



UCTE compliance monitoring program 2006

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COMPLIANCE OVERSIGHT REPORT

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Table of Contents

- 1. Introduction 1
- 2. Executive Summary 2
- 3. Compliance monitoring and self regulation 4
- 4. Legal basis for compliance monitoring according to the UCTE Statutes and Internal Regulations 5
- 5. 2006 Compliance Monitoring Program Results 7
 - 5.1. Collection of the Questionnaires 7
 - 5.2. Definition fo compliance levels 8
 - 5.3. Compliance with standards and requirements 9
- 6. Analysis of comments 12
- 7. Overall conclusions 13
- 8. Recommendations for UCTE OH 14
- 9. Recommendations for Compliance Monitoring Program 2007 15

1. Introduction

The UCTE Compliance Monitoring Program 2006 was designed as a pilot project to verify Transmission System Operators' (TSOs') compliance with the UCTE Operation Handbook. For this purpose the UCTE Steering Committee has set up an Ad-hoc Group CMEP – meanwhile transferred into the WG CM&E (Working Group Compliance Monitoring and Enforcement) - with a task to collect and review the compliance declarations provided by TSOs in the process. UCTE Steering Committee (SC) on its meeting on 23 March 2006 approved final Compliance Monitoring Program and decided to launch the trial Compliance Monitoring and Enforcement Process (CMEP) for 2006.

This pilot project aimed at encouraging compliance with the UCTE Operation Handbook (OH) standard and requirements necessary to preserve the reliability of the UCTE synchronous area and at increasing the UCTE credibility and transparency within the UCTE community on the compliance with the Operation Handbook

This report presents the results from the pilot project meant to be a learning process for UCTE and TSOs themselves. The Operation Handbook was developed since 2004, with Policies 1, 2 and 3 being approved and in force in July 2005. Thus, those Policies were taken as a scope of the initial Compliance Program. In order to ease the compliance evaluation, the compliance questionnaires were developed and included into the Compliance Monitoring Program.

The primary purpose of the 2006 Compliance Program was to test the Program's effectiveness and make required improvements. Another purpose was to recommend how the UCTE could make the necessary updates in its processes and procedures so as to make them fully applicable, once the UCTE Operation Handbook is finished.

2. *Executive Summary*

The first compliance monitoring process in UCTE has shown that compliance with UCTE Reliability Rules by the TSOs in 2006 was rather the norm than the exception. However the process itself was not performed according to the preliminary schedule. Many TSOs delivered compliance documentation (questionnaires) to AhG CMEP after the due date.

Even though the compliance monitoring for Policies 1, 2 and 3 was mandatory, there were some cases where TSOs did not perform the self-assessment, without giving any comment. This possibility will be eliminated in the regular process in 2007.

Following five compliance levels were used in the pilot CMEP:

- 1.) Guaranteed Compliance (GC)
- 2.) Full compliant (FC)
- 3.) Mainly compliant (L1)
- 4.) Non-compliant (L2)
- 5.) Severe non-compliant (L3)

Despite it was reminded that the non-compliance levels L2 and L3 have to be accompanied by declaration of actions and deadlines when compliance will be reached together with temporary measures to preserve the security of the system (as for Addenda to MLA) some TSOs did not follow this principle.

A severe non-compliance was announced only once. The greatest number of compliance levels L1 and L2 showed by TSOs concern rules related to:

- Primary control
- Emergency situations
- Scheduling of power exchanges
- Voltage control and reactive power management

More detailed analyses of these rules show, that a big part of above mentioned rules concern matters requiring cooperation, coordination, exchange of data and agreements between TSOs:

- P1-E-R2 Emergency Situation Declaration
- P1-E-R3 Coordination
- P2-A-R2 Data Exchange Among Operators
- P3-B-S4 Joint action at boundaries between TSOs
- P3-B-S4.1 Pre-set values at boundaries
- P3-B-S4.2 Reactive power flows on tie-lines
- P3-B-S4.3 Bilateral policies

This shows that there is still a need and space for better cooperation between TSOs and that UCTE can play a pushing and coordinating role in this area.

The process has shown also some weaknesses of the used form of the self assessment. Due to the different understanding of compliance levels, especially levels GC and FC, TSOs have had difficulties with application of the compliance levels. Therefore WG CM&E proposes for the future to apply only three compliance levels by merging on the one hand the levels GC and FC and on the other hand the levels L2 and L3 in order to ease the common

understanding of the levels. Reducing the compliance levels to three and making requirements more measurable might increase the efficiency of the self assessment process.

Only a self-assessment with qualitative comments by each TSO explaining their chosen levels of compliance, improvement and extension of OH concerning how the standards are measured and compliance is verified and the opportunity of investigations by ad hoc enquiry teams will give more objective results.

Compliance monitoring process and all the difficulties connected to this process have also allowed to formulate many recommendations for the Operation Handbook.

