Feasibility Review

SOUTH SAN JOAQUIN ELECTRIC
JUNE 28, 2016

A Fork in the Road

BOARD DECISION POINT

Fork in the Road

"When you come to a fork in the road, take it!"

Yogi Berra

We Assess Every Fork in the Road

- Fork = decision point
  - Chance to quit a bad idea
  - Chance to continue with confidence
- Repeatedly re-assess feasibility
- There will be more forks . . .

An Orderly Approach to Evaluating Feasibility

SEEKING ANSWERS BY DESIGN

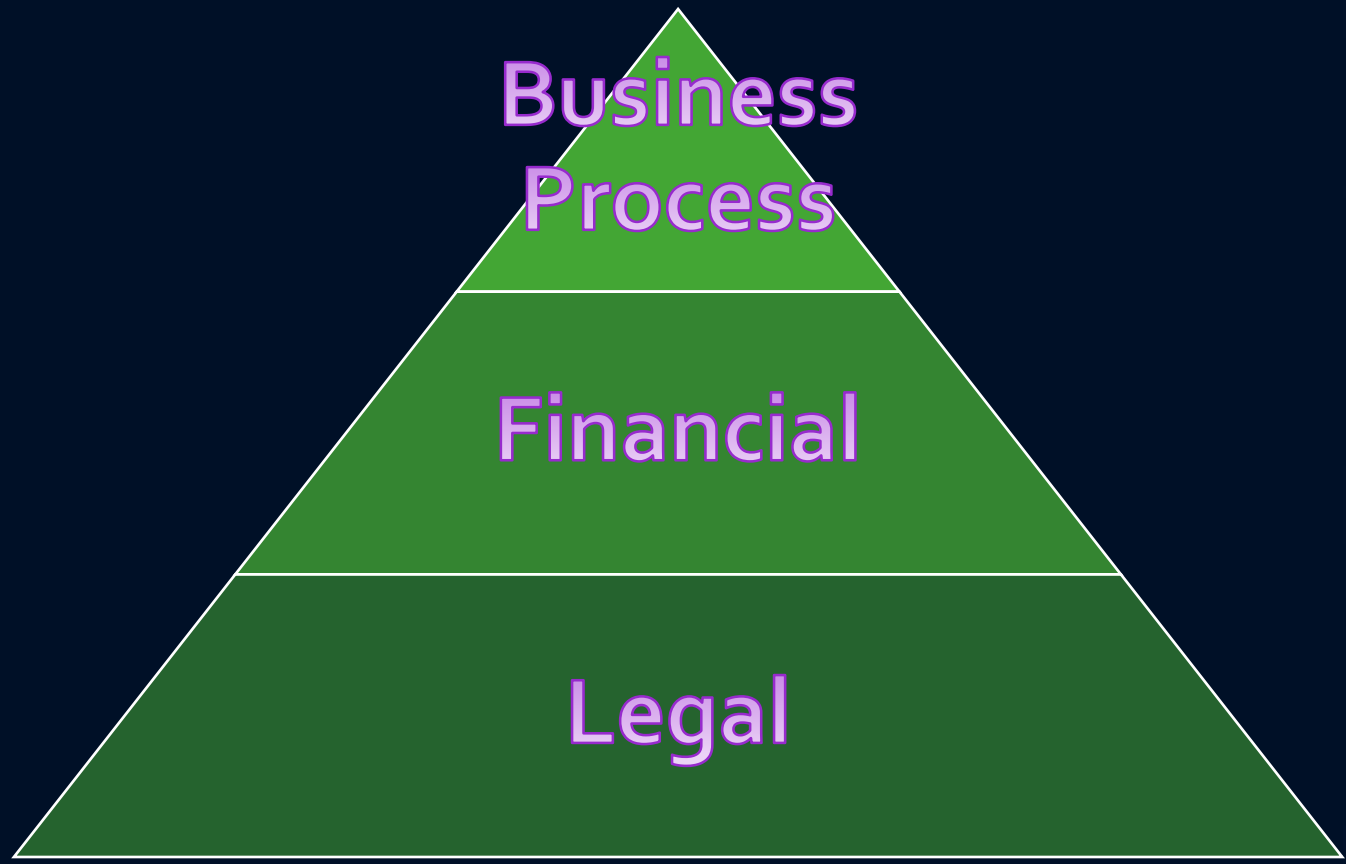
An Approach to Feasibility Which . . .

