

**Conclusions and recommendations**  
**Seventh meeting of inventory lead reviewers**  
**Bonn, Germany**

*10–12 March 2010*

The seventh meeting of inventory lead reviewers (LRs) was held in Bonn, Germany, from 10 to 12 March 2009. Thirty experts from Parties not included in Annex I to the Convention (non-Annex I Parties) and 33 experts from Parties included in Annex I to the Convention (Annex I Parties) were invited to the meeting. Of the 44 experts that attended, 18 were from non-Annex I Parties and 26 were from Annex I Parties. In addition, two review experts, who are representatives of the European Union, attended the meeting as observers.

In accordance with decisions 12/CP.9, 22/CMP.1 and 24/CMP.1, the meeting addressed both procedural and technical issues relating to the annual review of greenhouse gas (GHG) inventories of Annex I Parties and the annual reviews under the Kyoto Protocol. The aim of the meeting was to continue to develop a common approach to these reviews to be taken by the expert review teams (ERTs), and to make recommendations to the secretariat and expert reviewers on ways to further improve the effectiveness and efficiency of the reviews. The conclusions and recommendations of the meeting are presented below.

In addition, the secretariat organized a one-day refresher seminar during the meeting on the review of activities reported under Article 3, paragraphs 3 and 4, of the Kyoto Protocol. All land use, land-use change and forestry (LULUCF) review experts who have participated in a review or passed the mandatory training were invited to the refresher seminar.

**Procedural issues, including actions by the secretariat**

*Review process in 2009, including consistency issues*

The LRs expressed their **appreciation to all the experts who participated in the review process of the 2009 annual submissions**, in particular the experts who accepted late invitations to attend a review following last minute cancellations by other experts, the experts who participated in more than one review and the experts who had to take on additional responsibilities during the reviews owing to unforeseen circumstances. The LRs also expressed their appreciation to the secretariat for coordinating and supporting the review process in an effective and efficient way.

The LRs acknowledged that **ERTs consistently applied the “Guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention”** (hereinafter referred to as the UNFCCC review guidelines) **and the “Guidelines for review under Article 8 of the Kyoto Protocol”** (hereinafter referred to as the Article 8 review guidelines) (decision 22/CMP.1) during the 2009 reviews, as well as the relevant procedures. The LRs also acknowledged that the secretariat, in response to a request by the Subsidiary Body for Scientific and Technological Advice (SBSTA) at its thirtieth session,<sup>1</sup> performed quality assurance (QA) of the review activities in the 2009 review cycle. This further enhanced the consistency of the reviews. The LRs noted that attention to consistency in reviews will continue to require monitoring; they also noted that the SBSTA, at its twenty-ninth session, requested the secretariat to include the consideration of consistency as a permanent agenda item for the meeting of lead reviewers.<sup>2</sup>

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<sup>1</sup> FCCC/SBSTA/2009/3, paragraph 73 (b).

<sup>2</sup> FCCC/SBSTA/2008/13, paragraph 64.

The LRs acknowledged the **importance of ensuring consistency at each stage of the annual technical review**. They noted that consistency **at each stage of the annual technical review** has improved in recent years, based on experience gained over 10 years of reviews and the work by LRs, ERTs and the secretariat.

The LRs noted that the work undertaken by the secretariat on the annual review report template, the review tools and the implementation of QA procedures for the review activities facilitated the work of the LRs in enhancing consistency in the review process. The LRs concluded that the annual review report template is an important tool for enhancing consistency across reviews.

#### *Training and experts' participation in reviews*

The LRs welcomed the **implementation by the secretariat of the updated training programmes under the Convention and under the Kyoto Protocol** adopted by the Conference of the Parties (COP) and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), respectively. The LRs also welcomed the information on ongoing training activities, including the new Kyoto Protocol courses, as well as the information on possible new activities, such as: regional training seminars, the development of a new training course for the review of higher-tier methods and complex models and the implementation of refresher seminars for experienced reviewers.

