you withdraw your *offers* for a dispatchable *generation facility* for any hour in which a day-ahead commitment was received, and the withdrawal is within your control, the *generation facility* is not eligible to receive a DA-PCG.

If a PCG-eligible *generation facility* is not scheduled as a result of circumstances outside of your control, (e.g., *forced outage* or grid incapability), the PCG is prorated to the part of your DACP schedule that was delivered in real time.

4.3 Day-Ahead Intertie Transactions

DACP does not cause any changes to the Pre-*dispatch* scheduling process which determines the economic schedules for interchange used in the Transaction Checkout Process in real time.

We expect that you will *offer* or *bid* in the *real-time market* in order to have your transactions scheduled in an amount equal to your DACP committed and scheduled quantities. This includes both legs of linked wheel transactions scheduled in the DACP.

4.4 Real-Time Market Integration

The incremental *energy* component of three-part *offers* accepted day-ahead, flow through to the *real-time market*. Pre-*dispatch* optimizes using only the incremental *energy* portion of the *offer* and disregards the other parts of the *offer* (*speed no-load (SNL)* and *start up cost (SUC)*). Single-part *offers* approved in day-ahead will continue to flow through to real time.

Any *bids/offers* not approved for use in the DACP by 14:00 are automatically rejected and will not be carried forward for use in real time. If you wish to revise *dispatch data* for inclusion in Pre-*dispatch* you can do so after 14:00 (real time rules for *dispatch data* submission will apply).

Approved *bids/offers* for *dispatchable loads*, imports, and exports will flow through to real time. Approved forecasts/schedules for non-dispatchable resources will also flow through to real time.

DGD submitted after 10:00 will be used in the next day's DACP run.

4.4.1 Pseudo Unit Offer Submission—Real Time

PSU resources do not exist for the purpose of real-time *dispatch*. All PSU *offer* submissions after 14:00 until 06:00 the next day are rejected with the exception of valid standing *offers*. The schedules

and commitments generated by the DACE for a *PSU* are translated to the associated physical units (PUs) for Pre-dispatch and real-time dispatch.

If you want to change your *dispatch data* for these resources, you must submit real-time PU *offers*. You can submit these *offers* while DACP is in progress since they are ignored during DACP. These offers are not held for operator approval during DACP. They are not candidates for automatic rejection at 14:00 and are subject to the normal *dispatch data* rules of real-time submission at the conclusion of DACP.

You must submit your initial real-time *offers* for PUs associated with a *PSU* by 10:00 day-ahead. For each PU associated with a *PSU*, the PU *offer* at 14:00 determines the availability declaration envelope (ADE) for that resource. You must ensure that the ADE established for your PUs is sufficient to cover the PU schedules you receive from the DACP.

After 14:00, you need *IESO* approval to submit any new or revised *dispatch data* that expands your ADE, except for *dispatch data* submitted in response to our request for additional *bids* and *offers*.

4.4.2 Minimum Loading Point Price Cap

We apply DACP commitments to PCG-eligible *generation facilities* as minimum constraints to ensure a schedule to at least the DGD *MLP* in Pre-dispatch and real time. In order to prevent PCG-eligible *generation facilities* scheduled in the day-ahead from collecting self-induced Congestion Management Settlement Credit (CMSC), the *market rules* have imposed a cap on the *MLP* price.

Incremental *offers* that are updated after the day-ahead should not exceed the *MLP* price of the day-ahead incremental *offer* used in determining the DACP *Schedule of Record*.

4.5 Submit Dispatch Data

4.5.1 Non-dispatchable Generation Facilities

If you are a non-dispatchable *generation facility* (self scheduling or intermittent), you may submit new or revised *dispatch data* (schedules or forecasts) within the restrictions specified for real-time operation in “Market Manual 4.2: Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets”.

4.5.2 Dispatchable Loads and Dispatchable Generation Facilities

If you are a *dispatchable load* or a dispatchable *generation facility*, there are no restrictions to changing your *dispatch data* within the hours, *energy*, and capacity of your ADE. (The ADE is the hourly *energy* and capacity offered into the DACP for dispatchable *generation facilities*, or the hourly load *bid* as dispatchable for *dispatchable loads*.)