OH standards and requirements should clearly state who is responsible for compliance with the specific rule. They should be as much as possible measurable and give indications enabling easy evaluation of level of compliance. Even those rules, which are provided with measurable target physically values (that constitute full compliance) do not indicate the acceptable ranges.

With respect to the rules, a simplification of the categories of rules should be analyzed. Today the Operation Handbook is divided into criteria, requirements, standards, guidelines, procedures and measures, however the policies don't deal with those categories strictly in the same manner. Moreover it is not sure at all that each TSO understands such complicated nuances. Therefore maybe only two categories of commitments should be investigated: what is mandatory and what is voluntary.

With respect to the structure of policies, the present structure is built-up by degrees of commitments, with the most constraining issues (requirements and standards as mandatory) in the first place and secondly the guidelines (as voluntary). This structure has a drawback since it divides specific subjects (e.g. primary control) in different places in the same policy: requirements at one place, standards elsewhere and guidelines somewhere else. It could be considered to structure the policies subject by subject, indicating the degree of commitment for each item (rule) within the subject. This would give an immediate overview of each subject with its degree of commitment.

Since interoperability depends not only on the sum of the correct behavior of each individual TSO and its compliance with the current version of OH, the OH should be extended with additional standards and requirements that will take into account not only the neighborhood cross-border point of view but also the regional/whole system aspects in order to ensure reliable operation of the whole interconnected UCTE system.

These recommendations are provided as a feedback information for the WG Operation & Security (in charge of elaborating the Policies). They will allow an improvement of the Operation Handbook and in consequence increase the reliability of the UCTE system operation.

3. Compliance monitoring and self regulation

Regulation may be developed by industry bodies for their members (self-regulation) or it may be developed by the state. Regulation can be defined as *a set of rules (generally based in law) with compliance monitored by a public sector agency.*

Organizations, including voluntary industrial organizations such as UCTE, might be regulated mainly in order to secure transparency and accountability (for example through compliance with reporting and disclosure requirements), to protect vulnerable service users and to ensure and/or improve standards for service users.

Regulatory schemes generally have three main elements:

- the setting of standards or targets;
- compliance monitoring; and
- mechanisms for changing behaviors, i.e. sanctions for non-compliance.

Regulation is expensive as it imposes compliance costs on regulated organizations. Standard setting, monitoring and enforcement are also very resource intensive. These costs need to be justified by equal in extent benefits. Regulation has many positive benefits. Voluntary organizations might press for regulation because:

- it provides assurance that every provision meets a basic standard;
- it contributes to accountability and transparency through external scrutiny;
- it provides leading boards and staff an objective view to question how they do things;
- it focuses attention on standards;
- it increases their credibility because they generally compare favorably with public and private sector organizations;
- it provides assurance that public money is being spent appropriately;
- it increases founder confidence; and
- it supports sector advocacy for higher standards for service users and for the funding to meet these standards.

Compliance can be monitored by:

- the self-regulatory body by carrying out permanent surveillance of the programs;
- the state regulator by carrying out permanent surveillance of the programs;
- the recipients or interest groups by virtue of the establishment of a complaint system.

Self-regulation typically involves a unique combination of private interests with an oversight of the external institutions. Self-regulation has proven to be an effective and efficient form of regulation in several areas and markets. As markets developed, market participants recognized that regulation was necessary in order to protect the integrity of the market. Industry participants recognized that those who were most familiar with the practices of a particular trade were best suited to create rules related to that trade, to enforce those results and to resolve the disputes that arose from those rules.

One of the major reasons for the success of Self Regulated Organizations is their flexibility to adapt regulatory requirements to a rapidly changing business environment. This flexibility is even more important as European-wide energy markets trade without regard to national

boundaries. The regulatory framework must be continuously evaluated so that it does not lag behind or act as an impediment to market innovations.

The setting of standards (former recommendations of the UCPTE¹ and the new OH reliability rules of the UCTE) has been one of the main activities of UCTE (UCPTE) for over 50 years. Now, in the view of increasing demand for reliability, the UCTE is moving towards the next elements of regulatory scheme, i.e. compliance monitoring and, possibly, enforcement of the rules. Compliance monitoring is adopted for the following reasons:

- As an alternative to direct government regulation;
- To build public trust and consumer confidence;
- To increase security of interconnected operation and protect consumers;
- To put moral pressure on those TSOs who otherwise would behave in an “unprofessional” or “technically irresponsible” way;
- As a mark of professional status;
- To raise the public image of transmission industry;
- To provide a cheaper/ faster mode of dispute resolution as to go to law;
- To develop a set of common standards for services.

Main dangers for UCTE compliance monitoring process:

- key indicators of quality are not easily quantifiable or measurable;
- there is a tension between general UCTE standards and local flexibility; and
- the process of ensuring compliance can become more important than the aims, the focus being on ticking the right boxes in questionnaires, rather than meeting technical standards.