The LRs noted that these updated training programmes **would enhance the expertise of the reviewers and, hence, contribute to the quality and consistency of the review process**. They welcomed the **refresher seminar**, which took place during the meeting, **on the review of activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, including experience gained with adjustments during the 2009 reviews, based on Parties' voluntary submissions**. The LRs **urged the experts on LULUCF to undertake** the new online course on the review of activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol. They further urged **generalists and reminded themselves to take** the new online course on the review of national registries and information on assigned amounts. They recommended that the secretariat continue organizing refresher seminars, subject to availability of resources.

The LRs reiterated their conclusions from previous meetings, which recognized that **strengthening the capacity of expert reviewers by increasing the number of available experts and enhancing their training, and involving more secretariat staff in the reviews** is required to enhance consistency.

The LRs noted that **some activities under the updated training programmes are subject to supplementary funding**, and that these activities are necessary to make further progress in the training of experts and to strengthen the rigour of the annual review process under the Convention and the Kyoto Protocol.

Given the increased complexity of the annual review process, the LRs noted that there is a **need for enhanced and smooth integration of the new reviewers into the work of the ERTs**. The LRs requested the secretariat to take this into account when putting together ERTs, and agreed that LRs would take this into account when allocating and supporting tasks within the team. In addition, the LRs requested the secretariat to explore options to enhance the preparation of the new experts by involving them in a desk review in the lead-up to the week of the centralized review and to guide the new experts in their preparation for the reviews and encourage mentoring by more experienced reviewers.

The LRs noted the continued need for **additional review experts for the review process**, in particular from non-Annex I Parties, **to be nominated to the roster of experts and to**

**participate in the training courses.** They expressed concern that there are still some Annex I Parties that have nominated only one expert to the roster of experts. The LRs **requested the secretariat to intensify its efforts to identify new review experts**, in particular from non-Annex I Parties and from Annex I Parties that nominated only one expert to the roster. They also noted the need for the governments that nominate experts to the roster of experts and agree on their participation in reviews to ensure that these experts are available to ensure timely completion of the reviews, in accordance with the decisions under the Convention and the Kyoto Protocol.

#### Reporting, data management and review tools

The LRs welcomed the work undertaken by the secretariat to further develop the GHG information system, including CRF Reporter software and the review tools to cover the needs under the Convention and the Kyoto Protocol. They noted that this work facilitates the annual reporting by Parties, as well as the processing of this information and its subsequent review by ERTs.

The LRs took note of the information provided by the secretariat on activities relating to the upgrade of the GHG information system, including the CRF Reporter, subject to the availability of supplementary funding, in order to support reporting and reviews. The LRs requested the secretariat to continue improving the functionality and utility of the CRF Reporter in anticipation of the future needs for reporting, which are under consideration by the SBSTA, and to ensure that Parties are allowed sufficient time to adapt to these new needs before full implementation of the new reporting requirements. They noted that the necessary work on the CRF Reporter could be undertaken in the context of the activities of the **work programme established by the SBSTA** at its thirtieth session on the **revision of the “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual inventories” and the use of the 2006 IPCC Guidelines for National Gas Inventories**, including consideration of the **new reporting format tables**.

The LRs welcomed the work undertaken by the secretariat and the working group established by the LRs at their sixth meeting on including KP-LULUCF information in the 2010 review tools. They expressed support, subject to the availability of funding, for the development of the virtual team room (VTR) to support expert review activities under Article 8 of the Kyoto Protocol, with a focus on developing the **review issues tracking system (RITS)** and the discussion forum element of the communication management system for LRs. The LRs requested the secretariat to explore opportunities to provide a discussion forum for LRs and LULUCF experts for the 2010 annual reviews. They also requested the secretariat to consider organizing a trial of the RITS with selected 2010 ERTs, and to provide LRs at their eighth meeting with information on the outcomes of this trial and an update on the development of the remaining elements of the VTR.

The LRs noted that the 2010 annual submissions from Annex I Parties will provide the first opportunity for Parties to gain experience in using the new KP-LULUCF module of the CRF Reporter. They encouraged the secretariat to organize, subject to the availability of resources, a **workshop in the first half of 2011 on the CRF Reporter to discuss these experiences**. The LRs noted that this workshop could be held in conjunction with the activities of the work programme established by the SBSTA, mentioned in the previous paragraph, relating to the new reporting format tables.

