



TECHNICAL INFORMATION

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Subject : Procedural manual for override and use of power reserve on ships installed with SHaPoLi/EPL (Rev.2)

1. Background

- .1 In accordance with the implementation of the Energy Efficiency Existing Ship Index (EEXI) regulations and the relevant IMO guidelines (Res.MEPC.335(76) as amended by MEPC.375(80) and MEPC.390(81)), ships subject to these regulations are undergoing the installation of Power Limitation System (EPL/SHaPoLi) until the first periodical IAPP survey on or after 1 January 2023.
- .2 According to the aforementioned IMO guidelines, in the event of overriding the Power Limitation System for the safety of the ship or life and consequently a power reserve is used, it is required to record such actions on the record page of the Onboard Management Manual (OMM). Additionally, reporting, without delay, to the flag Administration or Recognized Organization (RO) as well as the relevant Authority of the next port of call is mandated.
- .3 Furthermore, reactivation of the Power Limitation system is imperative to promptly when the risk has been mitigated, and confirmation of this reactivation by the Recognized Organization (RO) or flag Administration is required. Therefore, please refer to the procedural manual for relevant requirements, including the application for the confirmation of reactivation after the override and/or the use of power reserve based on the KR e-Fleet.

2. Key Components

1. Subject: Ships installed with the SHaPoLi/EPL
2. In case the use of power reserve is allowed:

In accordance with the para. 3.1 of the IMO guidelines, the use of a power reserve is only

allowed for the purpose of securing the safety of a ship or saving life at sea, consistent with regulation 3.1 of MARPOL Annex VI. Followings are the example.

- Operating in adverse weather
- Operating in ice-infested waters
- Participation in search and rescue operations
- Avoidance of pirates
- Engine maintenance
- Other reasons consistent with regulation 3.1 of MARPOL Annex VI for the purpose of securing the safety of a ship or saving life at sea and etc.

3. In case of the reactivation of the Power Limitation System after the override, confirmation with supporting evidence by the Recognized Organization (RO) or flag Administration is required at the earliest opportunity.

=> Please be aware that failure to take appropriate measures for the requirement may result in findings during PSC inspections. **Along with the supporting evidence for the reactivation of the Power Limitation System, please apply to the branch office of our classification Society in the jurisdiction of the ship's next port for confirmation by review.(Refer to the attached "Guidelines for the application of review through e-Fleet.pdf")**

=> The confirmation may be carried out by review report without physical attendance of the surveyor since the confirmation is based on the supporting evidence in accordance with the paragraph 3.5 of the IMO guidelines. However, if it is detected by PSCO that, in accordance with the paragraph 3.7 of the IMO guidelines, the system is overridden without proper measures, then the confirmation of reactivation may be required in the presence of the surveyor at the port.

=> Recently, MEPC 81 adopted Res.MEPC.390(81) which contains below;

1. In a scenario specified in regulation 3.1 of MARPOL Annex VI, which may endanger safe navigation of the ship, immediate use may be achieved by procedural arrangements for pre-emptive un-limiting the SHaPoLi/EPL system.

2. Main arrangements of SHaPoLi

- 1) override of limitation is indicated by giving an alarm on the bridge, clearly informing the ship's master or OICNW;
- 2) in case of exceedance, the ship's master or OICNW to manually reduce the power within the limit;
- 3) in case of deliberate use of power reserve, data recording to commence automatically;

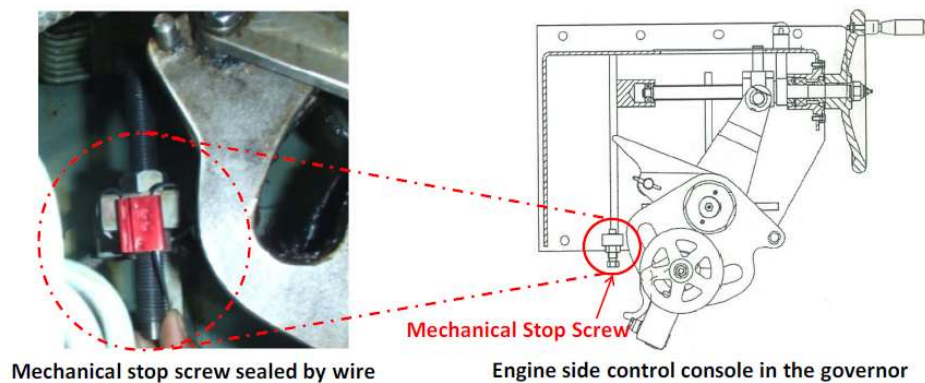
- 4) data recording device as defined in section 2.1.1.2 of Res.MEPC.335(76) as amended by MEPC.375(80) and MEPC.390(81); and
- 5) in case of short-term unintentional exceedance of the power limit the system may inhibit the initiation of the exceedance alarm for up to a maximum of five (5) minutes."

3. The following documents described in the appendices to Recommendation on the Provision and Display of Maneuvering Information on Board Ships (annex, resolution A.601(15)) should be updated to include the maneuvering characteristics of the ship when the ship has all shaft and engine power available, and when shaft or engine power has been limited:

- 1) the Pilot card;
- 2) the wheelhouse poster; and
- 3) the maneuvering booklet.

=> Examples of supporting evidence that should be submitted when applying for the confirmation of reactivation are as below:

- Engine power log
- For mechanical EPL, photo/record of resetting the sealing
- For electronic EPL or SHaPoLi, screenshot/photo or record confirming the reactivation
- Bridge/ER Log Book entry (in case a power reserve is not used after the power limitation system is overridden)
- Records of the Onboard Management Manual (OMM) record page (in case a power reserve is used).