- Simplifies the problem

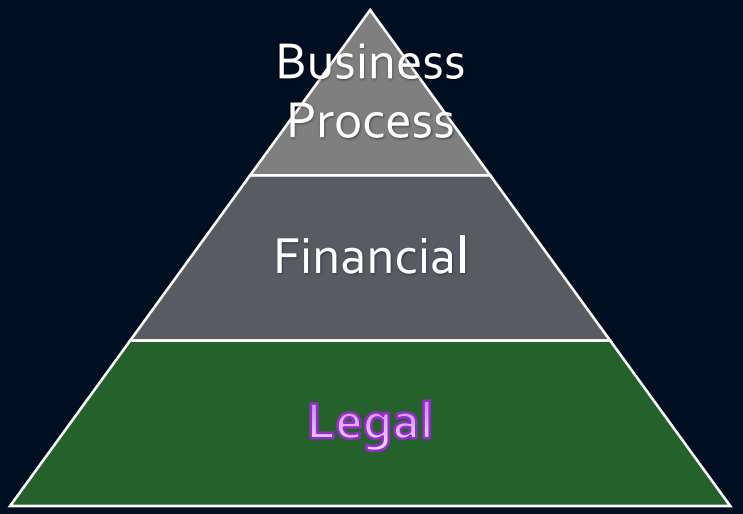
- Is thorough
- Is systematic

Elements of feasibility

Sequence of evaluation



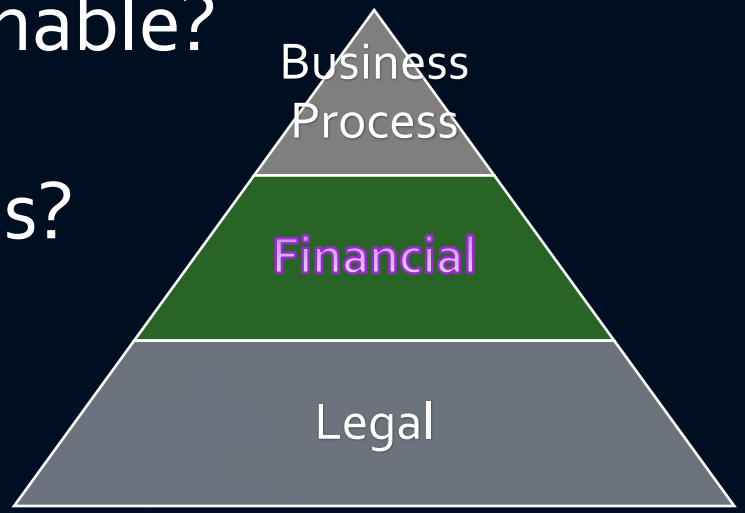
Is it Legally Feasible?



- Foundational, first gating question
- Is it legally permissible?
- Can we surmount statutory and regulatory hurdles?
- Legal team is capably handling this question

Is it Financially Feasible?

- Second gating question
- Can we fund the purchase of assets and the startup?
- Is business operation financially sustainable?
- Do we have adequate financial reserves?
- Yes is an enabling answer