4. Legal basis for compliance monitoring according to the UCTE Statutes and Internal Regulations

The technical rules for interconnected operation were mainly developed in the UCPTE, which consisted, until European Directive 96/92 came into force, of vertically integrated utilities, each of them managing its own control area (i.e. a control block acting as a single unity vis-à-vis other parties in the synchronous zone).

The cooperation in the synchronous zone brought about a strong win/win situation, which was the driver of the sustained growth. The presence of generation and transmission within each utility allowed the parties to ensure compliance with the technical rules in force. The absence of competition, coupled with a fair cost return legislation, removed incentives to cut corners on compliance.

UCPTE was not a legal body and its rules lacked any legal basis. Nevertheless, UCPTE was a successful example of a voluntary compliance with coordination rules, imposed by “peer pressure” in Assemblies, where high-level representatives of the utilities met on regular basis.

In 1999, UCPTE changed its name into UCTE, to reflect unbundling resulting from the European Electricity Directive. In 2001, UCTE was re-founded as a legal body, its members

¹ UCPTE is the predecessor organisation of the UCTE

being the designated Transmission System Operators in the EU countries and TSOs or vertically integrated utilities in other European countries. The new Articles of Associations and Internal Regulations directly addressed compliance with the Operation Handbook and monitoring thereof.

The new Articles of Associations:

Preamble

...
 – In order to seek to enforce the effectiveness of technical rules and principles established in the past by UCTE for the operation of the interconnected grids, it was decided to collect them in the Operation Handbook. For the avoidance of doubt regarding the binding character of the Operation Handbook on all Members, *the Members* shall all sign the Multilateral Agreement and as such *are committing themselves to fully comply with the Operation Handbook*.

Article 2 – Name and purposes of the Association

...
 2. The Association pursues essentially scientific aims primarily related to the operation of Transmission systems from a technical point of view and shall have the following purposes with regard to the Synchronous Area:
 • to study and to co-ordinate the rules for operation of the UCTE Synchronous Area and its interfaces with neighboring Transmission systems;
 ...
 • to study how to support *the compliance of Members with the technical rules and principles stated in the Operation Handbook*.

Internal Regulations:

Article 2 - Technical Rules and Recommendations

By approval of the present Internal Regulations, *each Member of UCTE commits itself*, without prejudice to applicable laws and legally enforceable regulations, *to comply with and to fully implement the technical rules of UCTE and to co-operate in studies and work of UCTE and provide UCTE with the adequate information requested*.

Article 24 - Functions of Working Groups and Sub-Groups

Based on the purposes defined in Art. 2 of the Articles of Association, UCTE performs the following activities:

- the drafting of technical rules and recommendations, together with their updating in response to the development of technical constraints, quality control objectives and the structures of the electricity sector;
- *the analysis of compliance with technical rules*;

....
 These activities shall, as required, be assigned to Working Groups, reporting to the Steering Committee, or to Sub-Groups, reporting to a specific Working Group.

Article 25 - Working Groups

Working Groups:

- shall prepare analyses, opinions, draft decisions, technical rules and recommendations *and shall monitor the compliance with those rules and recommendations*, for submission to the Steering Committee, on subject areas for which they are constituted,

The implementation of the European Directive resulted in developing Grid Codes in various countries. Grid Codes are sets of rules and regulations normally of public relevance and thus legally enforceable. They describe the rights and obligations of grid users vis-à-vis the Transmission or Distribution System Operators. The Grid Codes define the rights and obligations of generators participating in the primary and secondary control, as well as several other issues involving grid users. Since TSOs in the UCTE have to rely on grid users for

compliance with the UCTE rule setting, appropriate legal instruments must be provided in order to fulfill this aim.

At the Florence Regulatory Forum in February 2002 UCTE representatives advocated the need of binding Reliability Standards. Meanwhile UCTE transformed the set of UCPTE rules into an “Operational Handbook” (OH), which assembles the historical standards/recommendations from a TSO perspective and defines the rights and obligations of member TSOs with respect to reliability on synchronous area level.

The question of legal enforceability of Operation Handbook was solved by a decision that has been taken by the UCTE in 2002: a multi-lateral agreement (MLA) has been reached between all UCTE member TSOs. MLA has formalized the application of the Operational Handbook as a binding commitment.

Multilateral Agreement (MLA)

MLA gives the contractual framework for parties’ obligations over the course of the performance of the contract. The decision bodies of UCTE have the power, when appropriate, to adapt the parties’ obligations, i.e. to amend and further develop the technical standards, without UCTE being a party to the agreement.

