

Unpacking Cost of Supply Framework Workshop: Notes

DATE : 15 October 2020
TIME : 09H00 – 11H00
VENUE : Virtual via Ms Teams

Facilitator: Dr Silas Mulaudzi, SALGA: Sustainable Energy Specialist

Purpose of the workshop: SALGA

An essential component of rate/tariff design or determination is an understanding of the costs associated delivering the service. Unfortunately, there is often limited knowledge of these costs, and consequently the annual update of tariffs is not informed by true costs. This is particularly problematic in instances where the revenue that is recovered is insufficient to meet all associated costs. To address these challenges, NERSA requires that electricity distributors conduct Cost of Supply (COS) Studies that would aid tariff development. Therefore, one of the challenges identified regarding electricity Cost of Supply (COS) studies conducted by municipalities is the different understanding and interpretation of NERSA's Cost of Supply Framework. It is important for municipalities to have an in-depth and correct understanding of this framework. Accordingly, this workshop is hosted to allow NERSA to unpack this COS Framework.

Presentations available here:

[Cost of supply workshop: Financial indicators presentation](#)

[Cost of Supply Workshop Presentation](#)

Key Actions that emerged from the session:

1. NERSA to develop case studies on conducting CoS studies based on the CoS received from the Western Cape municipality and share these case studies with municipalities.
2. SEA to share the SMECT (simplified cost of supply tool) with municipalities interested in exploring the tool e.g. johan.duplessis@sbm.gov.za / Victor (Stellenbosch)
3. Financial indicator data whether it comes from NERSA only, or NT or consolidated. The data is work in progress and will continue to be refined until it is 100% accurate, and will be shared with the stakeholders
4. NERSA and SALGA should assist municipalities that are struggling with the electricity business, especially smaller municipalities that their electricity infrastructure is vandalized and poorly maintained, and running at a loss
5. The financial indicators data for the municipality is dire, with 23% of the municipalities that are spending between 10% and 100% of repair and maintenance, and this contravenes the COS framework as it allows up to 10%

Discussion Items:

1. High level municipal financial indicators and performance (NERSA)

- NERSA presented high-level indicators per Province on municipal performance i.t.o their financial indicators.
- The power loss is bad, with 51% of the municipalities that are losing above 25% of the power, and 13% losing between 15% and 25%. See accompanying presentation from NERSA.

Discussion:

- NERSA's allowed repairs and maintenance (R&M) ratio is 10%.
- NERSA confirmed that municipalities can have a revenue surplus from electricity sales of between 10 – 20% per the revenue requirement approach.
- It was highlighted that some municipalities in the Free State are having challenges with developing cost reflective tariffs as a result that they've to follow the given NERSA benchmark figures for that year.
- Also, some of the issues raised was that NERSA seemed not interested in approving municipal Winter tariffs. As some municipalities in the Free State have registered this issue with SALGA. These municipalities are of the view that in order for them to improve on their revenue generated they should be allowed to adjust their tariffs per these seasonal changes instead of offering a flat rate to their customers. Eskom seems to be allowed to apply