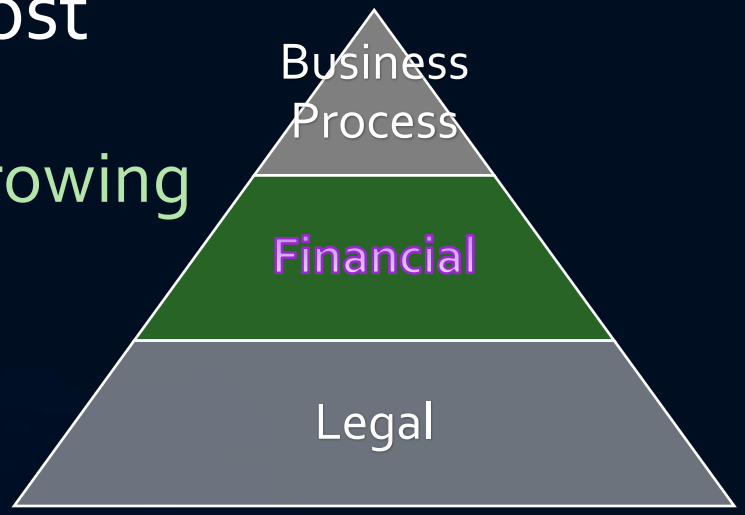
Without Financial Feasibility . . .

SSJID Electric would be impossible. We could stop here.

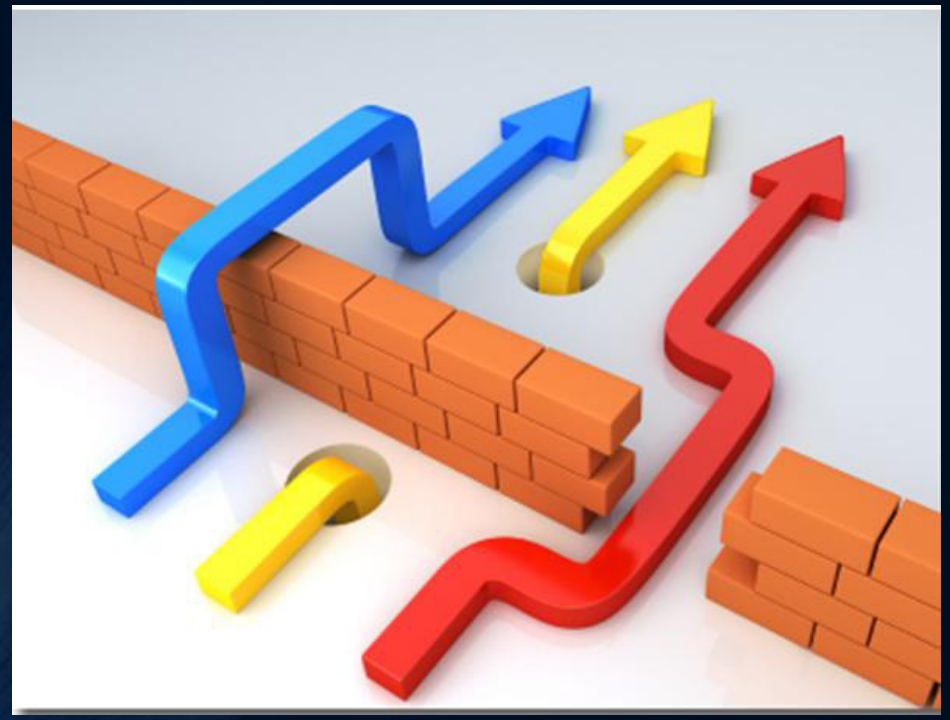
That is the gating aspect of financial feasibility.

Why Financial Feasibility is Enabling

- Adequate funds bring solutions within reach
  - **This is an important simplifying principle**
- Public economic benefit justifies the cost
  - More than $15,000,000 annually, and growing
  - Plus the multiplier effect



