



Business Process

Issuing Guarantees of Origin (Including Requesting)

Table of Contents

1	Document Tracking	3
2	Process Context	4
2.1	terminology	4
2.2	Background	4
2.3	Process Scope	5
3	Business Objective	6
4	Process Overview	8
4.1	Process Overview	8
5	Roles and Responsibilities	15
5.1	semo market operations	15
5.2	mrso	16
5.3	account holders	16
6	Process Description	17
6.1	Process Swimlane	17
6.2	Process Swimlane	18
7	Process Steps	19
7.1	GO ISSUING (INCLUDING REQUESTING) PROCESS	19
7.2	GO ISSUING (INCLUDING REQUESTING) PROCESS – METERED GENERATION DATA QUERY	21
8	Process References	23
8.1	Process Rule Documents	23
8.2	Related Documents	24
9	Assumptions	25
10	Appendices	26
10.1	Glossary	26
10.2	Account Holder users roles and permissions	27
11	Process Flowchart Key	28

1 DOCUMENT TRACKING

Version	Author	Content	Date
1.0	SEMO & CER	Final version as approved by CER	01/12/2011
1.1	SEMO	Update to reflect changes to processes	13/08/2012
1.2	SEMO	Update to reflect implementation of GO Online Registry, combining GO Request and GO Issue Business Processes, SEMO becoming member of AIB and connecting to the AIB Trading Hub	31/07/2015

2 PROCESS CONTEXT

2.1 TERMINOLOGY

Previous Terminology	GO Online Registry Terminology
Generator	Producer
Supplier	Supplier
GO Participant	Account Holder
Generator Unit	Production Device
Authorised User	(Account) User
Revocation	Withdrawal

2.2 BACKGROUND

Directive 2001/77/EC introduced the concept of Guarantees of Origin (GO) for electricity. The Renewables Directive¹ 2009/28/EC replaces Directive 2001/77/EC and Article 15 of the Renewables Directive further develops GO certificates. The directive states that the purpose of a GO certificate is for Fuel Mix Disclosure and that the GO certificate does not need to follow the physical flow of electricity. This legislation was transposed in Ireland by S.I. 147 of 2011 (replaced by S.I. 483 2014); the Statutory Instrument places the obligation for issuing GO certificates in Ireland on the Single Electricity Market Operator (SEMO) subject to the Supervisory Framework developed by the CER, in consultation with SEMO and the industry.

Renewable Generators which are registered for the GO scheme are entitled to request an electronic GO certificate for every 1MWh of renewable energy produced during a year, subject to the rules set out in S.I. 147 2011 (replaced by S.I. 483 of 2014).

Metered generation data, from SEMO market systems in the case of Within-SEM Generators, and from the Meter Registration System Operator (MRSO) in the case of Out-of-SEM Generators, is collected and uploaded to the GO Online Registry on a monthly basis.

GO Account Holders can cross check the metered generation data assigned to their Production Devices² and submit queries to SEMO if necessary.

Account Holders must submit a request to SEMO each month for electronic GO certificates to be issued. SEMO verifies whether these requests are valid. SEMO issues GO certificates based on validated GO requests by the last working day of the month following the relevant production period. One GO certificate is issued for each whole MWh of qualifying energy output of a registered production device. Any identifiable residual kWh will be carried forward to the next issuing period. GO certificates will expire 12 months after the end of the related production period.

¹ Transposed by the [Renewables Obligation \(Amendment\) Order \(Northern Ireland\) 2010](#) in Northern Ireland and by S.I. 147 of 2011 (replaced by S.I. 483 of 2014) in Ireland.

² Production Device is the new terminology used in the GO Online Registry. This is a Generator unit as per SEM terminology.

2.3 PROCESS SCOPE

This document describes the process by which:

- Metered generation data is collected and uploaded to the GO Online Registry
- Account Holders submit requests for GO certificates
- SEMO verifies GO requests with corresponding metered generation data
- SEMO issues electronic GO certificates

It does not describe the process for any of the following:

- Registering for the GO scheme
- Transferring GO certificates
- Withdrawal of GO certificates
- Importing GO certificates

3 BUSINESS OBJECTIVE

The objective of this business process is to meet the obligations SEMO has under S.I. 147 of 2011 (replaced by S.I. 483 of 2014), namely:

Supervision and Issuance of Guarantees of Origin:

5. (1) Guarantees of origin shall be issued by SEMO in accordance with the supervisory framework established by CER and these Regulations.

(2) CER shall, after consultation with SEMO and other relevant persons, design, establish and publish a supervisory framework for the issuance, registration, transfer and cancellation by electronic means, of guarantees of origin to generators of electricity from renewable energy sources

(3) CER and SEMO shall ensure that guarantees of origin are accurate, reliable and fraud-resistant.

Eligibility and characteristics of a guarantee of origin:

7. (1) A guarantee of origin shall be of the standard size of one megawatt hour (hereinafter referred to as a "renewable energy unit").

(2) No more than one guarantee of origin shall be issued in respect of each renewable energy unit.

(3) The same renewable energy unit shall be taken into account only once.

(7) A guarantee of origin shall specify at least:

(a) That the guarantee of origin relates to electricity from renewable sources,

(b) The energy source from which the electricity was produced and the start and end dates of production,

(c) The identity, location, type and capacity of the generating station where the electricity was produced,

(d) whether and to what extent the generating station has benefitted from investment support, whether and to what extent the unit of energy has benefited in any other way from a national support scheme and the type of support scheme, and

(e) The date and country of issue and a unique identification number.