#### Reviews in 2010

The LRs requested the secretariat, in updating the annual review report template, to take into account that in 2010 Parties to the Kyoto Protocol are expected to submit for the first time all

the information required under Article 7, paragraph 1 on a mandatory basis, by providing specific sections for the recording of relevant findings, conclusions and recommendations, as well as potential problems and adjustments to the inventory, if applicable. They also requested the secretariat to further elaborate the guidance included in the template and, where appropriate, include references to relevant COP and CMP decisions. The LRs recommended that this guidance be based on the experience gained and examples of good practice from previous reviews. This guidance could be developed in the form of checklists for specific review issues such as higher-tier methods.

#### *The Convention and the Kyoto Protocol*

The LRs acknowledged the steps taken by the secretariat to assist the LRs during the 2009 reviews in their role of ensuring that reviews are performed in accordance with the review guidelines and are performed consistently across Parties by each ERT. This includes **performing QA of review activities**, in accordance with the conclusions of the SBSTA at its thirtieth session. The LRs requested the secretariat to continue to perform QA of review activities during the 2010 review, subject to availability of resources, and to ensure that information on experiences on the QA activities are provided to the LRs at their eighth meeting.

#### *Registry and Kyoto Protocol units*

The LRs noted that the **standard independent assessment report (SIAR)** prepared under the auspices of the international transaction log administrator and the Registry System Administrators Forum greatly facilitated the **review of information reported under Article 7, paragraph 1, of the Kyoto Protocol on accounting of Kyoto Protocol units, the national registry and changes in the national registry in 2009**. They welcomed the steps taken by the secretariat to make the SIAR publicly available and to publish it on the UNFCCC website. The LRs welcomed the information from the secretariat that operational and/or procedural documentation that underpins the SIAR process will also be available on the UNFCCC website. The LRs noted that this development will enhance understanding by ERTs of the SIAR process.

The LRs expressed their appreciation of the ongoing effort by the secretariat to further enhance the utility of the SIAR and to facilitate its use by the ERTs in the 2010 annual review, including improving the structure, content and language of findings, conclusions and recommendations and ensuring that these closely reflect the language of decisions 15/CMP.1 and 22/CMP.1.

#### *Potential problems*

The LRs requested the secretariat to update the template for the **“Potential problems and further questions” (known as the Saturday paper)** and to provide further guidance on this template, based on the experiences gained during the review of initial reports and the two years of voluntary Kyoto Protocol annual submissions from Annex I Parties that are also Parties to the Kyoto Protocol.

The LRs further requested the secretariat, after each review, to collect and synthesize information on the type and nature of issues that have been included in the Saturday papers by ERTs, with a view to establishing and maintaining a framework for a consistent approach to identifying and assessing potential problems and their subsequent inclusion in the Saturday papers across years, Parties and ERTs.

The LRs requested the secretariat to provide the ERTs with a list containing, by category and by gas, information as to whether methodologies exist for these categories in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and/or the *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (hereinafter referred to as the IPCC good practice guidance), with a view to ensuring that correct and appropriate information on completeness is included in the Saturday paper and the annual review reports.

*Timeline, selection of countries for in-country reviews in 2010 and the annual report to the SBSTA*

The LRs reiterated the need for the consistent and rigorous implementation of the requirements and timelines by the Parties and the ERTs for various stages in the review process, in accordance with the Article 8 review guidelines, in order to be able to conclude the individual reviews, including adjustments procedures, within one year of the due date of annual submission under Article 7, paragraph 1.

The LRs took note of the plans by the secretariat to organize in 2010 in-country reviews, primarily for Parties that have chosen annual accounting for activities under Article 3, paragraphs 3 and 4. In addition, the LRs welcomed the plans by the secretariat to organize in-country reviews where problems concerning the national system remain unresolved or where significant changes to the inventory have occurred.