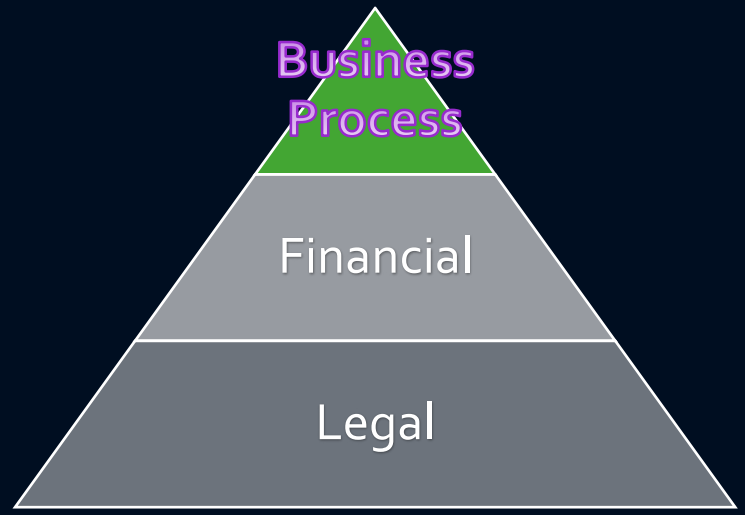
So, With Financial Feasibility . . .
(And adequate reserves)

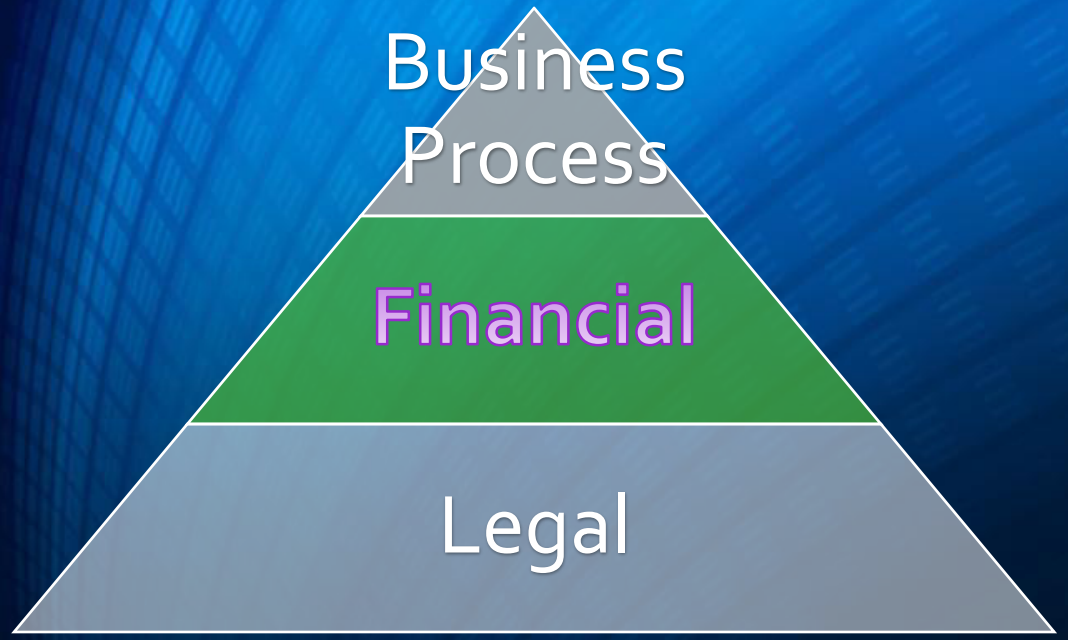


- Most other issues can be solved with the ability to pay
- Solutions can be devised or purchased
- This still requires:
  - Good execution of good plans
  - Expertise (which can be hired)

Is the Business Process Feasible?

- Can SSJID design this business?
- Will SSJID be able to operate it?
- Can SSJID conduct the transition (startup)?
- Remember the enabling effect of financial feasibility





Evaluating Financial Feasibility

STRONGEST RESULTS YET

Looking Back

- 2005 – Boris Prokop found feasibility
- 2010 – PA Consulting found feasibility
- 2013 – MRW found feasibility
- 2014 – Michael Bell Management Consulting found feasibility
- 2014 – LAFCo found feasibility

Trend: Feasibility has grown stronger as the analysis has been successively refined

Four Methods to Assess Financial Feasibility

- Method 1: Prepare a conservative projection of performance criteria
  - Debt service coverage
  - Cash reserves
- Method 2: Critically evaluate the pro forma financial projection
- Method 3: Understand the basic economics of the business
  - Why it **ought** to work (or not)
- Method 4: Find external reference points for comparison
  - Other public power utilities

