Guidelines for Evaluation of an Application for a PCA Risk Mitigation Credit

AS PROVIDED IN SECTION 702.108 OF THE NCUA RULES AND REGULATIONS

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Guidelines for Evaluation of an Application for a PCA Risk Mitigation Credit

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This document provides guidance for NCUA staff (you) to evaluate a federally-insured credit union’s application for a risk mitigation credit (RMC) under §702.108 of the NCUA Rules and Regulations implementing Prompt Corrective Action (PCA). It is expected that experienced NCUA staff, such as specialized examiners, typically will evaluate such applications. If granted by the appropriate regional director, an RMC will reduce a credit union’s risk-based net worth (RBNW) requirement under §§702.106 and 702.107.

For application information, refer to the National Credit Union Administration (NCUA) Board’s Guidelines for Submission of an Application for a PCA Risk Mitigation Credit (NCUA Board Guidelines). NCUA Board Guidelines provide the procedure for a federally-insured credit union to apply for an RMC under NCUA Rules and Regulations §702.108.

This document does not stand-alone. It must be read in light of the NCUA Board Guidelines. You must use your experience and judgment to evaluate an application and to formulate a recommendation to the appropriate regional director.

The NCUA Board Guidelines explain the two types of risk mitigation credits for which a credit union may apply, an Interest Rate Risk Mitigation Credit (IRRMC) and one or more Credit Risk Mitigation Credits (CRMC). The NCUA Board Guidelines show examples of how each is calculated.

There are three parts to the calculation of each IRRMC and CRMC: (1) the Maximum RMC, (2) the Qualitative Rating, and (3) the Quantitative Category Factor. The NCUA Board Guidelines specify how to calculate the Maximum RMC both for an IRRMC and a CRMC, and provide the Quantitative Categories and the table of Quantitative Category Factors for an IRRMC.

These evaluation guidelines specify: a framework to assign a Qualitative Rating for an IRRMC (Section II) and a Qualitative Rating for each CRMC (Section III); considerations for establishing new Quantitative Categories and new tables of Quantitative Category Factors for each CRMC (Section III); and a procedure for adding new Quantitative Category Factors for a CRMC to the Appendix of these guidelines (Section IV).

A Qualitative Rating will have a value between 0.00 and 1.00. A Qualitative Rating of 0.00 means you cannot rely on the credit union’s risk measurement process (and NCUA would not approve the RMC). A Qualitative Rating of 1.00 means you can place 100 percent reliance on the credit union’s risk measurement process. You will use a starting value of 1.00 for each Qualitative Rating. You will document weaknesses in the credit union’s risk measurement process and assign a deduction from the Qualitative Rating for each weakness.
How is the Qualitative Rating determined?

You will start with a Qualitative Rating of 1.00. You will calculate the Qualitative Rating by subtracting deductions that you assess for measurement weaknesses.

You will identify measurement weaknesses in accordance with the bases for weaknesses in a Qualitative Rating, described below. You will review the contents of the IRRMC application and assign a deduction for each weakness that materially lowers the reliability of the credit union’s measures of interest rate risk. Deductions from the Qualitative Rating have the effect of reducing an otherwise erroneously high IRRMC of a credit union with a weak risk measurement process. You will document the deductions in a worksheet. (See Table 3 for an example at the end of this section).

A measurement weakness may understate the level of interest rate risk in two ways. First, the post-shock net economic value (NEV) ratio may be overstated. Second, the decline in NEV ratio may be understated. (For definitions of post-shock NEV ratio and decline in NEV ratio, see NCUA Board Guidelines, Section II, Question 5.)

Both these weaknesses may result in an understatement in the level of interest rate risk as categorized in Table A – Quantitative Categories for Interest Rate Risk (see, NCUA Board Guidelines, Section II, Question 4). If the credit union overstates its post shock NEV ratio, it may erroneously place itself in a higher row on the table and report a lower-risk Quantitative Category Factor. If the credit union understates its decline in NEV ratio, it may erroneously place itself in a column too far left on the table and again report a lower-risk Quantitative Category Factor.