In case of alleged default or breach of the contract, private conflict resolution mechanisms are in most cases more suitable since no court has the necessary expertise to arbitrate efficiently the technical aspects of the matter to be judged. A step by step approach is foreseen in order to solve controversies arising between TSOs. In case of technical infringement, the Parties have to take steps to prompt solution and try to solve the controversy in a conciliatory way. In the event of failure, the Parties may start a Mediation Procedure that could involve an internal body (“Technical Committee”) to be appointed by UCTE.

Parties should be given incentives not to breach the agreement. UCTE has since a long time an exclusion clause, by which members may be excluded from the association. This clause was never used during the 53 years existence of the association and it is plausible that this will remain so. On the contrary, the use of compensation for damages seems appropriate.

5. 2006 Compliance Monitoring Program Results

5.1. Collection of the Questionnaires

Compliance of UCTE member TSOs with Operation Handbook standards and requirements was evaluated through the Questionnaires developed for Policies 1, 2 and 3. The process was steered and coordinated by the AhG CMEP, set up by the SC at the meeting on 19 January 2006 and supported by the UCTE Secretariat. As defined in the Compliance Program the Control Area Managers designated within the frame of the Multilateral Agreement were responsible for filling in the compliance declarations for individual TSOs. Compliance questionnaires were filled via dedicated application in UCTE's extranet allowing an access to all compliance data for all Control Area Managers.

The pilot project was designed as a self-assessment process for the most critical standards and requirements of Policies 1, 2 and 3. The set of most critical standards has been selected by the expert teams cooperating with the Drafting Teams for the concerned Policies and converted into questionnaires. Only the requirements and standards not applicable to TSOs or which do not influence the reliability of interconnected operation have not been included in the questionnaires. The questionnaires were meant as a supporting tool, narrowing interpretation possibilities and posing specific questions concerning each standard. Based on TSOs own evaluation, Control Area managers were asked to report their compliance levels for the selected standards/requirements.

Due to the fear of the high workload related to compliance evaluation, in the first step only the compliance with Policy 3 was mandatory, i.e. the questionnaires related to the Policies 1 and 2 have been filled in on a voluntary basis. In this step, in order to assess the workload, the AhG asked the Control Area Managers for an estimation. After having realized that the workload is reasonable² and that most of the TSOs followed the voluntary process for Policies 1 and 2, the AhG recommended to the Steering Committee to extend the process to those Policies. Upon this recommendation the Steering Committee incorporated the Policies 1 and 2 into the obligatory scope of the pilot CMEP.

5.2. Definition of compliance levels

Following definitions were used in the pilot CMEP:

"Guaranteed Compliance (GC)" - This category applies when the standard / requirement is over fulfilled in all respects. The procedures are stable and can be guaranteed under all thinkable conditions.

"Full compliance (FC)" - This category applies when the standard / requirement is fulfilled in all details. Security and quality of system operation of adjacent systems is not jeopardized under foreseeable conditions;

"Level 1 (Mainly compliant) (L1)" - This category applies when the standard/requirement is mainly fulfilled. Security and quality of system operation of adjacent systems is not jeopardized. The procedures are sufficient, but can not be guaranteed under all circumstances;

"Level 2 (Non-compliant) (L2)" - This category applies when the standard / requirement is in some essential parts not fulfilled. The non-compliance may have limited influences to the security and quality of system operation of parts of adjacent systems). The non-compliant TSO should fill in a non-compliance declaration!;

² The average value for the self assessment of compliance for the selected standards of all three Policies was estimated At about 50 manhours.

"Level 3 (Severe non-compliant) (L3)" - This category applies when the standard/requirement is for the most part not respected. The non-compliance may jeopardize the security and quality of system operation of the adjacent systems, respectively of the whole synchronous zone). The non-compliant TSO should fill in a non-compliance declaration!;

Feedback

The AhG CMEP asked for any feedback on the process, which could be given in the text field "General comments for the Policy".

5.3. Compliance with standards and requirements

Compliance according to Policies

There are big differences in assessment of compliance between different TSOs. This is due to difficulties with interpretation of OH rules and the "self criticism" of the TSOs. However an analyses of questionnaires enables some general observations.