However, you need our approval to submit any new or revised *dispatch data* that expands⁴ your ADE, except for *dispatch data* submitted in response to our request for additional *bids* and *offers*. Since there is no ADE associated with the daily *energy* limits provided before and during the DACP,

⁴ ADE expansion means an increase to the hours and/or quantities specified in your *bid* or *offer* that was used to establish your ADE in the DACP *Schedule of Record*.

energy-limited resources may change these limits without restriction up to the mandatory window in real time.

To ensure that we review and approve your request to expand your ADE, you must notify us by phone of your submission as early as possible.

After you notify us of your submission, we will:

- Review your *dispatch data* submission
- Assess the merits of your submission based on the valid reasons for change listed in Appendix A of Market Manual 9.2: Submitting Operational and Market Data for the Day-Ahead Commitment Process
- Approve or reject your submission
- Inform you of our decision by phone
- Ask you to reinstate your old *dispatch data* if we rejected your submission

There is no formal notification through the Market Participant Interface (MPI) of an approval or rejection of your request to expand your ADE outside of the mandatory window in real time.

If you submit your changes within the mandatory window in real time, you must follow the rules for submitting *dispatch data* in that window as specified in Market Manual 4.2: Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets. We will formally communicate an approval or rejection of your request to expand your ADE through the MPI.

There is no automated enforcement mechanism for the ADE after the DACP. It is your responsibility to notify us when your *dispatch data* revision expands your established ADE beyond the deadband defined in Section 4.5.5.3.

We use a manual ex-post process to find the instances of *dispatch data* revisions that expand your ADE without our approval.

4.5.3 Imports and Exports

If you are an importer or exporter, you may submit new or revised *dispatch data* within the restrictions for real-time operation as described in Market Manual 4.2: Submission of Dispatch Data in the Real-Time Energy and *Operating Reserve Markets*.

If you are an importer, you are not allowed to change the e-Tag used by the DACP such that the import becomes part of a linked wheel in real time.

4.5.4 Hourly Demand Response Resources

If you are an *hourly demand response* resource and need to revise your *dispatch data* to reflect your ability to reduce *energy* withdrawals, you may do so within the restrictions for real-time operations as described in Market Manual 4.2: Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets.

4.5.5 Availability Declaration Envelope for Dispatchable Generation Facilities and Dispatchable Loads

The ADE is established by *dispatch data* that is accepted by 10:00, or approved before 14:00, as mentioned in Market Manual 9.2: Submitting Operational and Market Data for the Day-Ahead Commitment Process.

You may submit *offers/bids* in real time within the hours, *energy*, and capacity of your *facility's* ADE. There are no restrictions on price changes and there are no restrictions on daily *energy* limit changes. However, *offers* exceeding the hours and/or quantities of the ADE require our approval.

Offers submitted by dispatchable *generation facilities* during DACP provide their declaration of the hours, *energy*, and capacity for those hours which they intend to *offer* in real time. *Bids* submitted by *dispatchable loads* during DACP provide their declaration of the hours, *energy*, and capacity for those hours which they intend to *bid* during real time.

These declarations of availability in the day-ahead, together with the *energy* schedules submitted by non-dispatchable *generation facilities*, provide us with a picture of the *adequacy* of available market resources. This picture allows us to commit generation and schedule imports in the day-ahead to meet forecast Ontario *demand*.

Because you are not financially bound by the *dispatch data* you submit in the DACP, and because this *dispatch data* is used as the basis for resource commitment and *reliability* guarantees, we place certain restrictions on the *offers* or *bids* that you can make in real time.

4.5.5.1 The Availability Declaration Envelope

The ADE applies to dispatchable *generation facilities* and dispatchable *loads* (the notion of the ADE does not apply to non-dispatchable *generation facilities*, *non-dispatchable loads*, imports, or exports).

The ADE is the hourly *energy* and capacity offered into the DACP for dispatchable *generation facilities*, or the hourly load *bid* as dispatchable for *dispatchable loads*.

Offers for *operating reserve* into the DACP must be accompanied by a corresponding *energy offer* (or *bid* for *dispatchable load*). While there is no ADE for *operating reserve* (OR), the ADE of the corresponding *energy offer/bid* will impact the amount of OR you can offer in real time.