You must rely only upon the credit union’s current risk measures in granting the IRRMC. Do not assign the credit union a higher Qualitative Rating based upon the credit union’s willingness to implement any suggested improvements to the risk measurement process. You should not recalculate the credit union’s NEV using “correct” assumptions for the credit union to implement. Rather, when NCUA next reviews the credit union’s risk measurement process, NCUA will consider any changes that the credit union has implemented and may assign a higher Qualitative Rating, if appropriate, at that time.

As a rule of thumb, you are to assign about a 0.10 deduction from the Qualitative Rating for each weakness in the interest rate risk measurement process that may result in an overstatement of about 20 basis points in the post-shock NEV ratio and an understatement of about 20 basis points in the decline in NEV ratio. This is because, on average, a 100 basis point error,
both in the *decline in NEV ratio* and the *post-shock NEV ratio*, typically would result in an increase in the Quantitative Category Factor of 0.50. A deduction of about 0.50 from the Qualitative Rating for a 100 basis point error in measurement will reduce the resulting IRRMC by half, which will roughly offset the effect of an erroneous increase in the Quantitative Category Factor of about 0.50. See Table 1, below, for an illustration of this effect. Different deductions may be warranted, depending on the specific circumstances.

The following table illustrates how deductions from the Qualitative Rating serve to equate the IRRMCs of two credit unions with similar levels of interest rate risk. One credit union has a reliable interest rate risk measurement process. The second credit union has a less reliable interest rate risk measurement process that understates the actual level of interest rate risk. The table also illustrates that, to obtain similar IRRMCs for credit unions with lower levels of risk, you may place a higher reliance on the credit union’s measures by increasing the Qualitative Rating (by moderating the size of the deductions from the Qualitative Rating). For credit unions with higher levels of risk, you should decrease your reliance on the credit union’s measures by decreasing the Qualitative Rating (by increasing the size of the deductions from the Qualitative Rating).

**Table 1**

**Illustration of How Deductions from the Qualitative Rating Serve to Equate IRRMCs of Two Similar Credit Unions**

<table>
<thead>
<tr>
<th>“Actual Risk” (Credit Union Two understates its risk)</th>
<th>Maximum IRRMC</th>
<th>Qualitative Rating</th>
<th>Quantitative Category Factor</th>
<th>IRRMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Significant Risk”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Union One</td>
<td>1.00</td>
<td>X 1.00</td>
<td>X 0.50</td>
<td>= 0.50</td>
</tr>
<tr>
<td>Credit Union Two</td>
<td>1.00</td>
<td>X 0.50</td>
<td>X 1.00</td>
<td>= 0.50</td>
</tr>
<tr>
<td>“Moderate Risk”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Union One</td>
<td>1.00</td>
<td>X 1.00</td>
<td>X 0.75</td>
<td>= 0.75</td>
</tr>
<tr>
<td>Credit Union Two</td>
<td>1.00</td>
<td>X 0.50</td>
<td>X 1.00</td>
<td>= 0.50 (1)</td>
</tr>
<tr>
<td>“High Risk”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Union One</td>
<td>1.00</td>
<td>X 1.00</td>
<td>X 0.25</td>
<td>= 0.25</td>
</tr>
<tr>
<td>Credit Union Two</td>
<td>1.00</td>
<td>X 0.50</td>
<td>X 0.75</td>
<td>= 0.38 (2)</td>
</tr>
</tbody>
</table>

(1) This IRRMC is lower than warranted by the apparent level of risk because the credit union has a weak measurement process.

(2) This IRRMC is 13 basis points higher than warranted by the *apparent* level of risk. Thus, when the *apparent* level of risk is high, your assessment of the risk measurement process should be particularly thorough.

Assume Credit Union One calculates a Maximum IRRMC of 1.00. Because Credit Union One has a very reliable interest rate risk measurement process with
no material weakness, you assign a Qualitative Rating of 1.00. At quarter-end, the credit union reports it has “Significant Risk” and a Quantitative Category Factor of 0.50 (using Table B in Section II of the NCUA Board Guidelines). This results in an IRRMC of 0.50 percent for Credit Union One (calculated as Maximum IRRMC of 1.00 times Qualitative Rating of 1.00 times Quantitative Category Factor of 0.50).