Request for issue of guarantee of origin and information required:

8. (1) A guarantee of origin shall be issued by SEMO in response to a request from a generator of electricity from renewable energy sources.

(2) A guarantee of origin may not be requested for electricity generated outside the State.

(3) A request for the issuance of a guarantee of origin shall not be considered properly made until SEMO has been provided with at least the following information from the applicant—

(a) The energy source from which the electricity was generated,

(b) The start and end dates of generation covered by the request,

(c) The name, address, location, type and capacity of the generating station where the energy was generated,

(d) Whether and to what extent the generating station has benefited from investment support,

(e) Whether and to what extent the unit of energy has benefited in any other way from a support scheme, and the type of support scheme, and

(f) The date on which the generating station became operational.

(4) SEMO may request further information from a requester for the purpose of determining eligibility for the guarantee of origin and ascertaining the accuracy of the information submitted in accordance with paragraph 3.

(5) SEMO shall, in accordance with the supervisory framework, establish an electronic register of issued guarantees of origin which shall include, at a minimum, the following information:

(a) The date of issue of the guarantee of origin;

(b) The name and address (if a body corporate its registered place of business) of the person to whom the guarantee has been, or was originally, issued;

(c) A unique identification number for each guarantee of origin;

(d) The energy source or sources from which the electricity to which the guarantee of origin relates was generated;

(e) The start and end dates of generation to which the guarantee of origin relates;

(f) The type and capacity of the generating station where the energy was generated to which the guarantee of origin relates;

(g) Where the guarantee of origin has been transferred, the name and address (if a body corporate its registered place of business) of the last person to whom it has been transferred;

(h) Where a guarantee of origin has been issued to a PSO generator, a statement to this effect;

(i) A list of any guarantees of origin revoked pursuant to Regulation 9.

(6) SEMO may refuse a request for a guarantee of origin where—

(a) It is not satisfied that the requester is a generator of electricity from renewable sources, and

(b) The application is incomplete or ineligible.

SEMO is also bound to follow the Supervisory Framework as set out in the decision paper CER/11/824 “Supervisory Framework for Administration of Guarantees of Origin” and all amendments to said framework.

Figure 1 below displays the GO Issuing and Requesting process:

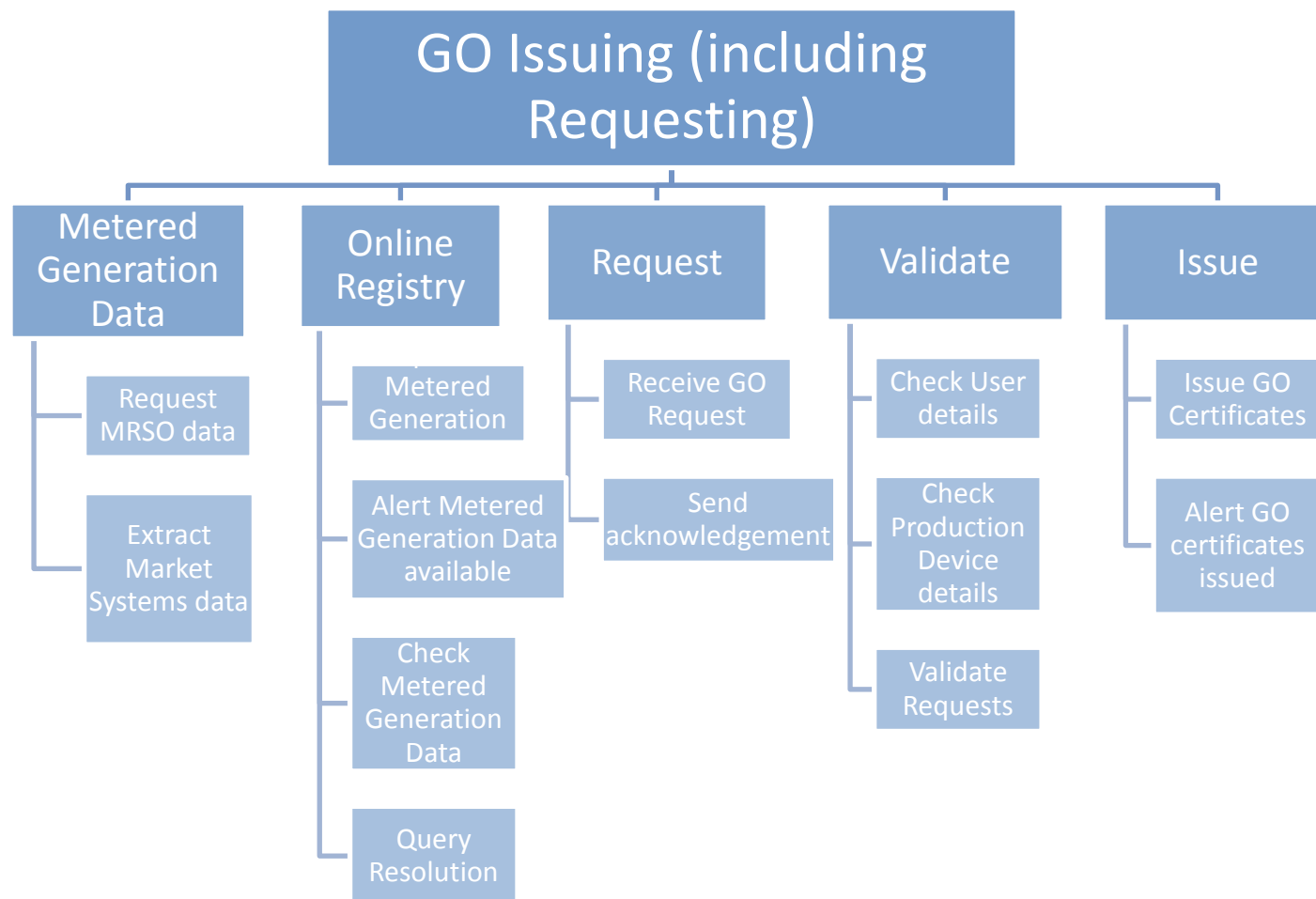


Fig. 1 Issuing GO Certificates (including Requesting)

Figure 2 and 3 below display the GO Issuing and Requesting timeline:

Issue Month + 10 Working Days	Issue Month + 11 Working Days	Issue Month + 15 Working Days	Issue Month + 17 Working Days	Last working day of day of following month
<u>Metered Generation Data</u>	<u>Online Registry</u>	<u>Request</u>	<u>Validate</u>	<u>Issue</u>
Request MRSO data	Metered Generation Data is uploaded to Online Registry	Account Holder submit GO Request	Check user details	Issue GO certificates
Extract Market Systems data	Issue alert to notify Account Holder(s) metered generation data is available	Send acknowledgement	Check production device details	Issue alert
	Account Holder(s) check metered generation data		Check number of certificates requested	

Fig. 2 Timelines

Issue Month + 10 Working Days	Issue Month + 11 Working Days	Issue Month + 14 Working Days	Issue Month + 17 Working Days	Issue Month + 18 Working Days	Issue Month + 20 Working Days	Last working day of following month
<u>Metered Generation Data</u>	<u>Online Registry</u>	<u>Submit Query</u>	<u>Query Resolution</u>	<u>Request</u>	<u>Validate</u>	<u>Issue</u>
Request MRSO data	Metered Generation Data is uploaded to Online Registry	Account Holder(s) submit metered generation data query	Liaise with relevant Metered Data Provider	Account Holder submit GO Request	Check user details	Issue GO certificates
Extract Market Systems data	Issue alert to notify Account Holder(s) metered generation data is available		Provide solution or update	Send acknowledgement	Check production device details	Issue alert
	Account Holder(s) check metered generation data				Check number of certificates requested	

Fig. 3 Timelines - Metered generation query

The process is summarised in the five main activities described below:

4.1.1 METERED DATA

The first activity for SEMO is to collect the metered generation data for both Within-SEM and Out-of-SEM Production Devices.

Details of these activities are provided below.

Request MRSO data

The Metered Data Provider for Out-of-SEM Production Devices is the Meter Registration System Operator (MRSO). SEMO will request the metered generation data from MRSO on a monthly basis.

This data is to be provided within ten working days of the end of the previous month.

Extract Market System data

In its role as Market Operator, SEMO has access to the Within-SEM metered data in order to settle the market. The Metered Data Provider for Within-SEM Production Devices is EIRGRID. EIRGRID regularly submits metered generation data to the Central Market Systems for use in the Single Electricity Market (SEM).

SEMO will extract the metered generation data within ten working days of the end of the previous month for use in this process, GO Issuing (including Requesting).

4.1.2 ONLINE REGISTRY

When metered generation data has been collected, SEMO uploads the metered generation data to the GO Online Registry, and notifies Account Holders that it is available to check.

Upload Metered Generation Data

The metered generation data is uploaded to the GO Online Registry. The metered generation data is automatically assigned to each Production Device.

Alert Metered Generation data available

When the metered generation data has been uploaded and assigned to each Production Device, SEMO will issue an alert. Account Holder Users subscribed to 'Domain Announcements' Alerts will receive this via email. The process for subscribing to Alerts can be found in section 4.7 of the Guarantees of Origin Registration Business Process. Domain Announcement Alerts are also visible to Account Holder Users upon log in to the GO Online Registry, labelled "Ireland_Announcement".

Check metered generation data

Account Holders can review the meter generation data assigned to their Production Devices in the GO Online Registry. If Account Holders find discrepancies with the number assigned to their Production Devices they can submit queries via email to guaranteesoforigin@semo.com.

Account Holders have three working days from the date the alert is issued to review and/or query the metered generation data.

Query resolution

After liaising with the relevant Metered Data Provider, SEMO will provide a resolution or update within three working days of receipt of query. The Account Holder will inform SEMO that they are satisfied to proceed with the final value by email before GO certificates can be issued.

4.1.3 REQUEST

Following a review of the metered generation the Account Holder submits a GO Request, SEMO will send an acknowledgement email to the Account Holder to confirm the GO Request has been received.

Submit GO Request Template

An Account Holder User with the appropriate user roles and permissions within the GO Online Registry completes a GO Request email template from goo.sem-o.com and sends it to Guaranteesoforigin@sem-o.com. This is done by an Account Holder User that has been assigned the Commit Transaction role (see section 10.2).

Account Holders should submit requests by 5pm, five working days after the date the alert is issued to review the metered generation data.