Assessment Method 1:
MRW's Financial Projection

MEASURES OF FINANCIAL FEASIBILITY

Performance Criteria
(Measures of Financial Feasibility)

Can pay Opex and Capex	
Can Pay Debt Service	Greater than 125%
Ability to discount rates	At least 15%
Can Build Cash Reserves	More than 120 days of opex

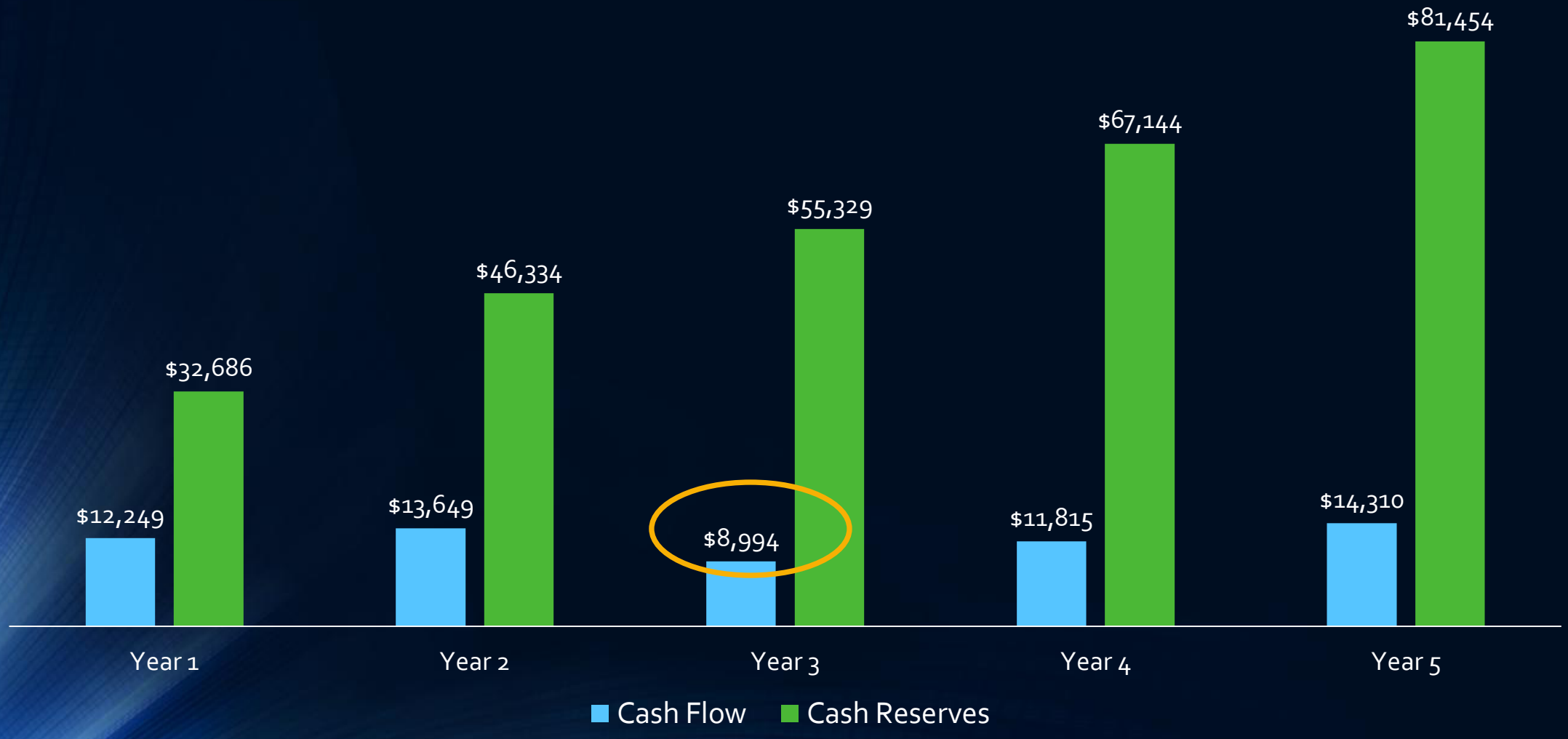
Introducing MRW & Associates

Consulting in the electric and gas utility industries

- Assists clients with:
  - Market assessments
  - Litigation
  - Regulatory proceedings
  - Financial assessments
  - Policy analysis