Assume Credit Union Two has a similar balance sheet (and thus a similar level of interest rate risk), and also calculates a Maximum IRRMC of 1.00. However, this second credit union does not have a very reliable interest rate risk measurement process. Because of material weaknesses, you assign Credit Union Two a Qualitative Rating of 0.50. At quarter-end, Credit Union Two reports it has “Minimal Risk” and a Quantitative Category Factor of 1.00 (using Table B in Section II of the NCUA Board Guidelines), understating the actual level of interest rate risk. However, because of its lower Qualitative Rating, Credit Union Two also has an IRRMC of 0.50 percent (calculated as Maximum IRRMC of 1.00 times Qualitative Rating of 0.50 times Quantitative Category Factor of 1.00).

What are bases of weaknesses in a Qualitative Rating?

Your evaluation of the Qualitative Rating will cover the interest rate risk measurement process that the credit union describes in the application. The application for an IRRMC must disclose the impact of an immediate and sustained parallel shift in market interest rates of plus and minus 300 basis points (bps) on the credit union’s net economic value (NEV) and the NEV ratio as of quarter-end. To enable you to assess the reliability of these measures of interest rate risk exposure, the application must include: (A) risk measurement policies, procedures, and documentation; (B) data inputs; (C) assumptions; (D) model capabilities and implementation; and (E) validations.

The credit union should thoroughly document the way it uses its NEV model to produce interest rate risk measurements. At a minimum, the credit union must outline the process it uses to consistently produce results from quarter-end data. You may deduct from the Qualitative Rating for weak policies, procedures, and documentation.

If the credit union does not provide you with an adequate explanation of its process for measuring interest rate risk, then you should assess a full deduction, disapproving the IRRMC application.
B. Data Inputs.

1. Balance Sheet Amounts. A credit union should reconcile the beginning balance of each account with source systems and the general ledger. You may deduct from the Qualitative Rating if the data input process does not provide for adequate reconciliation.

2. Balance Sheet Rates. It is more reliable for a credit union to use actual rates than to impute rates from income statement items and balance sheet amounts. Imputed rates that are too high will overstate asset values, resulting in post-shock NEV ratios that are higher than justified. Imputed rates that are too low will understate liability values, resulting in post-shock NEV ratios that are higher than justified. Each of these errors may understate the credit union’s interest rate risk.

3. Remaining Term of Scheduled Cash Flows. Generally, actual remaining terms of scheduled cash flows are more reliable than estimated remaining terms of scheduled cash flows. Scheduled cash flows include scheduled principal payments and interest payments. In the absence of actual remaining term, many systems permit the credit union to evenly “spread” the balance sheet amount over the range of maturities for an account. This can understate the average remaining term for an asset, resulting in overstated asset values and an understated level of interest rate risk. Credit unions that do not have data for the actual remaining term must include information supporting their assumptions. You may deduct from the Qualitative Rating for undocumented assumptions.

C. Assumptions.

1. Prepayments. Cash flow assumptions can significantly alter reported interest rate sensitivity. Many assets have three sources of cash flow: scheduled principal payment, interest payment, and prepayment of principal. The first two are addressed under data inputs, above.

Credit unions must document all prepayment assumptions. Prepayment assumptions must be reasonable and supportable. You should assess a deduction from the Qualitative Rating for unreasonable prepayment assumptions. You may evaluate whether prepayment assumptions are reasonable by reviewing the effects of the prepayment assumptions on reported interest rate sensitivity. Examples of the effects of reasonable mortgage loan prepayment assumptions can be found in the mortgage tables of the “Asset Valuation Workbook” provided by the Office of Investment Services, and are available on the NCUA’s web site (under “Reference Information” for “Investment/Asset Liability Management” under “ALM Review Procedures”). Regional Capital Markets Specialists may use Bloomberg or other calculators to estimate the effect of prepayment assumptions on reported interest rate sensitivity.
2. **Discount Rates.** You will review the reasonableness of credit spreads. A credit spread is an additional margin that reflects the credit risk of the balance sheet item. If a credit union aggregates balance sheet items with dissimilar credit risks, then an estimate of the fair value of that pool of items will be less reliable. The measurement error may have a significant impact on the credit union’s *post-shock NEV ratio*. However, this error typically will not have a significant impact on the *decline in NEV ratio*, since the measurement error typically will be similar both for the estimate of current value and the estimate of post-shock value. **You may account for this type of error with a deduction that is about half the amount for an error that affects both the post-shock NEV ratio and the decline in NEV ratio.**

Credit risk is a significant factor in determining the value of an asset. The best estimate of the fair value of a balance sheet item is a quoted market price. In the absence of a quoted market price, a credit union should use a model price that is reasonable and supportable. Model prices should incorporate assumptions that market participants would use in their estimates of values, including assumptions about default. Thus, to estimate a fair value, a credit union should use an adequate credit spread.