Policy 1

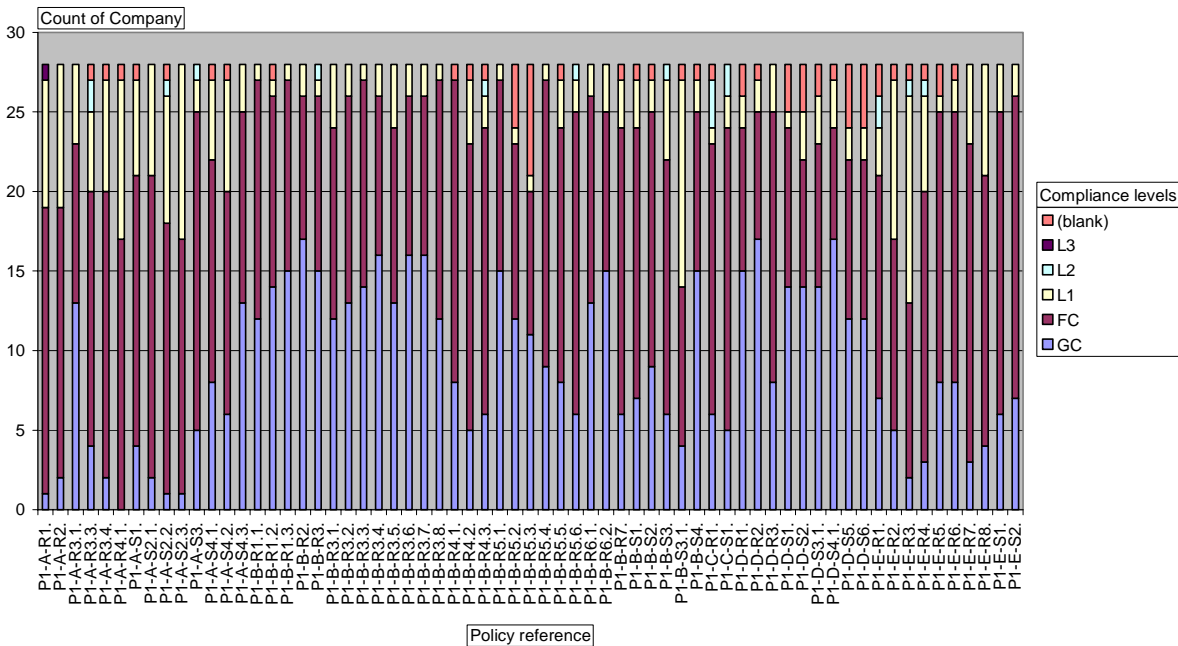


Chart 2. Compliance with OH Policy 1 rules ("blank" means no answer or rule is not applicable for TSO)

The only severe non-compliance (L3) was declared for **Policy 1 - Chapter A - Requirement 1 (P1-A-R1)** by one TSO. This requirement defines the accuracy of frequency measurements setting the minimum level at 10 mHz. The comment provided by that TSO explains that the accuracy of frequency measurement used in the primary controllers is class 5 (0.5% or 250 mHz). Having in mind the small size of the concerned Control Area (the maximum load at

around 1500 MW) the AhG considers that this non-compliance is estimated not to be critical to the security of the whole interconnected UCTE system.

The greatest number of evaluations with L1 and L2 compliance levels are found for rules related mainly to Primary Control and to much less extent to Secondary Control and Measures for Emergency Conditions:

- P1-A-R1 Accuracy of Frequency Measurements
- P1-A-R2 Insensitivity of Controllers
- P1-A-R3.-3.4 Primary Control Reserve
- P1-A-R4.1 Constant Network Power Frequency Characteristic
- P1-A-S1 System Reliability
- P1-A-S2.1 Adjustment of Generation
- P1-A-S2.2 Deployment
- P1-A-S2.3 Duration of Delivery
- P1-A-S4.2 Contribution to Control
- P1-B-S3.1 Compliance With Large Program Change
- P1-E-R2 Emergency Situation Declaration
- P1-E-R3 Coordination