- seasonal tariffs and not municipalities.
- NERSA explained that while the methodology for determining Eskom's Revenue Requirement (the Rate of Return) is different from what is used by municipalities (the Benchmark methodology).
 - o Eskom has better data on its assets therefore it makes it easier for the utility to apply this type of revenue determination methodology compared to most municipalities which don't have good asset data registers.
 - o In addition time of use (ToU) tariffs require additional infrastructure to be in place such as meters. If municipalities can have this infrastructure in place it might improve their understanding of their electricity distribution system and improve their tariff determination.
 - It was acknowledged that a lot needs to be done to improve the municipal electricity distribution business. Formation of the existing CoS Working Group was acknowledged to be a necessary intervention in the sector.
 - Municipalities indicated that most of these initiatives have to be led by SALGA in collaboration with NERSA.
 - Electricity losses are a result of many factors. NERSA was called to look into assisting municipalities to reduce their electricity losses (both technical and non-technical losses).
 - It was suggested that NERSA looks into helping municipalities set tariffs that help address losses associated with aging infrastructure.
 - The fact that the electricity business is not ring-fenced in most municipalities i.e. electricity being part of other departments rather than a standalone department also adds to issues of poor revenue collection.
 - MISA indicated that they receive/ make use of the same data reported by NERSA. As there were questions on which department has the most reliable data between National Treasury's mSCOA and NERSA data extracted from municipal D-Forms.
 - In response NERSA indicated that it collects data from the D-Forms – NERSA validates the data – what is submitted isn't approved without the supporting documentation. NERSA does interrogate data held by Treasury in its mSCOA database. This helps to ensure that there is data alignment and integrity.
 - MISA indicated that non-technical losses are seen increasingly from the LPU's. This is an area that isn't being carefully considered – not a lot is being done by municipalities in metering these customers which leads to large losses.
 - It was recommended that NERSA consider including theft of infrastructure in the CoS Methodology. This might ensure prioritisation of safety of municipal infrastructure.
 - Municipalities therefore need to also pay more attention to improving collections besides focusing on non-technical losses.
 - National Treasury indicating that as they're working on updating the department's Circular 88 indicators to include non-technical losses such as theft. However, metros have in the past indicated that it would be difficult to account for this especially for non-technical losses.
 - NERSA indicated that municipal distributors are allowed to make a provision on losses of <12% as part of their revenue requirement determination. Anything above this has to come from the municipalities bottom-line.

- A municipal participant indicated that with Repairs and Maintenance (R&M) one should remember that it is not a MFMA requirement for smaller municipalities to have a full costing system. In terms of mSCOA only the material component and External Contractors' cost is regarded as R&M. The own labour that forms a large portion of the cost, is regarded as Personnel Costs and therefore does not reflect as part of R&M. Perhaps NERSA should Align their requirements with the mSCOA requirements for the different Categories of Municipalities. Then better comparisons can be made. It is not practical to evaluate a Metro with a separate Municipal Entity for Electricity the same as a small municipality where it is only a Department within the municipal structure. Municipalities can also not be compared to Eskom that is covered under different financial regulations.
 - o In response, some municipalities indicated that they apportion some of their internal maintenance personnel as maintenance costs, that is their function.
 - o While there seem to be no guide on how to apportion internal municipal staff time spent on R&M. Municipalities are using the actual figures for the personnel costs of their maintenance teams. NERSA approved some of the municipalities tariff applications based on this apportioning of R&M costs.
- I.t.o of the benchmarking methodology a provision is made to include losses in the revenue requirement. This includes both technical & non-technical losses.
- NERSA ensures compliance with the R&M by municipalities through audits that it conducts on a select sample of municipalities annually.
- Some of the municipalities had expressed concern that the unpacking workshop was a high-level discussion on CoS studies with no real guidelines or assistance for smaller on doing these COS studies. NERSA was asked if there are any example of typical CoS studies that have been approved by the regulator i.e. for a municipality with a total NMD of between 50 and 100MVA?
 - o NERSA indicated that while the rgeulator hasnt developed a course on CoS studies. The regulator has mainly relied on D-Form Workshops to capacitate municipalites around CoS studies. However, a challenge they've noticed is that these workshops dont usually draw the right audience from the municipal departments.
 - o NERSA to develop case studies based on a recently approved CoS from a small municipality in the Western Cape.
 - o No CoS studies have been approved in the past by NERSA from small municipalities.

2. **Unpacking COS framework (NERSA)**

- NERSA indicated that cost functionalization may not apply to all municipalities as some municipalities may only be limited to distribution without any generation taking place.
- Comments received by NERSA from municipalities in the past include that the CoS framework seems too detailed.
- Also some municipalities have indicated that some of their customers do not fall under the prescribed customer classifications – provided by NERSA's benchmarking methodology. Hence NERSA advises municipalities to conduct their CoS studies so that they get their customer classes right.