Send acknowledgement

SEMO will respond to the sender of the GO Request to confirm receipt.

This acknowledgement will be sent within one working day of receipt of the GO Request. It should be noted that submissions received after 5pm will be treated as being received the following working day.

4.1.4 VALIDATE

All submissions must be validated to ensure that they conform to the template email supplied on the SEMO website and to ensure that they have come from a registered Account Holder User.

Check user details

SEMO will check the name of the user submitting the GO Request against the list of Account Holder Users in the GO Online Registry. Only those requests which have come from registered Account Holder Users with the appropriate user roles and permissions within the GO Online Registry will be advanced to the next step. SEMO will reject any requests that do not pass this validation.

This will be done within two working days of receipt of the request.

SEMO will send an email to the user that submitted the GO Request and indicate that the GO Request has been rejected because the User did not have the appropriate role and permissions in the GO Online Registry.

If the Account Holder User in question can arrange to have the Commit Transaction role added to their permissions in the GO Online Registry, they could resubmit the GO request and the process can resume from this section (4.1.4). User roles can only be updated by the Account Holder Root User or Account Holder User Administrator (see section 10.2).

If SEMO do not receive a revised GO Request the process ends here.

Check Production Device details

SEMO will check the Production Device details supplied in the GO Request against the GO Online Registry database. This check is to ensure that all unit details are correct for the specified Production Device. If details are incorrect a rejection email will be sent.

This will be completed within two working day of receipt of the request.

SEMO will send an email to the User that submitted the GO Request and indicate that the GO Request has been rejected because the Production Device details did not match those recorded in the GO Online Registry database.

If the Account Holder User confirms by return email the correct Production Device details, the process can resume from this section (4.1.4).

If SEMO do not receive a revised GO Request the process ends here.

Validate requests

The number of certificates requested will be cross checked against the metered generation values and dates of production detailed in the GO Online Registry for the relevant Production Device to ensure that there is sufficient generation available to issue the number requested.

This is to be done within 17 working days of the end of the previous month.

SEMO will reject any requests that do not pass this validation.

SEMO will send an email to the Account Holder User in question and indicate that the GO Request has been rejected due to an incorrect number of certificates being requested.

If the Account Holder User confirms by return email the correct number of certificates requested, the process can resume from this section (4.1.4).

If SEMO do not receive a revised GO Request the process ends here.

Rejection of requests (if required)

GO Requests which do not meet the requirements stated in S.I. 147 2011 (replaced by S.I. 483 of 2014) will be rejected by SEMO. The requirements are as follows:

8. (2) *A guarantee of origin may not be requested for electricity generated outside the State.*
- (3) *A request for the issuance of a guarantee of origin shall not be considered properly made until SEMO has been provided with at least the following information from the applicant—*
 - (a) *The energy source from which the electricity was generated,*
 - (b) *The start and end dates of generation covered by the request,*

- (c) The name, address, location, type and capacity of the generating station where the energy was generated,*
- (d) Whether and to what extent the generating station has benefited from investment support,*
- (e) Whether and to what extent the unit of energy has benefited in any other way from a support scheme, and the type of support scheme, and*
- (f) The date on which the generating station became operational.*

4.1.5 ISSUE

To comply with obligations under S.I. 147 of 2011 (replaced by S.I. 483 of 2014), SEMO must create GO certificates and compile a database of issued GO certificates including a unique certificate ID for each certificate. Details of the steps involved are outlined below:

Issue GO Certificates

SEMO will issue the electronic GO certificates to each Account Holder based on their validated requests for the production period. One GO certificate is issued for each whole MWh of qualifying energy output of a registered production device. Any identifiable residual kWh will be carried forward to the next issuing period.

This process will involve the creation of a unique certificate ID for each GO certificate.

SEMO will issue the GO certificates on the last working day of the month following the relevant production period after the GO Requests have been validated.

Once issued the GO certificates cannot be altered or deleted except to correct an error.

Guarantees of Origin will expire 12 months after the end of the related production period. GO certificates that expire are no longer valid for transfer.

Alert GO Certificates Issued

When certificates have been issued, SEMO will issue an alert to Account Holders. Account Holder Users subscribed to 'Domain Announcements' alerts will receive the alert via email. The process for subscribing to alerts can be found in section 4.7 of the Guarantees of Origin Registration Business Process. Domain Announcement alerts are also visible to Account Holder Users upon log in to the GO Online Registry and are labelled "Ireland_Announcement".

Account Holders can then log in to their accounts in the GO Online Registry and view the GO certificates.

4.1.6 ADMINISTRATION OF CORRECTIONS OR ERRORS

In the event that SEMO issues too many certificates in error, SEMO will remove GO certificates of the same type and with the same combined Face Value from the relevant Account Holder to compensate for the discrepancy. The activities involved in this process are outlined in the Withdrawal of Guarantees of Origin Business Process.

In the event that SEMO issues too few GO certificates in error, SEMO will contact the Account Holder by email as soon as is practicable and will issue additional GO certificates for the relevant production period for the relevant Production Device in the GO Online Registry.

4.1.7 ADMINISTRATION OF CORRECTIONS OR ERRORS

In the event that the data in a GO certificate(s) is inaccurate (whether or not it is through an act or omission of the Registrant of the originating Production Device):

- a. SEMO will withdraw those Certificates (provided that such GO certificates are, at the time of such Withdrawal, in the Account of that Registrant); and
- b. In the case of GO certificates that are no longer in the Irish domain, SEMO will cooperate with other Issuing Bodies to withdraw the erroneous GO certificates.