3. **Non-maturity Deposit Accounts.** When assessing its interest rate risk exposure, a credit union must make judgments and assumptions about when share account balances will be withdrawn and how the credit union will change administered rates on share accounts. For example, while some members may request immediate withdrawal of share account balances upon an increase in market interest rates, other members may not exercise the right to withdraw funds immediately.

A credit union must estimate the timing of cash flows for share accounts and share draft accounts. In doing so, credit union management needs to consider such factors as: the spread between the credit union’s offering rate and market rates; its competition from other depository institutions; the demographic characteristics of its members; and any tiered pricing strategies that may divide a credit union’s member base between high-balance, rate-sensitive members and low-balance, rate-insensitive members.

As a general rule, examiners should review closely the basis for support of any non-maturity account cash flow assumptions in excess of five years. There is a growing awareness about higher rates available in share certificates and other instruments such as money market mutual funds. This calls into question whether non-maturity account holders can be expected to continue to be insensitive to interest rates.

In estimating a fair value for a non-maturity account, a credit union must consider both the rate on the account and an estimate of the cost of providing the account.
D. Model Capabilities and Implementation.
A credit union must document the valuation technique it uses for each material category in its chart of accounts. Model prices may be obtained using the present value of estimated future cash flows, option-pricing models, or option-adjusted spread models.

Credit unions are expected to provide information about how its models are implemented. Particular detail should be provided for instruments with embedded options. A present value model does not account for the time value of embedded options. This measurement error causes assets to be overvalued and, therefore, NEV to be overstated.

To determine the fair value of balance sheet items with embedded options, properly implemented option-adjusted spread models are more reliable than using the present value of estimated future cash flows. However, the cost of option-adjusted spread models (along with the costs of properly implementing and running such models) may be unreasonably large for many credit unions.

One low cost alternative to in-house option measurement is use of a third-party service provider to measure balance sheet items with embedded options. Credit unions frequently rely on third-party service providers (such as broker-dealers) to measure the interest rate risk of investment securities (through use of information systems such as Bloomberg).

Another alternative to in-house option measurement is to present the worst case results for a balance sheet item. For example, a credit union may assume no prepayments on its asset to estimate values, resulting in an overstatement of the actual level of interest rate risk. Accordingly, you will assess the reasonableness of the overall model implementation before assessing significant deductions for use of present value models to value instruments with embedded options.

E. Validations.
A credit union’s comparison of benchmark instrument valuations and sensitivities versus model results will facilitate your determination of an appropriate deduction from the Qualitative Rating. A credit union’s explanation of how it reviews model results for reasonableness should include benchmarks (i.e., instruments with price sensitivities measured using industry standard methods).

Regional Capital Markets Specialists may use Bloomberg or other calculators to test the reasonableness of a credit union’s valuations and sensitivities.

Model validation is an ongoing process. Vendors frequently update their models. A credit union also may adjust how their model is implemented. Credit unions
are expected to perform parallel valuations when updates or adjustments to a model are made. In the event of material differences in results, a credit union should perform an adequate revalidation prior to use of risk reports from a revised model.

**Example IRRMC Qualitative Rating Calculation.**

As noted above, you will start with a Qualitative Rating of 1.00. You will calculate the Qualitative Rating by subtracting the deductions for measurement weaknesses from the starting value of 1.00.

Assume a credit union has 20 percent of total assets in auto loans. The credit union reports that an assumed 3-year remaining term auto loan reflects the average risk of its portfolio. You observe that this 3-year remaining term does not appear unreasonable, since the credit union discloses that its auto loan balances have been stable in recent years.

