Cleco Power LLC

System Impact Study for Transmission Request
March 2008

Oasis Request 71853936

The purpose of this study is to determine the availability of transfer capability across Cleco Power LLC's transmission system. This study will determine the ability to accommodate the Oasis Reservation # 71853936 for 580 MW of Firm Yearly Network Transmission Service beginning January 1, 2010 through January 1, 2030.

This study was performed using the base case models identified in the table below. The studies were run using Siemens® PSS/e version 30 and MUST version 8.3 programs. Power flow models were developed to reflect anticipated operational conditions, including load, generation, extended outages and confirmed firm transactions, from January 1, 2010 through January 1, 2030.

Modifications to the base cases were made to reflect the latest information available. Changes that were made include the following:

1. Existing network resource generation in the sink control area was re-dispatched to allow for the transaction.
2. Customer's resources were re-dispatched to allow the transaction.
3. Cleco load was scaled to reflect the latest load forecast.
4. Confirmed firm transmission reservations were modeled for the years 2010–2030.

If the flow on a monitored facility exceeds 100% of its emergency rating under normal and single contingency conditions with the transfer in place, the loading on the facility will be compared with the loading prior to the transfer. If the transfer causes an increase in flow greater than 3.0%, the facility is expected to require improvement.
Furthermore, if the transfer results in transmission bus voltage levels falling below criteria under single contingency conditions, then voltage support facility additions must be constructed.

With confirmed transactions, the ATC analysis indicates that the transaction is limited by the following facilities with an impact greater than 3.0%. These limiting elements must be upgraded to eliminate the transfer constraints they cause.

Study Results
ATC values were calculated for the study period and are listed below along with the limiting and contingency element. Only Cleco Transmission elements are identified in this report. Due to the closely interconnected nature with neighboring control areas, violations in neighboring control areas ("Affected System") will require an Affected System study or proof of Confirmed Firm Transmission service with the identified Affected System in order to grant this transmission service request.

Affected System: Entergy

Year	Limiting Element	Contingency Element	ATC (MW)
2010	SW Bayou Rapides to Twin Bridges 138 kV line	Pineville 230/138 kV Auto	0
2018	* Richard to Habetz 138 kV line	Bonin to Labbe 230 kV line	0
2018	* Flanders to Habetz 138 kV line	Bonin to Labbe 230 kV line	0

***** Currently, there is a proposed joint project which will eliminate the transfer constraint caused by the above limiting elements in the Acadiana Area load pocket. If this project is approved, it will become part of Cleco's base plan and the customer will not be required to fund the upgrades.

The following transmission bus voltage levels fall below planning criteria (0.92 p.u. under N-1) as a direct result of the transaction for certain single contingencies. Affected busses and their worst offending single contingency are provided below.

Year	Bus Voltage Violations	Contingency Element	Bus Voltage (P.U.)
	No Cleco Facility Limit		

Upgrade Projects

Upgrade costs are planning estimates for transmission facilities owned by Cleco Power and/or tie lines. A facility study will provide detailed cost estimates and solutions for the limiting elements. Facility study results may be different due to transmission system configuration changes and/or prior OASIS requests in the facilities study phase. External facilities will require a system impact study or a partial facility study to obtain estimates.

Limiting Element	Planning Estimate for Upgrade	Year Needed
SW Bayou Rapides to Twin Bridges 138 kV line	$24,000,000	2010
*Richard to Flanders 138 kV line	$38,000,000	2018

***** Currently, there is a proposed joint project which will eliminate the transfer constraint caused by the above limiting elements in the Acadiana Area load pocket. If this project is approved, it will become part of Cleco's base plan and the customer will not be required to fund the upgrades.

Summary of Results:

Oasis Request	Period	Cases Used	Capacity (MW)	ATC Available	Conditional Firm ATC Available
71853936	January 1, 2010- January 1, 2030	Summer 2010 Summer 2013 Summer 2018	0	No	

The requested transfer capability is available for the transactions specified in the study as stated below,

Oasis Request 71853936: January 1, 2010 through January 1, 2030 0 MW

Total: 0 MW

These results are based upon the most recent information available at the time of the study. TTC and ATC values obtained in the study are for Cleco Power's transmission system and are subject to change with any modifications to the assumptions made in the study.