Policy 2

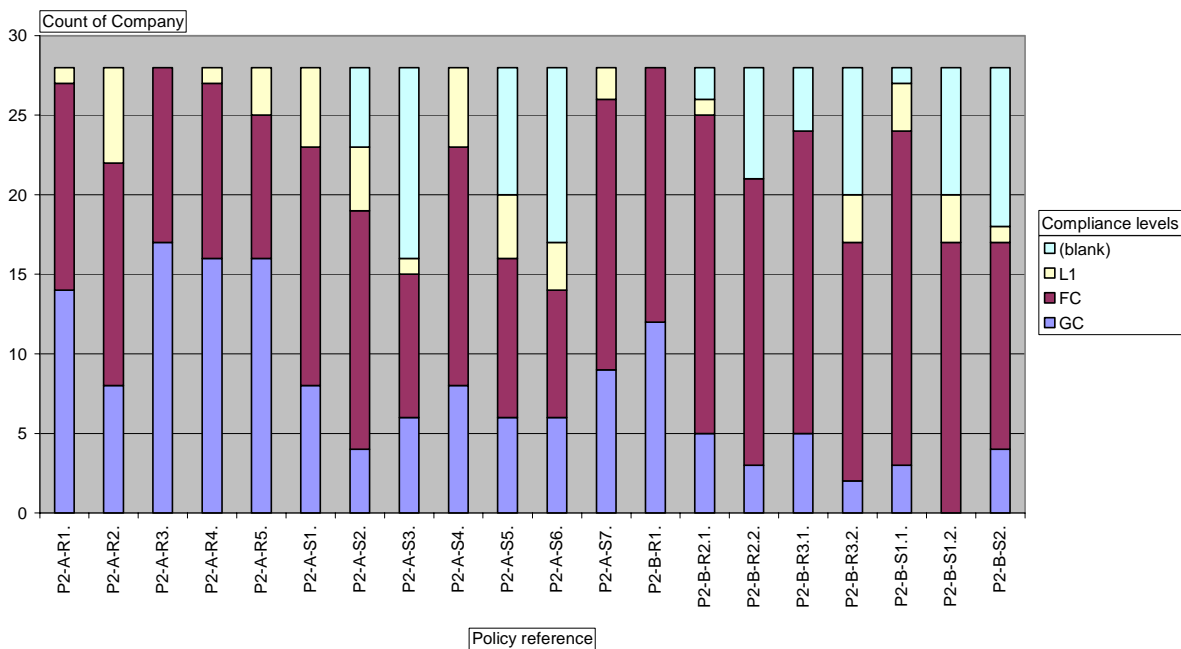


Chart 3. Compliance with OH Policy 2 rules

There are no declared non-compliances for Policy 2, however there is a remarkable number of standards and requirements for which no answer has been given. After analysis of the questionnaire and comments, the AhG concluded that some of the standards/requirements refer to Control Block or Coordination Centers and that in those cases the TSOs, which perform only the functioning of a Control Area, could not provide answers. The AhG takes a note that in the CM Program 2007 this issue has to be solved via including an additional choice “not applicable for a Control Area”.

The greatest number of evaluations with L1 compliance level was declared for rules related mainly to Scheduling of Power exchanges:

- P2-A-R2 Data Exchange Among Operators

- P2-A-S1 Day Ahead Verification
- P2-A-S2 Day Ahead Control Block Verification
- P2-A-S4 Modification of Exchange Schedule
- P2-B-R3.2 Transmission of Power Deviations

Policy 3

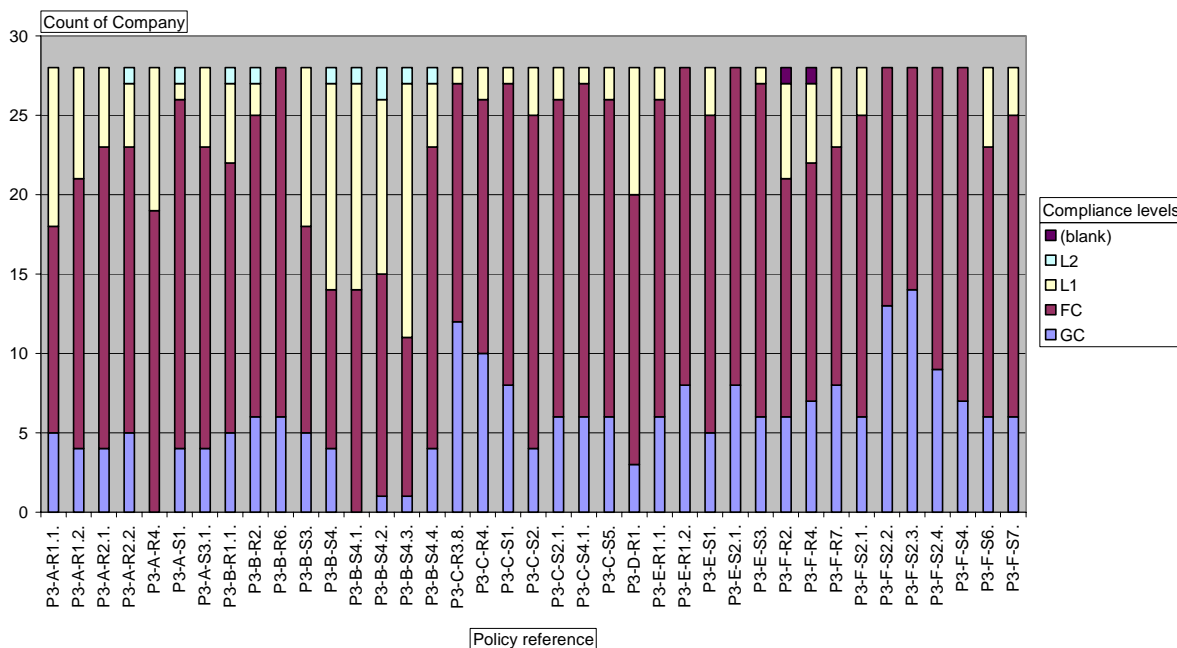


Chart 4. Compliance with OH Policy 3 rules

The greatest number of evaluations with L1 and L2 compliance levels was declared for rules concerning Voltage Control and Reactive Power Management:

- P3-B-S3 Preventing Voltage collapse
- P3-B-S4 Joint action at boundaries between TSOs
- P3-B-S4.1 Pre-set values at boundaries
- P3-B-S4.2 Reactive power flows on tie-lines
- P3-B-S4.3 Bilateral policies

The big number of evaluations with L1 and L2 levels might indicate that a lot of TSOs have some problems with compliance with these rules.