The credit union assumes a constant prepayment rate (CPR) of 24 for auto loans, *without any data or justification*. (CPR represents the annual rate of unscheduled principal payments as a percentage of the outstanding principal balance.) Because the credit union did not supply any data or justification to support a prepayment assumption, the credit union’s prepayment assumption may understate the price sensitivity of a 3-year remaining term auto loan by about ninety basis points. (See table 2 below: since the credit union reports an assumed 3-year remaining term, compare the 3-year remaining term loan’s decrease in price between 0 CPR and 24 CPR.)

Auto loans are 20 percent of total assets at the credit union. This means that the *decline in NEV ratio* is understated about 18 basis points *(i.e., 90 basis points times 20 percent)*. This also means that the *post-shock NEV ratio* is overstated about 18 basis points. **You use our rule of thumb and deduct 0.10 from the Qualitative Rating for this weakness in the interest rate risk measurement process that may result in an overstatement of about 20 basis points in the post-shock NEV ratio and an understatement of about 20 basis points in the decline in NEV ratio.**
You assign other deductions and document them in table 3, below. For example, for loan categories other than autos, the credit union does not adequately justify assumptions it uses for the remaining terms of scheduled cash flows. For this weakness, you assign a deduction from the Qualitative Rating of 0.10.
## Table 3
### Example IRRMC Qualitative Rating Calculation

<table>
<thead>
<tr>
<th>Basis of Quality Weakness</th>
<th>Deduction</th>
<th>Qualitative Rating</th>
<th>Comment (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Starting Qualitative Rating</strong></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Policies, Procedures, and Documentation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Data Inputs:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance Sheet Amounts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance Sheet Rates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remaining Term of Scheduled Cash Flows</td>
<td>-.10</td>
<td></td>
<td>MBLs not well documented</td>
</tr>
<tr>
<td><strong>Assumptions:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepayments</td>
<td>-.10</td>
<td></td>
<td>Auto loans not documented</td>
</tr>
<tr>
<td>Discount Rates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Maturity Deposit Accounts</td>
<td>-.15</td>
<td></td>
<td>Aggressive assumptions</td>
</tr>
<tr>
<td><strong>Model Capabilities &amp; Implementation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Validations</td>
<td>-.10</td>
<td></td>
<td>Weakness in term share review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Final Qualitative Rating</strong></td>
<td></td>
<td>.55</td>
<td></td>
</tr>
</tbody>
</table>

(1) Your actual comments should be detailed and specific to inform the credit union of weaknesses.
SECTION III – Evaluation of a Credit Risk Mitigation Credit (CRMC) Application

Introduction

To determine whether the credit union has submitted a legitimate Quantitative Category for a CRMC, you will review the characteristics the credit union used to identify one or more loan types for which it has provided quantitative evidence of credit risk mitigation. On a case-by-case basis, you will establish and assign a set of Quantitative Category Factors for a CRMC. (In contrast, Quantitative Category Factors for an IRRMC are published in the NCUA Board Guidelines and are *not* changed on a case-by-case basis.) Appropriate Quantitative Category Factors for a CRMC are highly dependent on the type of loan and Quantitative Category.

Also on a case-by-case basis, you will develop bases for weaknesses in the quality of the Quantitative Category, including aspects of a credit union’s credit risk management process that relate to the Quantitative Category. You will review these bases and assign a Qualitative Rating for a CRMC.

The NCUA Board Guidelines provide a specific *example* of Quantitative Category Factors based on the Quantitative Category of the loan-to-value ratio. This example of a Quantitative Category addresses one source of loan credit quality: collateral. There are both quantitative and qualitative aspects involved in collateral valuation. Quantitatively, a credit union can categorize loans according to the loan-to-value ratios shown in the example Quantitative Category Factors table in the NCUA Board Guidelines. Qualitatively, appraisals can be assessed using various methods, some of which will produce more conservative valuations.

*What is a legitimate Quantitative Category?*

For a Quantitative Category to be a legitimate indicator of credit risk mitigation, the credit risk of the loans subject to the application must be reduced and/or counterbalanced *because* of the Quantitative Category. In the NCUA Board Guidelines, an example of a legitimate Quantitative Category is the loan-to-value ratio. A CRMC must be based on one or more quantitative characteristics indicative of the borrower’s credit worthiness, which may include better than average:

1. Capital;
2. Capacity;
3. Credit history;
4. Collateral; and/or
5. Conditions of business.
The credit union’s application must provide quantitative evidence of credit risk mitigation (i.e., better than average loan credit quality) for any proposed Quantitative Category. For example, third-party credit scores may provide evidence of a borrower’s capacity and credit history.