5 ROLES AND RESPONSIBILITIES

5.1 SEMO MARKET OPERATIONS

SEMO will be responsible for informing Account Holders that requests have been rejected, within two working days of receipt of request.

Under S.I 147 of 2011 (replaced by S.I. 483 of 2014) SEMO has the following obligations:

5. (1) Guarantees of origin shall be issued by SEMO in accordance with the supervisory framework established by CER and these Regulations.

(2) CER shall, after consultation with SEMO and other relevant persons, design, establish and publish a supervisory framework for the issuance, registration, transfer and cancellation by electronic means, of guarantees of origin to generators of electricity from renewable energy sources.

(3) CER and SEMO shall ensure that guarantees of origin are accurate, reliable and fraud-resistant.

7. (1) A guarantee of origin shall be of the standard size of one megawatt hour (hereinafter referred to as a “renewable energy unit”).

(2) No more than one guarantee of origin shall be issued in respect of each renewable energy unit.

(3) The same renewable energy unit shall be taken into account only once.

(7) A guarantee of origin shall specify at least:

(a) That the guarantee of origin relates to electricity from renewable sources,

(b) The energy source from which the electricity was produced and the start and end dates of production,

(c) The identity, location, type and capacity of the generating station where the electricity was produced,

(d) whether and to what extent the generating station has benefitted from investment support, whether and to what extent the unit of energy has benefited in any other way from a national support scheme and the type of support scheme, and

(e) The date and country of issue and a unique identification number.

8. (1) A guarantee of origin shall be issued by SEMO in response to a request from a generator of electricity from renewable energy sources.

(4) SEMO may request further information from a requester for the purpose of determining eligibility for the guarantee of origin and ascertaining the accuracy of the information submitted in accordance with paragraph 3.

(5) SEMO shall, in accordance with the supervisory framework, establish an electronic register of issued guarantees of origin which shall include, at a minimum, the following information:

(a) The date of issue of the guarantee of origin;

- (b) The name and address (if a body corporate its registered place of business) of the person to whom the guarantee has been, or was originally, issued;*
- (c) A unique identification number for each guarantee of origin;*
- (d) The energy source or sources from which the electricity to which the guarantee of origin relates was generated;*
- (e) The start and end dates of generation to which the guarantee of origin relates;*
- (f) The type and capacity of the generating station where the energy was generated to which the guarantee of origin relates;*
- (g) Where the guarantee of origin has been transferred, the name and address (if a body corporate its registered place of business) of the last person to whom it has been transferred;*
- (h) Where a guarantee of origin has been issued to a PSO generator, a statement to this effect;*
- (i) A list of any guarantees of origin revoked pursuant to Regulation 9.*
- (6) SEMO may refuse a request for a guarantee of origin where—*
 - (a) It is not satisfied that the requester is a generator of electricity from renewable sources, and*
 - (b) The application is incomplete or ineligible.*

5. (3) CER and SEMO shall ensure that guarantees of origin are accurate, reliable and fraud-resistant.

SEMO must also conform to the Supervisory Framework as set out in the decision paper CER/11/824 “Supervisory Framework for Administration of Guarantees of Origin”.

5.2 MRSO

The MRSO are required to submit metered data for Out-of-SEM units on a monthly basis to SEMO, for the purposes of verifying and issuing GO certificates.

As per the decision paper (CER/11/824), MRSO will provide this information within ten working days after the end of each month.

5.3 ACCOUNT HOLDERS

Account Holders are responsible for sending GO Requests which are valid and which come from an Account Holder User with the appropriate user roles and permissions within the GO Online Registry.

Account Holders are also bound by the Supervisory Framework as set out in the decision paper CER/11/824 “Supervisory Framework for Administration of Guarantees of Origin”.