Other rules with relatively big number of evaluations with L1 and L2 compliance levels are the following:

- P3-A-R1.1 Monitoring
- P3-A-R1.2 Violation of N-1 Criterion
- P3-A-R4 Operational Network Reserve
- P3-B-R1.1 Reactive power resources
- P3-D-R1 Loss of element
- P3-F-R2 Reliable and secure telecommunication network
- P3-F-R4 Back-up facilities

In the self-assessment process there is a missing link between reported compliance levels and addenda tabled in the MLA process at eight TSOs. If this is not a result of a reached compliance, it must be ascribed to a misunderstanding of the given compliance criteria. This issue will be reviewed again, when the results of the addenda monitoring process are available.

In the same context, some general issues like compliance by TSOs who contract the services related to specific Policies from other TSOs will be clarified and agreed for the future.

Conclusions

- **Many TSOs seem to have some problems with compliance with the rules on Voltage Control and Reactive Power Management.**

Compliance according to TSOs

There are big differences in assessment of compliance levels between different TSOs. There is a group of four TSOs, which for most of rules declare the level GC. There is also another group of fourteen TSOs, which for most of the rules declare the level FC and did not assign any GC level. It seems that these differences result from different understanding of the levels GC and FC.

Big differences in application of levels L1 on one side and GC and FC on the other side show that results can be influenced by the “philosophy” or “criticism” applied during the self assessment. As this self assessment is made by different specialists with different experiences, and with no common and objective assessment method, it seems that differences in self assessment cannot be overcome. This is the intrinsic feature of self assessment and only

- (i) assessment with qualitative comments by each TSO to explain how they reach compliance,
- (ii) improvement and extension of OH concerning how the standards are measured and compliance is verified (by the use of reports, explanations, submitting of procedure documents, etc.), and
- (iii) investigations by audit teams can give more objective results.

Conclusions

- Due to the different understanding and difficulties with application of the compliance levels GC and FC, WG CM&E proposes for the future to apply only three levels of compliance by merging on the one hand the levels GC and FC and on the other hand the levels L2 and L3. This will ease a common understanding.
- Reducing the compliance levels to three and making requirements more measurable might increase the efficiency of the self assessment process.
- Only assessment with qualitative comments by each TSO explaining why they have chosen their level of compliance, improvement and extension of OH concerning how the standards are measured and compliance is verified, and the opportunity of investigations by an ad hoc enquiry team can give more objective results.

6. Analysis of comments

Since originally it was decided that UCTE will not interfere into the self-assessment, the process shows the variety of the approaches by different TSOs. Moreover, in the pilot process TSOs did not have to provide any information justifying the chosen level of compliance. As a

result the actions of the AhG CMEP were limited to a quantitative rather than to the preferred qualitative analysis.

However, in the course of assessing the compliance for Policy 3, the AhG decided to recommend to the SC an obligation for providing a comments for 4 requirements with lowest average level of compliance, namely: P3-B-S4 “Joint action at boundaries between TSOs”, P3-B-S4.1 “Pre-set values at boundaries”, P3-B-S4.2 “Reactive power flows on tie-lines”, P3-B-S4.3 “Bilateral policies”. It is worth of noting that not all the TSOs provided answers to this request and many of those who provided them did this at a rather general level. Therefore a qualitative analysis is still not possible.

Main conclusions from general comments:

- CMEP contains too many questions, some are not essential for the stability of the UCTE grid.
- Wording of the OH rules is not always clear and can lead to different interpretations.
- There are too many compliance levels.
- Specific for Policy 1: indicators of Load Frequency Control (LFC) should be incorporated into the evaluation of the quality of frequency regulation.
- Specific for Policy 2: an option for “not applicable for a Control Area” is missing.

Main conclusions from specific comments:

- Some comments are so general that it not possible to extract any additional value for the CMEP.
- Some TSOs provided comments that they are not nationally responsible to verify the compliance of generators with some standards or that this compliance is not regularly tested. These comments confirm that TSOs have limited means to oblige generators and to verify the compliance (or the quality of service) with some specific standards related to the performance of generation units.
- The AhG CMEP noted that there are some “new” non-compliances, which were not declared in the Addenda to MLA. This is perceived as a normal situation, as compliance normally can not be assured eternally, especially when the rules refer to third parties or depend on other (a.o. market) regulations.
- In some cases the provided comments seem to be in contradiction to the declared level of compliance (e.g. lack of a dead band is still assessed as Fully Compliant).
- In one case a UCTE member company is a block coordinator but not a TSO. Thus some OH requirements refer to this company. However, the CMEP is addressed only to TSOs. To overcome this situation a local TSO within a block decided to assess the compliance of the block coordinator, by using its own standards and requirements that are officially not applicable to the whole Control Area.