- Areas of expertise include:
  - Markets
  - Fossil fuel generation
  - Renewable energy
  - Demand response
  - Energy efficiency
  - Distributed generation

Cash Flows and Reserves Projected



Days Cash on Hand

- Definition:

  The number of days we could pay operating expenses if we had no income.

  Standard minimum is 120 days.

At the end of year 1	192
At the end of year 2	267
At the end of year 3	312
At the end of year 4	366
At the end of year 5	449

  Growth continues thereafter.

30 Year Cash Flow Projection

- Cash flow strong and growing
- Cash reserves are enormous
- These numbers won't happen . . .
  - Cost based rates
- Shows the size of our safety margin

	Cash Flow	Reserves
Years 1 - 5	$61,018	$81,454
Years 1 – 10	$143,879	$164,315
Years 1 – 20	$391,558	$411,994
Years 1 - 30	$982,510	$1,002,946

Projected Debt Service Coverage

Year	Debt Service Coverage Ratio
1	2.24
2	2.37
3	1.66
4	1.83
5	1.98
6	2.19
7	2.27
8	2.31
6	2.25
10	2.25

Minimum standard is 1.25

Assessment Method 2:
Evaluate the MRW Analysis

STRENGTHS AND VULNERABILITIES

Two Steps to Evaluate MRW's Analysis

1. Evaluate the quality of the pro forma financial projection
   - Michael Bell has done this
   - We will touch on this from a different perspective
2. Evaluate risks of incorrect assumptions by using sensitivity analysis

Strengths of the MRW Financial Projections

- MRW constructed sophisticated projections of:
  - Wholesale power costs
  - PG&E rates
  - Greenhouse gas allowance revenues
  - Exit fees
- Prepared by an expert team led by Laura Norin
- Reviewed by Michael Bell in 2014; Michael has now reviewed again
- Challenged vigorously by PG&E (unsuccessfully)

PG&E Rates Forecast

- An MRW topic of expertise
- Sets upper limit on SSJID rates at 85%
- MRW method is very sophisticated
  - 10 worksheets
  - Experience supporting rate case interveners
- 30-year PG&E rate forecast is like a 30-day weather forecast
- We know the rates will keep increasing

Wholesale Power Cost Forecast

- Another MRW area of expertise
- 52% of rate revenues over 30 years
- 45% over first 5 years
- Ratio is typically 65% - 70% for California public power
- MID ratio was 66% for 2014
- MRW assumes 15% discount (minimum allowable discount for SSJID)
- MRW projects SSJID power cost grows 3% - 4% annually
  - Except 2031 - 2033

Again . . .

SSJID Steps to Evaluate MRW's Analysis

1. Evaluate the quality of the pro forma financial projection
2. Evaluate risks of incorrect assumptions by sensitivity analysis

What Is a Sensitivity Analysis?

- Shows how sensitive the results are to changes in a key assumption
  - Results = days cash on hand, debt service coverage, etc.
  - Key assumption = asset appraisal, cost of power, etc.
- Change the assumption and look at the results

Following Are Sensitivity Analysis Results for:

- Discount from PG&E rates
- Wholesale power cost
- Operating expenses
- Capital expenditures
- Interest rate on bonds
- Purchase price (determines debt service)