6 PROCESS DESCRIPTION

6.1 PROCESS SWIMLANE

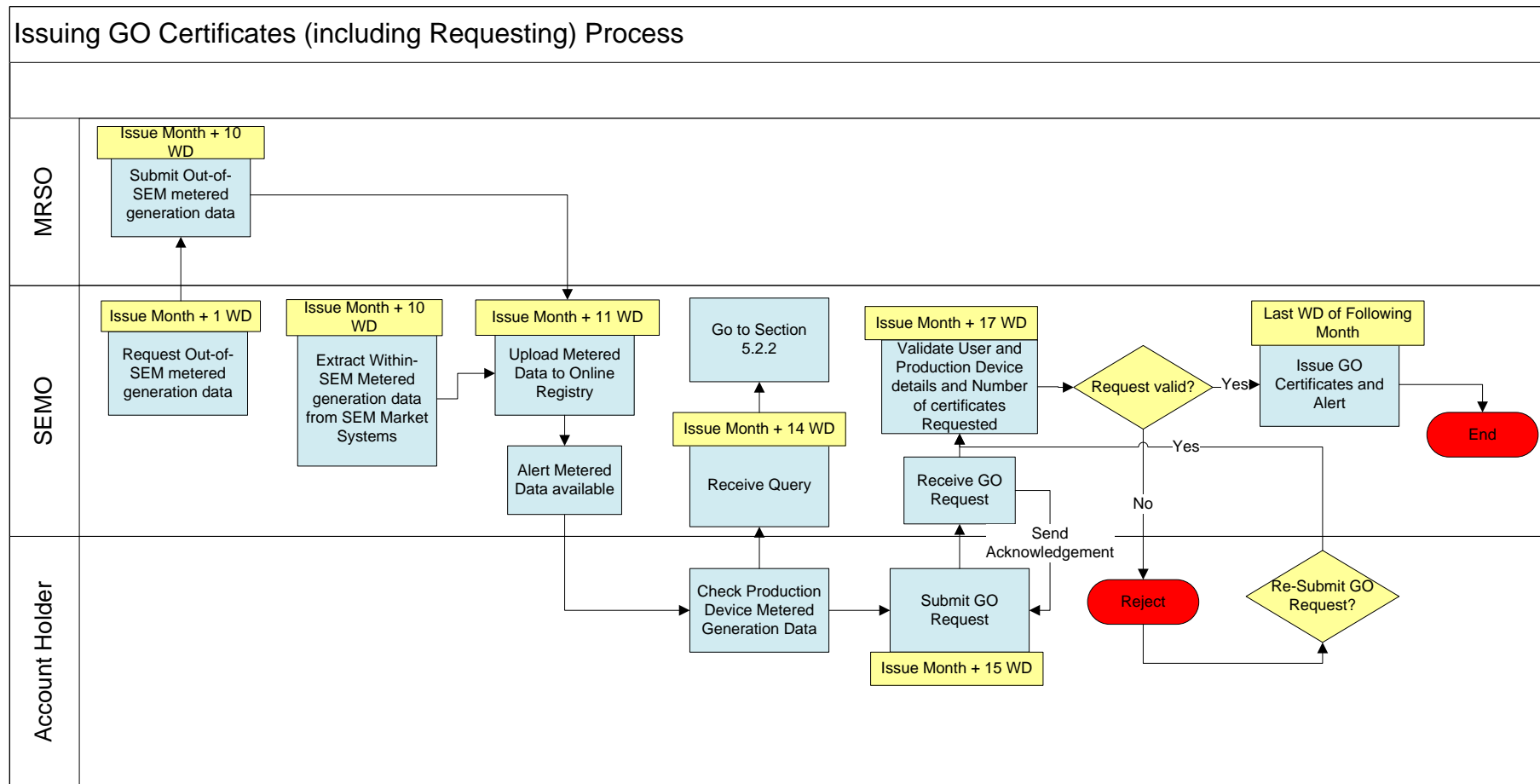


Fig. 4 Issuing GO Certificates (including Requesting) Process

6.2 PROCESS SWIMLANE

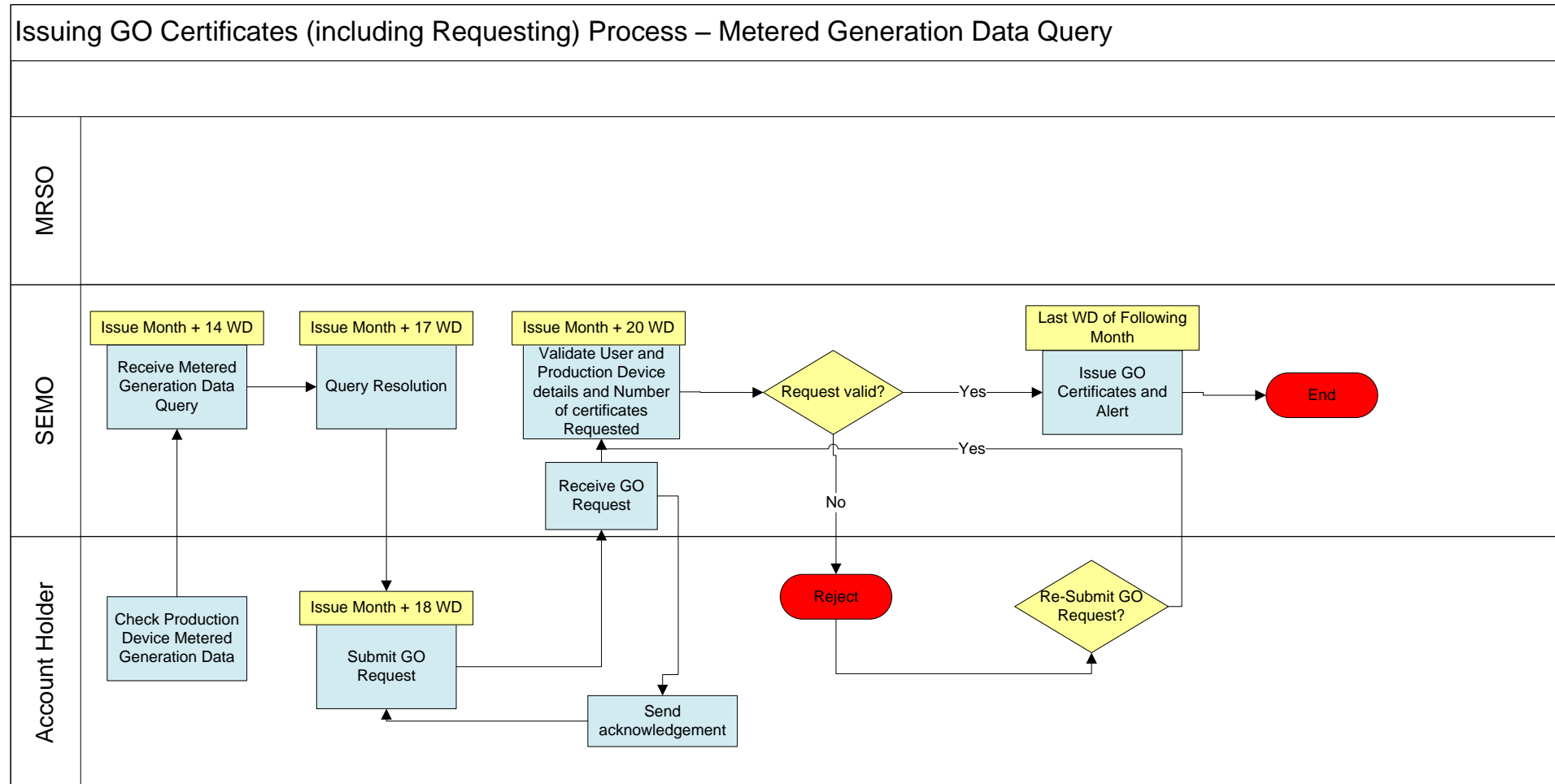


Fig. 5 Issuing GO Certificates (including Requesting) Process – Metered Generation Data Query

7 PROCESS STEPS

7.1 GO ISSUING (INCLUDING REQUESTING) PROCESS

Step	Step Name	Step Description	Timing
Metered Generation Data			
1	Request MRSO Out-of-SEM data	At the end of the month SEMO contacts MRSO requesting non loss adjusted metered data for all Out-of-SEM units and metered generation for distribution connected Within-SEM units. MRSO provides the data within 10 WD	Issue Month + 10 WD
2	Extract Market System Within-SEM data	SEMO extracts non loss adjusted metered data for all Within-SEM Production Devices from the SEMO Market Systems and creates the monthly Metered Generation database	Issue Month + 10 WD
3	Upload metered generation data	SEMO uploads the metered generation data to the GO Online Registry	Issue Month + 11 WD
4	Alert metered generation data available	SEMO issues an announcement to Account Holders to indicate metered data now available to cross check.	Issue Month + 11 WD
Verify			
5	Check Metered Generation Data	Account Holders review the meter generation data that has been assigned to their Production Devices in the GO Online Registry. If Account Holders find discrepancies with the metered generation data assigned they can submit queries to SEMO.	Issue Month + 14 WD
6 (Optional)	Query Resolution	If Account Holder submits a metered generation data query to guaranteesoforigin@semo.com , go to “Query Resolution” section 6.1.2 for details	Issue Month + 14 WD
Request			

Step	Step Name	Step Description	Timing
7	Receive GO request	Account Holder Users with the appropriate role within the GO Online Registry send an email, using the template provided, to Guaranteesoforigin@sem-o.com	Issue Month + 15 WD
8	Send Acknowledgement	GO Request is received and call is logged to track the request. An acknowledgment email is sent to the Account Holder.	Issue Month + 15 WD
Validate			
9	Check user details	SEMO checks the name of the Account Holder User submitting the GO request against the User details contained in the GO Online Registry.	Issue Month + 17 WD
10	Check Production Device details	SEMO also checks the Production Device details in the GO request against the details contained in the GO Online Registry	Issue Month + 17 WD