*Adjustments of estimates from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol*

The LRs acknowledged with appreciation the organization by the secretariat of a process to enable ERTs to gain experience with the methods for adjustments of estimates of GHG emissions by sources and removals by sinks resulting from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol during the inventory review process in 2009, and the work done by the ERTs to apply the methods for adjustments. The LRs requested the secretariat to ensure that a small group of experienced reviewers is available during the annual 2010 review for consultations on any issues relating to potential problems on activities under Article 3, paragraph 3 and 4. The LRs also requested that this topic be included in the agenda for the LRs' meeting in 2011.

The LRs concluded that the mandatory information on KP-LULUCF activities, which is new and supplementary to the Convention reporting, will represent a major challenge for both the Parties when preparing their inventories and the ERTs in the review process.

*Long-term issues relating to the review process*

The LRs took note of the conclusions of the SBSTA and the Subsidiary Body for Implementation at their thirtieth sessions relating to the review process, including the training of experts, the organization of the meetings of LRs and the planning and conducting of reviews, as well as the further development of the GHG information system, including CRF Reporter software, which are planned and prioritized during 2010 and 2011. **The LRs acknowledged that a number of review activities that were previously funded through supplementary resources are funded for 2010 and 2011 from the core budget, which provides for stable and predictable funding for these core activities.**

The LRs welcomed the steps taken by the secretariat in the planning and setting of priorities for activities that underpin the managing of the reporting and review processes, and the planning of related activities that meet the requirements of a robust process under the Convention and the Kyoto Protocol for 2010 and 2011. In order to maintain and enhance the

current level of quality, consistency and timeliness of the review process, the LRs noted that most of the planned activities that will be supported from the supplementary budget must be implemented. **Among the priority activities in this context are the development of VTR to enhance communication among reviewers and the tracking and resolution of review issues, increasing the number of new experts that participate in the reviews as trainees and organizing regional training seminars** that, in addition to strengthening the capacity of experts for reviews, should enhance the capacity of experts from developing countries to prepare their national inventories. The LRs noted the need for Parties to support these activities by providing supplementary funding.

### **Methodological, technical and other issues, including actions by LRs and ERTs**

#### *The Convention and the Kyoto Protocol*

The LRs agreed that they need to pay special attention to consistency of the expert review, by, for example, informing ERTs of conclusions and recommendations of the meetings of LRs and ensuring that the agreed approach is communicated to ERTs and adhered to thereafter. They also agreed that ERTs need to consider national circumstances in their endeavour to address consistency issues.

For the **review of GHG inventories**, the LRs reiterated that both the Convention and the Kyoto Protocol require reporting Parties to **continuously improve their GHG inventories and systems to reflect the enhanced understanding of the methodological and scientific basis of the GHG inventories, and to continuously work on the implementation of the recommendations for improvements arising from the inventory review**. The LRs recommended that when changes in methodologies are identified during the review, the ERTs should ascertain whether they are in accordance with the UNFCCC reporting guidelines and the IPCC good practice guidance.

The LRs expressed concern that the review transcript that records the findings of a review, including those on problems that have been resolved, are not necessarily complete and that the secretariat does not always receive completed review transcripts from ERTs after the review has been finalized. As in previous meetings, the LRs reiterated that the **review transcript remains an important tool for the review process** and should be used during all stages of the individual reviews, such as the preparation for the review and throughout the review week, and when reflecting on the final outcome of the review, including a clear indication on whether an issue included in the transcript has been resolved. The LRs again expressed support for the secretariat's work on developing the RITS that will streamline issue identification, recording, tracking and resolution, and interactions between Parties, ERTs and the secretariat, thus superseding the review transcript.

#### *Methodological issues*

The LRs noted that the IPCC good practice guidance encourages the use of higher-tier methods, including country-specific methods and data, for key categories. They concluded that ERTs should encourage Parties to move to higher-tier methods, especially for key categories, as a part of their improvement plans. In specific cases, taking into account the Party's national circumstances, the LRs acknowledged that using a default method or data could be in line with the decision trees of the IPCC good practice guidance.