- Use of the Embedded vs Marginal CoS – NERSA prefers the Embedded CoS as it is easy to implement – ease to match the Revenue requirement & allowed revenues (from tariffs) – it simplifies the tariff determination as it gives the average tariff.
- However, the embedded approach is not an efficient approach as it doesn't send out the right signals to customers versus the Marginal Approach. It is also subjective choice of allocation factors since there is no theoretically "right" way to allocate or time-differentiate the costs.
- Whereas the merits of marginal COS is that prices signal the economic costs of consumption and investment decisions and the regulated tariffs mimic the cost structures faced by competitive suppliers. Its demerits are that it is difficult to implement than a study that uses historical costs and there is almost always a need to reconcile marginal cost revenues to the allowed revenues when setting tariffs. Municipalities tend not to reflect the costs of services provided by their electricity departments to other municipal businesses – which is wrong as this leads to under recovery (losses).
- Charging for human resources costs needs in the revenue requirement determination application needs to be clearly determined/ justified.
- CoS studies aren't the silver bullet to solve all municipal electricity distribution issues – it is important to address all the other factors affecting financial performance of the licensed distributors.
- Municipalities need to look at updating their asset registers as a starting point.
- Debt collection rates should've ideally been included in the D-Forms' Financial Indicators as NERSA often requests municipalities to submit this information outside the general data collection.
- It was pointed out that no matter how good a municipality's cost of supply study is, it cannot address the issue of non-technical losses. This can only be addressed by licensees concerned by ensuring that meter audits, removing illegal connections, replacing faulty meters in time ensuring that split meters are installed and improving culture of payment from consumers
 - NERSA mentioned that it doesn't have a defined turnaround time for approving CoS studies submitted to them. As there is usually a lot of back-and-forth regarding supporting data requests from the municipality. Ideally if all data is submitted then it should be possible to approve these studies within 6-months.
- In terms of methodology used for CoS, NERSA indicated that the regulator prefers that municipalities use the NERSA provided CoS framework instead of NRS 058?
- Issues around financial performance of the municipal distributors – no proper meters in

3. On the chat box

Some comments and questions were raised during the workshop on the chat box and were clarified, those were:

Name	Comment/question
Mohammed Lorgat	In terms of surplus what is the expected norm?
Johan Du Plessis	With Repair and Maintenance one should remember that it is not a MFMA requirement for smaller municipalities to have a full costing system. In terms of mSCOA only the material component and External Contractors cost is regarded as R&M. The own labour that forms a large portion of the cost, is regarded as Personnel Costs and therefore does not reflect as part of R&M. Perhaps NERSA should Align their requirements with the mSCOA requirements for the different Categories of Municipalities. Then better comparisons can be made. It is not practical to evaluate a Metro with a separate Municipal Entity for Electricity the same as a small municipality where it is only a Department within the municipal structure. Municipalities can also not be compared to Eskom that is covered under different financial regulations.
Johan Du Plessis	Hi Steve, Is there a guideline that is used for the apportion of funds to R&M form National Treasury, or are you using your own figure? Hi Johan, we are using the actual figures for the personnel costs of our maintenance teams and have had a NERSA audit last year and were found fully compliant, that figure was discussed in detail with the audit team and they were happy
Steve Cooper	Hi Johan, we are using the actual figures for the personnel costs of our maintenance teams and have had a NERSA audit last year and were found fully compliant, that figure was discussed in detail with the audit team and they were happy
Johan Du Plessis	I am concerned that this is just a high level discussion on the Cost of supply and no real guidelines or assistance for smaller on doing the COS. Is there any example of a Typical COS that was approved by NERSA for a municipality with a total NMD of between 50 and 100MVA?
Mduduzi Msibi	Indeed it doesn't matter how good your cost of supply is, it cannot address the issue of non-technical losses. This can only be addressed by licensees concerned by ensuring that meter audits, removing illegal connections, replacing faulty meters in time ensuring that split meters are installed and improving culture of payment from consumers
Victor Dyusha	What is NERSA's turnaround time after a municipality has submitted its Cost of Supply Study?
Josh Dippenaar	Hi Johan. SALGA has been working to develop a template COS for smaller municipalities as part of the COS Working Group. We can share this spreadsheet with you if you are looking to undertake your own COS study internally. It may assist you to interpret the framework

4. Way forward

- SALGA through the COS Working Group will continue to engage municipalities on the developments around the Cost of Supply studies area
- One of the initiatives that is unfolding, which is intended to solve the electricity challenges in some smaller municipalities is the EDI reform. This work is led by CoGTA and a Technical Committee is chaired by the DMRE, so the progress on this work will be communicated at the right time.

Workshop was adjourned at 10H50