<Example. Sealing of mechanical stop screw>

4. Measures to be taken to comply with the paragraph 3 of the *Guidelines on the Shaft/Engine Power Limitation System to comply with the EEXI requirements and use of a power reserve* (Res.MEPC.335(76) as amended by MEPC.375(80) and MEPC.390(81)) are as below:

1) A power reserve is used after the override of SHaPoLi/EPL

a) Any use of a power reserve should be recorded in the record page of the OMM for SHaPoLi/EPL, signed by the master and should be kept on board. The record includes:

- ship type; IMO number; ship size (in DWT and/or GT);
- ship's limited and maximum unlimited shaft/engine power;
- position of the ship and timestamp when the power reserve was used;
- reason for using the power reserve;
- Beaufort number and wave height or ice condition (in case of using the power reserve under adverse weather condition);
- supporting evidence, e.g. expected weather condition (in case of using the power reserve for avoidance action);
- records from the SHaPoLi/EPL system for the electronically controlled engine during the power reserve was used;
- position of the ship and timestamp when the power limit was reactivated or replaced

b) The ship should without delay notify its Administration or RO and the competent authority of the relevant port of destination.

c) The reactivation of the SHaPoLi/EPL system should be confirmed with supporting evidence by the Administration or the RO at the earliest opportunity. (Refer to the attached "Guidelines for the application of review through e-Fleet.pdf")

2) Activation of SHaPoLi/EPL override (power reserve is NOT used, implementing preventative measures in accordance with MARPOL Annex VI)

a) The event should be recorded in the Bridge & Engine Log Book:

- power used during the period when the override was activated (E/R Log Book);
- details of the reset after the reset of the EPL/SHaPoLi as soon as possible (Bridge & ER Log Book)

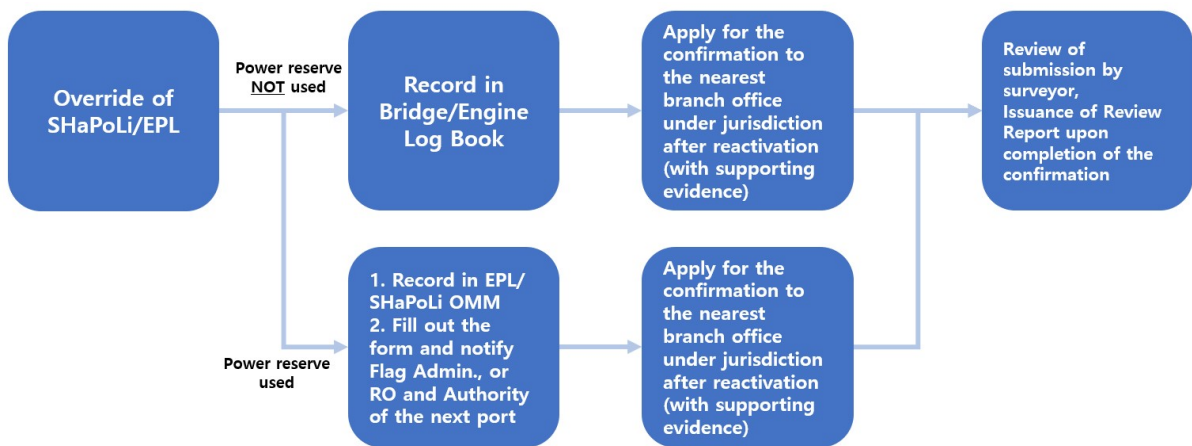
b) The notification to the flag Administration or RO and the competent authority of the relevant port of destination is not required.

c) The reactivation of the SHaPoLi/EPL system should be confirmed with supporting evidence by the Administration or the RO at the earliest opportunity.(Refer to the attached "Guidelines for the application of review through e-Fleet.pdf")

Activation of Override	Power reserve used	Power reserve <u>NOT</u> used
Record in E/R, Bridge Log Books		√
Record in OMM record page	√	
Notify flag/RO(KR)	√	
Notify next destination port	√	
Confirmation of reactivation by flag/RO(KR)	√	√

<SHaPoLi/EPL Override and a Use of Power Reserve>

5. Process for the notification to the Flag/RO, port Authority and the confirmation of reactivation can be seen in the following flowchart.



<SHaPoLi/EPL Override / Power reserve / Reactivation Flow-chart>

3. Special or separate instruction from Flag Administration(differ from IMO standards)

1) In the case of the Bahamas flag Administration, Marine Notice 61 which is different with the IMO guidelines was published. Accordingly, Bahamas Flagged ships shall follow the MN 61 as below(refer to the attached Marine Notice 61 for details) :

- Deactivation (override) shall be recorded in the OMM.
- The use of power reserve shall be recorded in the OMM and the official logbook and be reported to the flag Administration. Separate notification to the port authorities is required, referencing the flag Administration and RO in c.c.
- Flag State acknowledgement from regarding the use of power reserve and subsequent reactivation shall be duly logged onboard and reviewed by the RO during the next IAPP survey.

If you have any questions regarding this Technical Information, please contact as below:

- **Convention & Legislation Service Team** (convention@krs.co.kr) : General inquiries, Notification of the use of a power reserve for non-Korean flagged ships
- **Statutory Service Team** (statutory@krs.co.kr): Notification of the use of a power reserve for Korean flag ships etc.

- End of Document -

Attachment

1. Res.MEPC.335(76).pdf
2. Res.MEPC.375(80).pdf
3. Res.MEPC.390(81).pdf
4. 2022_ETC_01_E_Guideline for the implementation of EEXI regulation.pdf
5. (Sample) Reporting Format - Power Reserve.xlsx
6. (E) Guidelines for application of review through E-Fleet.pdf
7. (Bahamas) MN 061 MARPOL Annex VI.pdf

Distributions : KR surveyors, Ship owners, Manufacturers, Other relevant parties

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