11	Validate Requests	SEMO checks that the number of GO Certificates requested matches the meter reading in the GO Online Registry	Issue Month + 17 WD
12 (Optional)	Send rejection	If any details are invalid, SEMO sends a notice that the GO Request has been rejected to the original sender.	Issue Month + 17 WD
Issue			
13	Issue GO certificates	SEMO issues GO certificates for all valid requests	Last WD of Following Month
14	Alert GO certificates issued	SEMO issues an announcement to all Account Holders via the GO Online Registry to advise that all requested GO certificates have been issued	Last WD of Following Month

7.2 GO ISSUING (INCLUDING REQUESTING) PROCESS – METERED GENERATION DATA QUERY

Step	Step Name	Step Description	Timing
Metered Generation Data			
Verify			
1	Query Resolution	SEMO will liaise with relevant Metered Data Provider and provide solution or update to Account Holder	Issue Month + 17 WD
Request			
2	Receive GO Request	Account Holder Users with the appropriate role within the GO Online Registry send an email, using the template provided, to Guaranteesoforigin@sem-o.com	Issue Month + 18 WD
3	Send Acknowledgement	GO request is received and an acknowledgment email is sent to the Account Holder.	Issue Month + 18 WD
Validate			
4	Check User details	SEMO checks the name of the Account Holder User submitting the GO request against the User details contained in the GO Online Registry.	Issue Month + 20 WD
5	Check Production Device details	SEMO also checks the Production Device details in the GO Request against the details contained in the GO Online Registry	Issue Month + 20 WD

Step	Step Name	Step Description	Timing
6	Validate requests	SEMO checks that the number of GO Certificates requested matches the meter reading in the GO Online Registry	Issue Month + 20 WD
7 (optional)	Send rejection	If any details are invalid, SEMO sends a notice that the GO Request has been rejected to the original sender.	Issue Month + 20 WD
Issue			
8	Issue GO certificates	SEMO issues GO certificates for valid request	Last Working Day of Following Month
9	Alert GO certificates issued	SEMO sends email to confirm to Account Holder that GO certificates have been issued	Last Working Day of Following Month

8 PROCESS REFERENCES

8.1 PROCESS RULE DOCUMENTS

The following table provides references to the documents that govern the design of this business process.

