Class	Group	Stratum	Consumer Interval (kWh/mês)	Estimated Annual Consumption	
				Flat Tariff	White Tariff
	1	1	0 A 80	978.653	423.399
Residencial	1	2	81 A 220	2.409.570	851.575
	1	3	221 A 500	898.631	151.458
Total				4.286.854	1.426.432

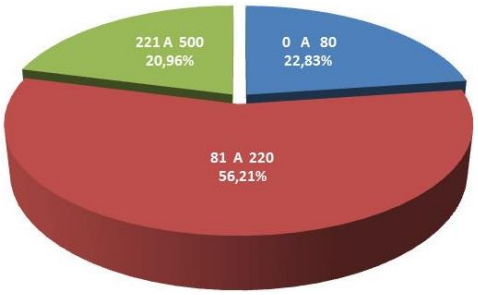

Figure 11. Flat Tariff Share per Consumption Interval

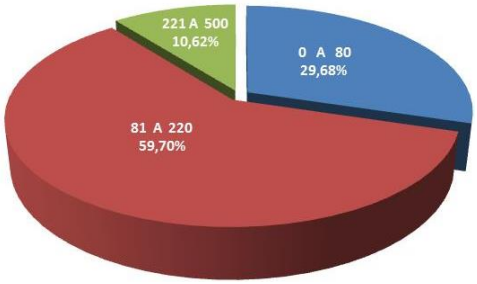

Figure 12. TOU Tariff Share per Consumption Interval

Crossing the solar energy potential analysis with the TOU impact analysis, it aas estimated that 44% of the maket that would migrate to the TOU tariff has medium potential for solar energy generation and therefore, could combine both decisions. For the market share which remained in the flat tariff, 33,40% showed high potential for solar energy generation and could benefit from it. It is possible conclude that the market share that migrated to the TOU tariff has more potential for solar energy use than the market from the flat tariff. From Table 10 it´s possible to see that most of the consumers with low potential for solar energy generation migrated for the TOU tariff, meanwhile consumers with higest potential remained in the flat tariff.

TABLE X. TARIFFS CLASS VERSUS SOLAR ENERGY POTENTIAL

Class	Flat Tariff	White Tariff
Class 1	33,0%	67,0%
Class 2	73,4%	26,6%
Class 3	64,8%	35,2%
Class 4	85,0%	15,0%
Class 5	80,9%	19,1%

V. CONCLUSION

The study aimed to develop an analysis of solar energy generation potential and TOU impact analysis using residential consumers daily load curves information. The study was performed for a small city called São Luiz do Paraitinga, but the same method can be replicated considering bigger cities as well. To implement the study computational inteligence and statistical inference techiniques were applied. Bussiness days and non-working days typical load curves were concieved for each consumer sampled providing valueable information, not just for tariff impact and solar energy potential analysis but also to support stakeholder and consumers during the decision making process. Interesting conclusions can be taken from the study. The city has high potential for implementation of solar energy generation projects, from rooftop arrangements to micro or mini solar generation plants that could fulfill the power generation needs for its population. Most of the city electricity market has medium to high solar energy generation potential. The introduction of the TOU tariff would promote a migration of around 25% of the city electricity market to the new tariff, without any change on its consumer behavior (without any load modulation), therefore providing no benefit to the power system.

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