The ADE is established for the next *dispatch day* by the most recent approved *dispatch data* that was considered in the DACP Schedule of Record.

If you are a dispatchable *generation facility*, you may submit *offers* in real time within the hours, *energy*, and capacity of your *facility's* ADE. There are no restrictions on price changes within the ADE and there are no restrictions on daily *energy* limit changes within the ADE. However, *offers* exceeding the hours and/or quantities of the ADE require our approval.

If you are a *dispatchable load*, you may submit *bids* in real time (and corresponding *offers* for OR) within the hours and *dispatchable load* quantities of your *facility's* ADE. There are no restrictions on price changes within the ADE. However, *bids* (and *offers* for OR) exceeding the hours and *dispatchable load* quantities of the ADE require our approval.

We will approve the submission of new or revised *dispatch data* that increases the ADE for dispatchable generation or *dispatchable load facilities* for the following reasons:

- If the *facility* is returning early from *planned outages* or *forced outages*, forced de-ratings, or cancellation of *planned outages*
- If we requested additional *bids* and *offers* (in which case, you do not need to call the *IESO*)
- If such increases to your *facility's* ADE will resolve emerging *reliability* concerns

For the late start of a *planned outage*, the *IESO* will accept the *dispatch data* submitted, but the *IESO* will not approve the expansion of your ADE. The submission will be logged to compliance for follow up.

4.5.5.2 Enforcement of the Availability Declaration Envelope

There is no automated enforcement mechanism of the ADE for *dispatch data* submitted after the DACP. The following actions apply to changes in ADE:

- *Offers* or *bids* you submit, which pass normal validation checks, will be entered into the *IESO's* systems.
- If your *offer* or *bid* violates your *facility's* ADE, you must notify us of your submission so we can consider it for approval (except for our request for additional *bids* and *offers*).
- Upon notification, we will review your *bid* or *offer* and accept or reject it based on the reasons stated above.
- The *IESO* will log our acceptance or rejection and will phone you to inform you of our decision.
- Rejection does not automatically substitute the previous *bid* or *offer*. You must correct any *dispatch data* that violates the ADE by submitting new *dispatch data*.
- We will manually process detected violations of the ADE (done without our approval) after the trade date of the DACP.
- We will apply a deadband above the ADE quantities for assessing compliance. (See the 4.5.5.3 Availability Declaration Envelope Deadband section below.)
- If you exceed your *facility's* ADE without approval, you will be subject to compliance actions for breach of the *market rules*.

4.5.5.3 Availability Declaration Envelope Deadband

You may make small increases to your ADE without requesting our approval. These increases must be limited to 2% of the ADE established in the DACP Schedule of Record, or 10 MW, whichever is less.

4.5.6 Submit Outage Requests

Submitting *outage* requests after the DACP uses the same process as real time.

For early return from *outages*, (both *planned outages* and *forced outages*), you must submit revised *dispatch data* to reflect your status. Any changes or additions to *dispatch data* submissions shall be consistent with *outage* requests submitted before 10:00.

For early return from *planned outages*, we will approve the *dispatch data* submitted that is consistent with the operation of your *facility*, and log the submission for compliance.

For late start of *planned outages*, we will accept the *dispatch data* submitted, but we will not approve the expansion of your ADE. The submission will be identified to Compliance for follow up. For details, refer to Market Manual 7.3: Outage Management.

4.5.7 Submit Non-Performance Events

Submission of non-performance events for *HDR* resources after the DACP must be made as indicated in Section 2.2 of Market Manual 7.3: Outage Management. Revised *dispatch data* must be submitted for an *HDR* resource to reflect any change to *demand response capacity* occurring after the DACP.

4.5.8 Submit Outage Cancellation Requests

We will approve *outage* cancellation requests and the submission of revised *dispatch data* to reflect your status. However, we will flag the revised *dispatch data* for compliance review.

4.6 Synchronize Units Committed in the Day-Ahead

When we commit your *generation unit* for *reliability* or the DA-PCG, we constrain it on to its *MLP* and for its day-ahead scheduled hours. In real time, we will *dispatch* your unit to at least its *MLP* for all hours that it received a day-ahead schedule.