A credit union’s application may support the quality of a proposed Quantitative Category by including historical data such as:

   a) Delinquencies;
   b) Charge-offs;
   c) Repossessions; and
   d) Recoveries.

**Who develops Quantitative Category Factors?**

After your review of the credit union’s application, you will develop a Quantitative Category Factor table tailored to the individual circumstances of the application. The factors in the table will reflect your judgment of the extent that the Quantitative Category specified in the credit union’s application mitigates credit risk. You may work with the credit union to develop this table.

Your initiative will be necessary in the creation of the range of values for Quantitative Category Factors. You will determine appropriate values between 0.00 and 1.00. This involves benchmarking a value of 1.00 for substantial mitigation of credit risk (e.g., loans secured with an abundance of Treasury securities), and assigning lower factors for riskier positions. A value of 0.00 (zero) indicates a lack of significant mitigation of credit risk. In the example loan-to-value ratio Quantitative Category Factors in the NCUA Board Guidelines, a 50% loan-to-value ratio is assigned the full 1.00 factor, scaled down to a 0.00 factor for an 80% loan-to-value ratio.

**How is the Qualitative Rating determined?**

You will start with a Qualitative Rating of 1.00. You will calculate the Qualitative Rating by subtracting deductions that you determine for credit quality weaknesses relating to the Quantitative Category.

You will determine credit quality weaknesses in accordance with the applicable bases for weaknesses in a Qualitative Rating, described below. **You will use your judgment both to determine which of the bases is applicable to the individual credit union applying for risk mitigation and to determine whether supplemental or additional bases should be included.**
Further, you will be required to apply judgment in the weighting of any such basis. A Quantitative Category and aspects of the credit risk management process that relate to the Quantitative Category must result in lower than average risk, in order to mitigate credit risk. An average credit risk management process, therefore, implies the need for a deduction from the Qualitative Rating (as explained below). You should assess a more substantial deduction for credit risk management processes that are weaker than average. You will determine the importance of an aspect of credit risk management, and the amount of the deduction.

**What are bases for weaknesses in a Qualitative Rating?**

Your evaluation of the Qualitative Rating may cover aspects of the credit risk management process that relate to the Quantitative Category. These include, but are not limited to: (A) loan monitoring and reporting; (B) loan documentation; (C) collateral valuation and monitoring; and (D) examination report information.

You may also assess a deduction if the credit union has a significant amount of loans with substantially below average credit quality. Low credit quality loans should be categorized in a Quantitative Category that receives a factor of zero and, therefore, would not be a source for a CRMC. However, you may assess a deduction if there is a large volume of such low credit quality loans.

**A. Loan Monitoring and Reporting.**

You will review the credit union’s explanation of how its reporting systems monitor the loan types identified in the application. You should expect to see clear reports at least monthly to executive management that describe:

a. new loan activity;
b. the performance of existing loan portfolios;
c. the level of substandard loans; and
d. the corrective action being taken on individual delinquent loans.

**B. Loan Documentation.**

The credit union should explain how its loan documentation includes the characteristics used to identify loan types for a Quantitative Category. For a Quantitative Category based on collateral, the credit union must document its recorded filings of security interests, including its priority. You should assess a complete deduction if the credit union does not document appropriate filings against collateral.

**C. Collateral Valuation and Monitoring.**

The credit union must explain how the value of collateral is determined and its procedures for establishing and updating collateral value.
In the case of MBLs, the credit union may document its frequency of on-site inspections of the business and its collateral. In the case of real estate loans, the credit union may document procedures to assess property value prior to foreclosure.

D. Examination Report Information.
You should be aware that a credit union’s application might refer only to the Quantitative Category in which the credit union can demonstrate mitigation, while omitting indicators of weaknesses in the credit quality of the loans subject to the application. You should thoroughly review the latest report of examination as it relates to the type of loans subject to the application, since identified weaknesses may form bases for deductions from the full 1.00 Qualitative Rating.