Document	Title	Version	Section	Description
S.I 147 of 2011 (replaced by S.I. 483 of 2014)	European Communities (Renewable Energy) Regulations 2011	N/A		Transposes EU directive to Irish law and names SEMO as the issuing body for GOs
Decision Paper CER/11/824	Supervisory Framework for Administration of Guarantees of Origin	N/A		Establishes the Supervisory Framework for the administration of Guarantees of Origin. Sets out specific detail of the GO scheme.
Directive 2009/28/EC	DIRECTIVE 2009/28/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC	N/A	Regulation 15	EU directive which sets out rules for GOs. Has been transposed by S.I. 147 of 2011(replaced by S.I. 483 of 2014) and is common source of law between Ireland and other Member States

8.2 RELATED DOCUMENTS

The following table provides a list of documents that are related to this business process.

Document	Title	Version	Relationship	Description
SEMO Business Process Model	SEMO Business Process Overview	1.0	Parent Document	Overview of the model used for the SEMO Business Processes. Provides the context for where each business process fits into SEMO.
Decision Paper CER/11/095	Fuel-Mix Disclosure in the Single Electricity Market: Calculation Methodology Decision Paper	N/A	Related Process	Decision paper outlining the process for Fuel Mix Disclosure which is the sole purpose of GOs.

9 ASSUMPTIONS

- GO Request template is available at goo.sem-o.com
- Account Holders will submit GO requests on a monthly basis.
- All submissions received after 5pm will be treated as being received the following working day.
- Account Holders can contact SEMO via the Contact Us form in the Online Registry
- All communications will be carried out via email (guaranteesoforigin@sem-o.com) and telephone (+353 1 2370468) for GO related enquiries. No hard copies of documents will be needed for this process.
- MRSO data submissions will conform to a template so that uploading this data does not have a material impact on timelines.
- The processing, issuing and tracking of GO certificates will be managed using the GO Online Registry.
- It will not be necessary for Account Holders to submit an amended GO Request template. SEMO will advise Account Holders of their actual metered generation data and Account Holders will confirm this value via email.
- GO certificates will be issued including Remainder Values as appropriate.

10 APPENDICES

10.1 GLOSSARY

Abbreviation	Definition
DSO	Distribution System Operator
RA	Regulatory Authority
SEM	Single Electricity Market
MDP	Meter Data Provider
MRSO	Meter Registration System Operator
T&SC	Trading and Settlement Code
WD	Working Day (Working Day ends at 5pm)
CER	Commission for Energy Regulation
S.I.	Statutory Instrument
GO	Guarantee of Origin
AH	Account Holder
PD	Production Device

10.2 ACCOUNT HOLDER USERS ROLES AND PERMISSIONS

CMO.grexel has various authorisation levels for Account Holder Users shown in Figure 3 below.

Specific responsibilities related to the use of CMO.grexel are identified and assigned to the predefined role(s) and the appropriate roles are assigned to the Users so that a user can have one or several roles.

Users with the Commit Transaction role can submit GO requests.

	<div> <div>AH Account Administrator</div> <div>AH Account Viewer</div> <div>AH PD Administrator</div> <div>AH PD Editor</div> <div>AH PD Viewer</div> <div>AH Root</div> <div>AH User Administrator</div> </div>						
HOME	x	x	x	x	x	x	x
Alerts list*	x		x	x	x	x	
Domain Announcement*	x	x	x	x	x	x	x
EECS-GO	x	x				x	
Accounts List	x	x				x	
Account Statement	x	x				x	
Search Certificates	x	x				x	
Search Transactions	x	x				x	
Initiate Transactions	x	x				x	
Commit Transactions	x					x	
Transfer Approval*	x					x	
PD Transaction Summary	x	x				x	
REPORTS	x	x	x	x	x	x	x
Activity Log	x	x	x	x	x	x	x
Cancellation Statements*	x	x	x	x	x	x	x
Issuing Statistics	x	x	x	x	x	x	x
USERS						x	x
Search User						x	x
Create User						x	x
Grant Permissions to External Users						x	x
Subscribe to Alerts*	x	x	x	x	x	x	x
PLANTS*			x	x	x	x	
View PD details			x	x	x	x	
Change Issuing Account			x			x	
Initiate PD registration*			x	x		x	
Confirm PD registration*			x			x	
Search Meter Readings*			x			x	
Add Meter Readings*			x			x	
Make Declarations*			x	x		x	
License Expiration Date			x	x	x	x	
MY PAGE						x	
Manage My Organization						x	
SUPPORT	x	x	x	x	x	x	x
User Manuals	x	x	x	x	x	x	x
Contact Us*	x	x	x	x	x	x	x

Fig. 6 User Roles and Permissions (taken from the Grexel Account Holder User Manual)

11 PROCESS FLOWCHART KEY

FLOWCHART KEY	
	Process trigger
	Process step
	Process decision / question
	Document
	Manual Input / Update
	Reference to another process
	Another business process to be implemented following current step (current step is a trigger for another process)
	Process end
	System
	Data
	System File
	Preparation