To meet this *dispatch*, you must plan the time you start and synchronize your unit. How you operate in real time may affect your eligibility for the DA-PCG. For additional information, refer to Market Manual 9.5: Settlement of the Day-Ahead Commitment Process.

When your *generation unit* is synchronized, it will be *dispatched* to its *MLP* using the ramp rate in the *offers* submitted. If the *generation unit* reaches its *MLP* before the first hour in which a constraint is applied, then we will *dispatch* your *generation unit* to at least its *MLP* for the hour(s) required prior to the constraints.

You must call us if you realize that you cannot be at your *MLP* at the beginning of your committed hours, within the applicable compliance deadband for real time operation as specified in “Interpretation Bulletin IMO_MKRI_001—Compliance with Dispatch Instructions Issued to Dispatchable Generators”. This allows us to make any necessary adjustments in the market systems to reflect your unit’s actual capability.

You must also call us if you cannot comply with your *dispatch instructions* after the constraints applied in the DACP have ended and you have not yet fulfilled your *minimum generation block run-time (MGBRT)* due to a delay in either synchronization or reaching your *MLP*. You will not be required to comply with these *dispatch instructions* if you are within the provisions of Section 7.5.3 of Chapter 7 of the “Market Rules”.

- End of Section -

5. Procedures for Real-Time Integration of the DACP

This section, which applies only to PCG-eligible resources, provides the following procedures relating to the interaction of the DACP and real-time operation.

- Procedure 5.1 Withdraw Offers for a Committed Resource
- Procedure 5.2 Respond to IESO Request for De-commitment

Procedures associated with the submission of *dispatch data* and daily generation data (DGD) during and after the operation of the DACP are covered in Market Manual 9.2.

5.1 Withdraw Offers for a Committed Resource

This section describes the procedure for withdrawing your *offers* for a DA-PCG eligible *generation facility* that received a commitment from the DACP.

5.1.1 Withdraw Offers for a Committed Resource – Procedure

This procedure is initiated when a PCG-eligible resource wants to withdraw its *offers* after receiving a commitment from the DACP. This activity can occur at any time after the DACP Schedule of Record is issued until two hours prior to the *dispatch hour*, regardless of whether the *generation unit* has synchronized to the IESO Controlled Grid or not.

5.1.2 Workflow for Withdraw Offers for a Committed Resource

The diagrams in this section represent the flow of work and information related to withdrawing *offers* for a committed resource.

See the table below for a description of the shapes used in the workflow diagram.

Table 5-1: Workflow Diagram Legend

Legend	Description
Oval	An event that triggers a task or that completes a task. Trigger events and completion events are numbered sequentially within procedure (01 to 99)
Task Box	Shows reference number and task name or brief summary of a task. Reference number (e.g., 1A.02) indicates the procedure number within the current <i>market manual</i> (1), sub-procedure identifier (if applicable) (A), and task number (02)
Solid Horizontal Line	Shows information flow between the IESO and external parties
Solid Vertical Line	Shows linkage between tasks
Broken Line	Links trigger events and completion events to preceding or succeeding task