The LRs reaffirmed that ERTs, when reviewing higher-tier/country-specific methods or models, need to follow the approach agreed at the sixth meeting of LRs.<sup>3</sup>

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<sup>3</sup> <[http://unfccc.int/files/national\\_reports/annex\\_i\\_ghg\\_inventories/review\\_process/application/pdf/sixth\\_meeting\\_of\\_inventory\\_lead\\_reviewers.pdf](http://unfccc.int/files/national_reports/annex_i_ghg_inventories/review_process/application/pdf/sixth_meeting_of_inventory_lead_reviewers.pdf)>.

The LRs recommended that the ERTs ensure that the category-specific information discussed in the annual review report includes the applied method and an assessment of whether it is in line with the IPCC good practice guidance.

#### *Previous recommendations*

The LRs noted the need for enhancing the way ERTs track how Parties, in their annual submissions, address the recommendations included in annual review reports. The LRs requested the secretariat to include in the review transcript the recommendations from the previous year's annual review report to help ERTs with this assessment. The LRs agreed that they need to ensure that the ERTs, in the annual review reports, identify issues that remain unresolved. Further, the LRs welcomed the **work of the secretariat on developing the RITS**, the objective of which is to streamline identification, storage, tracking and resolution of review issues and recommendations.

#### *Matters specific to the Kyoto Protocol*

##### *Inventory review*

During the meeting, the secretariat presented the overall approach for conducting the reviews of the 2010 annual inventory submissions under the Convention and supplementary information submitted under Article 7, paragraph 1, of the Kyoto Protocol. The LRs noted that in 2010 Parties to the Kyoto Protocol are expected to submit for the first time all the information required under Article 7, paragraph 1, on a mandatory basis.

The LRs noted that the annual review report template will help to minimize the repetition of information and facilitate consistency across review reports, and will improve the presentation of the key information resulting from reviews, which will be used for compliance purposes after it has been recorded in the compilation and accounting database. The LRs also noted the need for ERTs to clearly distinguish between mandatory and non-mandatory reporting requirements in their recommendations in the annual review reports to Parties on how to solve any issues identified during the review. The LRs further noted the need for consistency between the in-country review and centralized review templates, but also noted the need for the template to reflect the differences between the in-country and centralized reviews in the level of detail of some elements reported under Article 7, paragraph 1, and the need for the review reports to be concise, in particular for centralized reviews.

The LRs **endorsed the overall approach for the reviews in 2010, including the review template.**

For the **review of GHG inventories under the Kyoto Protocol**, the LRs noted that in 2010, Annex I Parties that are also Parties to the Kyoto Protocol will provide their annual submissions on a mandatory basis. In cases where potential problems are identified, the ERTs should clearly list them at the end of the review week and should clarify the nature of the problem in accordance with the principles of the IPCC good practice guidance, namely transparency, consistency, comparability, completeness and accuracy. The ERTs should provide clear recommendations to the Party on how to solve the problem and should clearly indicate, where necessary, the need for the Party to submit revised estimates, with a view to addressing identified potential problems within the six-week deadline after the review week, in accordance with the Article 8 review guidelines. The review report can then be based on these revised estimates.

The LRs agreed that the ERT should clearly state in the review report whether or not the problems identified during the review have been resolved. If not, it should formulate recommendations on how and when these problems should be resolved and on the further

steps to be taken by the Party. When **major potential problems relating to methodological requirements for the annual inventory has not been adequately corrected through the provision of revised estimates, the ERT should commence an adjustment procedure in accordance with the relevant guidelines** (decisions 20/CMP.1 and 22/CMP.1).

#### *National system*

The LRs noted that the **review of a Party's national system should focus on the changes in its national system and on checking the continued operation of the national system** in accordance with the general and specific functions set out in decision 19/CMP.1. They further noted that a detailed review of the national system can be undertaken only through an in-country review.

For the **review of the operation of the national system** in accordance with the general and specific functions set out in decision 19/CMP.1, the LRs noted a number of reports from the 2008 and 2009 reviews indicating that most of the problems with the national system identified during the initial reviews have been resolved. The LRs noted that the problems of the national system may be identified in conjunction with the identification of a major problem with the GHG inventory, including with regard to completeness, a very large number of outstanding recommendations from previous reviews and numerous errors and problems in the inventory estimates that could arise from a lack of proper application of quality assurance/quality control procedures.