7. Overall conclusions

The following is a listing of the conclusions reached by AhG CMEP based on the experiences from the 2006 Compliance Monitoring Program:

- The above charts show that in 2006 compliance with UCTE Reliability Rules by the TSOs was rather the norm than the exception.
- Many TSOs transmitted their UCTE compliance documentation (questionnaires with answers) to the AhG CMEP after the due date.

- Even though the compliance monitoring for Policies 1, 2 and 3 was mandatory, there are some cases where TSOs did not provide a self-assessment, without giving any comment. This possibility will be eliminated in the regular process in 2007.
- Even though it was reminded that a non-compliance level has to be accompanied by declaring the actions and deadlines when compliance will be reached together with temporary measures to preserve the security of the system (as for Addenda to MLA) some TSOs did not follow this request.
- The greatest number of compliance levels L1 and L2 concern rules related to:
 - Primary control
 - Emergency situations
 - Scheduling of Power exchanges
 - Voltage Control and Reactive Power management
- More detailed analysis of these rules shows, that a big part of the above mentioned rules concern matters requiring cooperation, coordination, exchange of data and agreements between TSOs:
 - P1-E-R2 Emergency Situation Declaration
 - P1-E-R3 Coordination
 - P2-A-R2 Data Exchange Among Operators
 - P3-B-S4 Joint action at boundaries between TSOs
 - P3-B-S4.1 Pre-set values at boundaries
 - P3-B-S4.2 Reactive power flows on tie-lines
 - P3-B-S4.3 Bilateral policies

This shows that there is still a need and space for better cooperation between TSOs and that UCTE can play a pushing and coordinating role in this area.

8. Recommendations for UCTE OH

OH standards and requirements should clearly state who is responsible for compliance with the specific rule. They should be as much as possible measurable and give indications enabling easy evaluation of level of compliance. Even those rules which are provided with measurable target physically values (level that constitute full compliance) do not indicate the acceptable ranges.

With respect to the rules, a simplification of the categories of rules should be analyzed. Today the Operation Handbook is divided into criteria, requirements, standards, guidelines, procedures and measures, however the policies don't deal with those categories strictly in the same manner. Moreover it is not sure at all that each TSO understands such complicate nuances. Therefore maybe only two categories of commitments should be investigated: what is mandatory and what is voluntary.

With respect to the structure of policies, the present structure is built-up by degrees of commitments, with the most constraining issues (requirements and standards as mandatory) in the first place and secondly the guidelines (as voluntary). This structure has a drawback since it divides specific subjects (e.g. primary control) in different places in the same policy: requirements at one place, standards elsewhere and guidelines somewhere else. It could be

considered to structure the policies subject by subject, indicating the degree of commitment for each item (rule) within the subject. This would give an immediate overview of each subject with its degree of commitment.

Since interoperability depends not only on the sum of the correct behavior of each individual TSO and its compliance with the current version of OH, the OH should be extended with additional standards and requirements that will take into account not only the neighborhood cross-border point of view but also the regional/whole system aspects in order to ensure reliable operation of the whole interconnected UCTE system.

9. Recommendations for Compliance Monitoring Program 2007

- WG CM&E will request more detailed information for the standards requiring bilateral/multilateral agreements. In this way the symmetry for given information can be verified by the WG CM&E.
- It will be made clear in the compliance program how the non-compliance for a TSO caused by the behavior of a neighboring TSOs will be treated (e.g. n-1 non-compliance due to heavy not agreed flows).
- For the self assessment, it will be requested for the TSOs for each answered standard and requirement (i) to explain by qualitative comments their chosen level of compliance, (ii) to add a reference list of all relevant documents which describe their existing internal procedures in operation or which explain their methodology applied including legislation references.
- Since compliance with OH Policies 1, 2 and 3 has been monitored in 2006, there is no need to repeat this review in 2007. This will provide the WG CM&E with the opportunity to concentrate on reviewing compliance with those Policies that are most critical for maintaining the UCTE reliability, as well as on newly adopted Policies.
- The Compliance Questionnaires will have a field “not applicable” to be filled in by TSOs for which the specific rule is not applicable.
- Since marking the compliance level is mandatory, a missing declaration will be treated as "non-compliant" (a default value).
- Cases of declared non-compliance, which are not accompanied with a list of actions and/or temporary measures to preserve the security of the system, will be highlighted in the COR as "potentially severe non-compliant". Moreover, additional compliance monitoring processes will be developed in order to follow them up.
- The Extranet Questionnaires will contain also the corresponding text of each rule in order to prevent misunderstandings.
- In the self-assessment process there will be established a link that is in some cases missing between reported compliance levels and the addenda tabled in the MLA process.
- In order to enforce the complete and timely appropriate answers from all TSOs, a first step of enforcement measures has to be implemented.