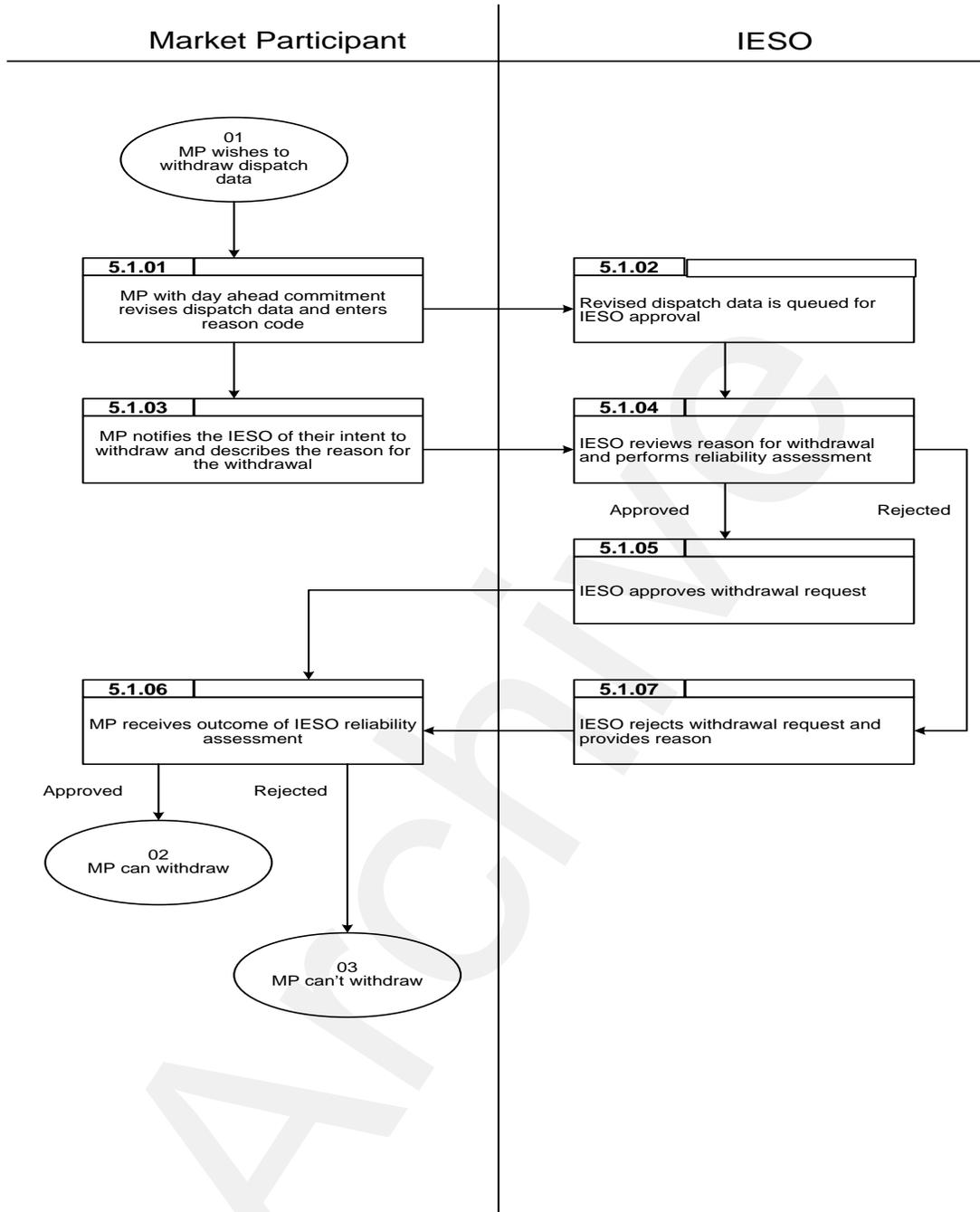


Figure 5-1: Withdraw Offers for a Committed Resource

5.1.3 Procedural Steps for Withdraw Offers for a Committed Resource

This section contains details on the task steps that make up a request to withdraw *offers* for a committed resource.

See the table below for a description of the fields used in the table of procedural steps.

Table 5-2: Procedural Steps Legend

Legend	Description
Ref #	The numerical reference to the task
Action	Detail about the specific task including: <ul style="list-style-type: none"> • A description of the events that can trigger commencement of the task • A list of the information flows that may or must result from the task
Tools	The format and method for each information flow are specified