#### *Registry and Kyoto units*

The LRs acknowledged that the 2009 annual review did not identify major changes in the national registries that may trigger a thorough technical review. Nevertheless, the LRs reiterated that, in accordance with the Article 8 review guidelines, the ERTs may recommend during the 2010 annual review a thorough review of a registry, involving an in-country visit, depending on the scope of the changes in the national registry and whether problems are identified. For such reviews, the ERTs may use additional expertise from the Registry System Administrators Forum.

#### *Potential problems*

The LRs agreed on the general criteria for the consideration of issues that should be included in the **Saturday paper**, and that these should be limited to mandatory reporting requirements as stipulated in decisions 13/CMP.1, 15/CMP.1 and 19/CMP.1, following the provisions contained in the annex to decision 22/CMP.1. They agreed that the ERT should give priority to the identification and discussion of potential problems earlier in the review week, with a view to ensuring consistency in the treatment of potential problems in the Saturday papers by the ERT.

#### *Distribution of tasks between annual and periodic reviews*

The LRs noted that most of the Parties will report for the first time information on the minimization of adverse impacts in accordance with Article 3, paragraph 14, in their annual submissions in 2010. They also noted the plans by the secretariat to compile this information in accordance with the Article 8 review guidelines with a view to being used subsequently for review purposes. **The LRs acknowledged the approach presented by the secretariat for the distribution of the tasks of reviewing activities under Article 3, paragraph 14, information between the annual and the periodic reviews. They recommend that this approach be followed by the ERTs during the annual and periodic reviews, in accordance with the Article 8 review guidelines.**



Similarly, the LRs noted that in accordance with the “Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol” (decision 15/CMP.1), Parties are requested to report information on the national system and the national registry in conjunction with periodic reporting and to report changes in the national system and national registry in the annual reporting. The LRs also noted that in addition to the initial review that provides for a thorough review of the national system and national registry, in accordance with the Article 8 review guidelines, reviews of the changes in the national system and national registry are conducted in conjunction with the annual review, while the review of the national registry is conducted in conjunction with the periodic review. **The LRs acknowledged the approach presented by the secretariat for distribution of the tasks of reviewing the national system and national registry, and the changes therein, between the annual and the periodic reviews on the basis of the Article 8 review guidelines, and relevant checklists; they recommend that this approach be followed by the ERTs during the annual and periodic reviews.**

*Annual report by LRs to the SBSTA and preparation for the 2010 review cycle*

**The LRs agreed with the procedure presented by the secretariat for the preparation of the annual report by the LRs to the SBSTA** with suggestions on how to improve the review process in accordance with the Article 8 review guidelines.

**The LRs also agreed to provide comments and feedback on the initial draft status reports prepared by the secretariat within one week of the date of submission**, if no potential problems are identified. In cases where such problems are identified, the LRs agreed to involve the ERT and to prepare the draft status report within 4 weeks after the submission date of the annual inventory, in accordance with the Article 8 review guidelines.

The LRs further agreed to provide guidance to the ERTs to improve the preparation for the review in order to be able to use time effectively during the review week, with a view to discussing and, when possible, resolving any possible problems. The LRs requested the secretariat to strive to provide the ERTs with materials, including the appropriate review report template, for the review one month before the review.

*Adjustments of estimates from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol*

The LRs noted that the **ERTs should continue to apply the agreed guidelines for adjustments in a consistent manner across reviews**. To that end, the LRs reaffirmed that all experts should continue to enhance their understanding of decision 20/CMP.1 (“Good practice guidance and adjustments under Article 5, paragraph 2, of the Kyoto Protocol”), as well as the technical guidance on methodologies for adjustments contained in its annex, and the Article 8 review guidelines, in particular the procedures and timing related to adjustments.

The LRs recommended that the ERTs **make every effort to provide advice to the Party on how to correct any problem identified during the review that can lead to an adjustment**.

The LRs also recommended that when applying adjustments to activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, the ERTs should take into account considerations such as the assessment of the consequences of the adjustment based on the KP-LULUCF accounting rules. If the adjustment would provide an accounting benefit for the Party, then the ERT should not proceed with the adjustment.

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