**Example CRMC Qualitative Rating Calculation.**

As noted above, you will start with a Qualitative Rating of 1.00. You will calculate the Qualitative Rating by subtracting the deductions for credit quality weaknesses from the starting value of 1.00.

Assume ABC Credit Union has applied for a CRMC. The credit union has MBLs for agricultural purposes. The loans are used for purposes of: short-term working capital, livestock and crop financing, equipment financing, and real estate mortgages. You have reviewed the credit union’s application information on loan monitoring and reporting, loan documentation, and collateral valuation and monitoring, as well as the latest examination report information. You documented the deductions for quality weaknesses in Table 4, below. In this example, you determined that the need for prompt security filings was not only of high importance, but that the current process was too slow. Consequently the deduction amount was -.20.
**TABLE 4**

**EXAMPLE CRMC QUALITATIVE RATING CALCULATION**

<table>
<thead>
<tr>
<th>Basis of Quality Weakness</th>
<th>Deduction</th>
<th>Qualitative Rating</th>
<th>Comment⁽¹⁾</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Starting Qualitative Rating</strong></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Loan Monitoring and Reporting</strong></td>
<td></td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Loan Documentation</td>
<td></td>
<td>.20</td>
<td>Process of security filing too slow and creates potential for unfavorable lien position.</td>
</tr>
<tr>
<td><strong>Collateral Valuation and Monitoring</strong></td>
<td></td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Examination Report Information</td>
<td></td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>Low Credit Quality Loans</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Final Qualitative Rating</strong></td>
<td>-.40</td>
<td>-.40</td>
<td></td>
</tr>
</tbody>
</table>

⁽¹⁾ Your actual comments should be detailed and specific to inform the credit union of weaknesses.

The following may be used as guidance to determine the amount of deductions for credit quality weaknesses in loans subject to the application. Note these deduction amounts are for your guidance only. The amounts may be increased or decreased to reflect the importance of the basis for weakness.

**TABLE 5 – EXPLANATION OF DEDUCTION AMOUNTS**

<table>
<thead>
<tr>
<th>Deduction</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.05</td>
<td>Credit quality is AVERAGE</td>
</tr>
<tr>
<td>-.10</td>
<td>Credit quality is SUBSTANDARD</td>
</tr>
<tr>
<td>-.20</td>
<td>Credit quality is SUBSTANDARD and basis is of significant importance</td>
</tr>
</tbody>
</table>
Your deductions may be made in each case where quality is not above average. Consequently, an average process may be a cause for deduction.

It is important to recognize the multiplicative nature of the Qualitative Rating in the CRMC formula. (See, NCUA Board Guidelines, Section III Question 2.) This multiplicative nature acts to minimize the credit allowed. A Qualitative Rating less than 1.00, when multiplied by a Quantitative Category Factor less than 1.00, will produce a third number that is smaller than either of these. In the example above, if the credit union’s loans were assigned to a Quantitative Category Factor of 0.70, then the CRMC would equal the maximum CRMC multiplied by a Qualitative Rating of 0.60, multiplied by a Quantitative Category Factor of 0.70. Thus, the credit union’s CRMC would equal the maximum CRMC multiplied by 0.42. You should therefore take care not to overstate the deductions for qualitative weaknesses.

SECTION IV – Process for Adding Quantitative Category Factors for a CRMC

Each regional director has the authority to approve newly created Quantitative Categories and tables of Quantitative Category Factors for a CRMC. Quantitative Category Factors must be based on the specific Quantitative Categories identified in a credit union’s application that provide quantitative evidence of credit risk mitigation. The region is responsible for developing Quantitative Category Factors that are relevant to each approved application for a CRMC.

The region must submit each approved application to the Office of Examination and Insurance (E&I). Upon receipt of an approved application including new Quantitative Category Factors, E&I will remove credit union specific information and will incorporate the new factors into the appendix to these guidelines to facilitate consistency among the regions. When E&I makes an addition to the appendix to these guidelines or otherwise revises the guidelines, the amended guidelines shall be made available on the NCUA web site. Each new version will be dated.

APPENDIX: Approved Quantitative Categories for a CRMC

The following Quantitative Categories and Quantitative Category Factors have been approved for CRMCs:

(None as of March 2001).