Table 5-3: Procedural Steps for Withdraw Offers for a Committed Resource

Ref #	Action	Tools
01	<p>You wish to withdraw <i>offers</i> for a committed resource (PCG-eligible resource with a day-ahead schedule):</p> <ul style="list-style-type: none"> • After the DACP <i>Schedule of Record</i> has been issued • Before or after the <i>generation unit</i> has synchronized to the <i>IESO-controlled grid</i> • Regardless of whether the withdrawal is within your control • More than 2 hours before the <i>dispatch hour</i> 	<ul style="list-style-type: none"> • Market Operation System - Market Participant Graphical User Interface (MPI) or Application Programmers Interface (API) • The <i>market participant</i> Graphical User Interface Users Guide can be found on the Graphical User Interface Users Guide page on the IESO Website.
5.1.01	<p>You have a day-ahead commitment and revise <i>dispatch data</i> and enter a reason code:</p> <ul style="list-style-type: none"> • Reason code required (new reason code “withdraw” for withdrawals that are within your control) • Must be outside the mandatory window (more than 2 hours in advance of the <i>dispatch hour</i>) • Submissions without a reason code will not be accepted by the <i>IESO</i> systems 	Market Operation System - Market Participant Graphical User Interface (MPI) or Application Programmers Interface (API)
5.1.02	Revised <i>dispatch data</i> is queued for <i>IESO</i> approval	Market Operation System -Market Participant Graphical User Interface (MPI) or Application Programmers Interface (API)
5.1.03	You notify the <i>IESO</i> Control Room Operator of your intent to withdraw and describe the reason for the withdrawal	Telephone
5.1.04	<p>We review the reason for withdrawal and perform a <i>reliability</i> assessment</p> <ul style="list-style-type: none"> • Reason code “withdraw” must be used for withdrawals that are within your control 	<i>IESO</i> assessment tools
5.1.05	<p>We approve your withdrawal request and notify you:</p> <ul style="list-style-type: none"> • No <i>security</i> or <i>adequacy</i> issues identified in <i>IESO</i> assessment 	<ul style="list-style-type: none"> • Market Operation System – <i>IESO</i> OPGUI • Telephone
5.1.06	<p>You receive the outcome of <i>IESO</i> <i>reliability</i> assessment:</p> <ul style="list-style-type: none"> • Withdrawal request approved • Changes to <i>offers</i> approved 	<ul style="list-style-type: none"> • Telephone • Market Operation System -Market Participant Graphical User Interface (MPI) or Application Programmers Interface (API)

5.1.07	<p>The <i>IESO</i> rejects your withdrawal request and notifies you:</p> <ul style="list-style-type: none"> • <i>Security</i> and/or <i>adequacy</i> issues identified in <i>IESO</i> assessment 	<ul style="list-style-type: none"> • Market Operation System – <i>IESO</i> OPGUI • Telephone
5.1.08	<p>You receive the outcome of the <i>IESO</i>'s <i>reliability</i> assessment:</p> <ul style="list-style-type: none"> • Withdrawal request rejected • Changes to <i>offers</i> rejected 	<ul style="list-style-type: none"> • Telephone • Market Operation System -Market Participant Graphical User Interface (MPI) or Application Programmers Interface (API)

Archive

5.2 Respond to IESO Request for De-commitment

5.2.1 Respond to IESO Request for De-commitment—Procedure

This procedure is initiated when the *IESO* calls you to request you to de-commit a PCG-eligible *generation facility* that received a day-ahead schedule and commitment from the DACP.

The *IESO* will de-commit your unit only for *reliability* reasons and only after the *IESO* calls to inform you of the *IESO's* intention to remove the constraints applied to your unit.

5.2.2 Work Flow for Respond to IESO Request for De-commitment

The diagrams in this section represent the flow of work and information related to the activities associated with a request from the *IESO* to de-commit your *generation unit*. A legend for the workflow diagram is shown in Table 5-1.

See Table 5-1: Workflow Diagram Legend for a description of the shapes used in the workflow diagram.

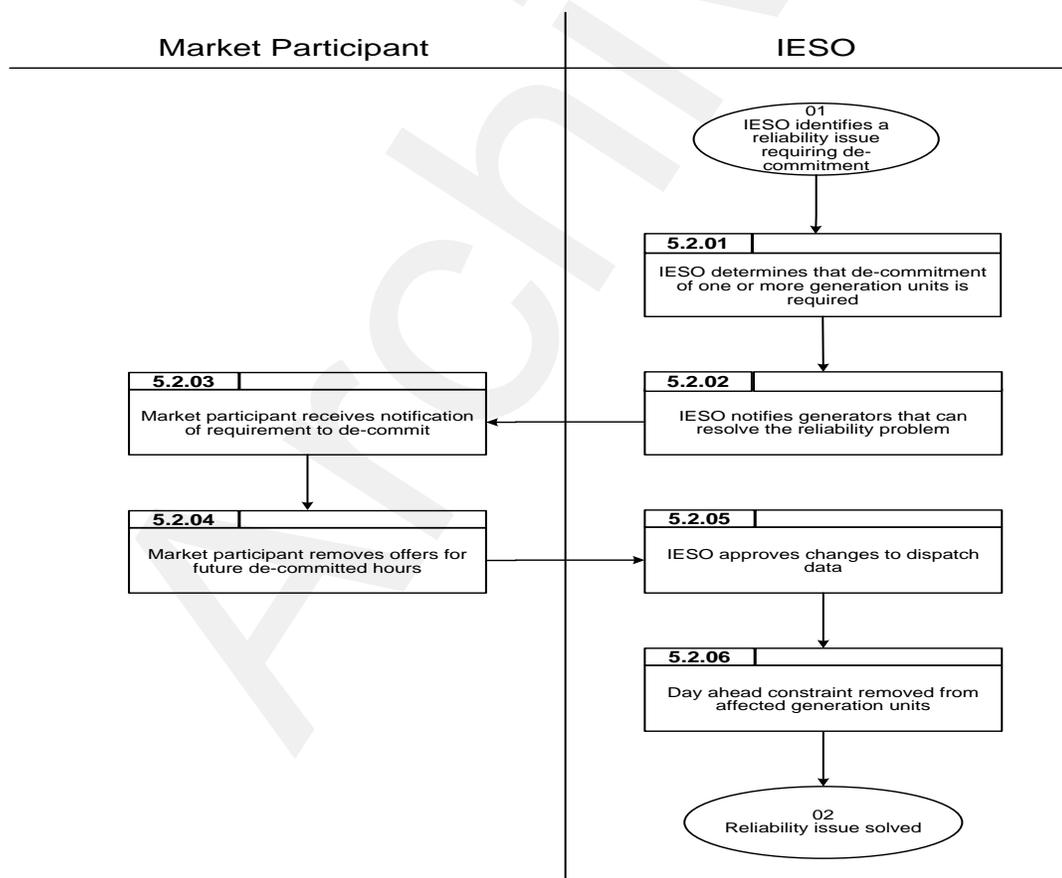


Figure 5-2: Workflow for Respond to IESO Request for De-commitment

5.2.3 Procedural Steps for Respond to IESO request for De-commitment

This section contains details on the steps needed when the *IESO* requires your *generation unit* to be de-committed for *reliability*.

See Table 5-2: Procedural Steps Legend for a description of the fields used in the table of procedural steps.

Table 5-4: Procedural Steps for Respond to IESO Request for De-commitment

Ref #	Action	Tools
01	The <i>IESO</i> identifies a <i>reliability</i> issue requiring de-commitment: <ul style="list-style-type: none"> PCG-eligible <i>generation unit</i> that received a commitment from the DACP 	<ul style="list-style-type: none"> Pre-dispatch results <i>IESO</i> assessment tools
5.2.01	The <i>IESO</i> determines that the de-commitment of one or more <i>generation units</i> is required for <i>reliability</i> : <ul style="list-style-type: none"> Specific <i>generation unit(s)</i> identified that will address the <i>reliability</i> issue Before or after the <i>generation unit</i> has synchronized to the <i>IESO-controlled grid</i> 	<ul style="list-style-type: none"> Pre-dispatch results <i>IESO</i> assessment tools
5.2.02	The <i>IESO</i> notifies <i>generators</i> that can resolve the <i>reliability</i> problem	Telephone
5.2.03	You receive notification of the requirement to de-commit	Telephone
5.2.04	You remove <i>offers</i> for future hours where a day-ahead commitment existed: <ul style="list-style-type: none"> Before or after the <i>generation unit</i> has synchronized to the <i>IESO-controlled grid</i> Removal of <i>offers</i> will be queued for <i>IESO</i> approval either inside or outside the mandatory window 	Market Operation System - Market Participant Graphical User Interface (MPI) or Application Programmers Interface (API)
5.2.05	<i>IESO</i> approves changes to your <i>dispatch data</i> : <ul style="list-style-type: none"> Will not be treated as a withdrawal because the removal of <i>offers</i> is not within your control 	<ul style="list-style-type: none"> Market Operation System – <i>IESO</i> OPGUI Telephone
5.2.06	The <i>IESO</i> removes your day-ahead constraint: <ul style="list-style-type: none"> PCG-eligible <i>generation unit</i> that received a day-ahead commitment 	<i>IESO</i> Contract Manager Application
02	The <i>reliability</i> issue identified by the <i>IESO</i> is solved	

- End of Document -