Effect of Rate Discount on Annual Cash Flows

Years	With Rates Discounted from PG&E by: 15%	17%	19%	21%	23%	25%	27%	29%
1	$12,249,355	$10,315,717	$8,382,078	$6,448,440	$4,514,802	$2,581,163	$647,525	($1,286,114)
2	13,648,540	11,603,846	9,559,152	7,514,457	5,469,763	3,425,069	1,380,374	(620,081)
3	**8,994,371**	**6,818,161**	**4,641,950**	**2,465,740**	**289,529**	**(1,886,681)**	**(4,062,892)**	**(6,146,222)**
4	11,815,252	9,450,439	7,085,627	4,720,814	2,356,002	(8,811)	(2,259,254)	(4,379,515)
5	14,310,159	11,829,677	9,349,195	6,868,712	4,388,230	1,907,748	(342,474)	(2,493,407)
6	15,829,326	13,196,552	10,563,779	7,931,006	5,298,232	2,665,459	263,604	(1,964,274)
7	17,019,312	14,220,868	11,422,425	8,623,981	5,825,537	3,027,093	485,014	(1,813,893)
8	17,643,208	14,672,657	11,702,107	8,731,556	**5,761,005**	**2,790,455**	**107,109**	**(2,242,158)**
9	**16,263,450**	**13,164,154**	**10,064,859**	**6,965,563**	**3,866,267**	**766,972**	**(2,001,486)**	**(4,349,823)**
10	**16,105,958**	**12,841,711**	**9,577,464**	**6,313,218**	**3,048,971**	**(215,276)**	**(3,027,333)**	**(5,411,512)**
11	17,943,570	14,473,206	11,002,842	7,532,478	4,062,113	591,749	(2,267,111)	(4,742,351)
12	20,175,161	16,471,038	12,766,914	9,062,791	5,358,667	1,654,544	(1,292,887)	(3,869,501)
13	22,562,686	18,605,422	14,648,158	10,690,895	6,733,631	2,776,367	(301,234)	(2,978,841)
14	25,205,430	20,987,308	16,769,186	12,551,065	8,332,943	4,114,821	859,524	(1,925,453)
15	**24,616,362**	**20,134,577**	**15,652,791**	**11,171,006**	**6,689,220**	**2,207,435**	**(1,264,789)**	**(4,142,472)**
16	**23,084,928**	**18,317,387**	**13,549,847**	**8,782,306**	**4,014,766**	**(752,775)**	**(4,347,331)**	**(7,336,387)**
17	**21,977,518**	**16,907,123**	**11,836,728**	**6,766,332**	**1,695,937**	**(3,374,458)**	**(6,967,905)**	**(10,085,273)**
18	26,108,224	20,676,435	15,244,646	9,812,856	4,381,067	(1,050,722)	(4,566,371)	(7,834,965)
19	31,307,131	25,500,549	19,693,966	13,887,384	8,080,802	2,274,219	(1,329,705)	(4,776,332)
20	34,697,728	28,539,434	22,381,141	16,222,847	10,064,554	3,906,260	131,543	(3,447,552)

Significance of the Bold Face Numbers

- Year 3: Principal payments on acquisition debt begin
- Years 9 – 11: Revenue growth pauses
- Years 15 – 18: Power cost jumps 30%

Capital Contributions Sensitivity to Rates Discount

Years	With Rates Discounted from PG&E by: 15%	17%	19%	21%	23%	25%	27%	29%
1	0	0	0	0	0	0	0	1,286,114
2	0	0	0	0	0	0	0	1,000,834
3	0	0	0	0	0	0	2,877,377	6,605,924
4						0	2,957,848	5,075,766
5						0	90,714	2,240,947
6						0	491,397	2,717,515
7						0	342,566	2,639,852
8						0	664,247	3,012,365
9						0	2,682,253	5,030,612
10						0	3,817,807	6,201,167
11						0	3,174,330	5,647,488
12						0	2,264,379	4,838,678
13						0	1,263,983	3,939,283
14						0	124,290	2,906,815
15	0	0	0	0	0	0	3,185,172	6,060,739
16	0	0	0	0	0	0	6,837,339	9,823,851
17	0	0	0	0	0	0	9,533,674	12,648,112
18	0	0	0	0	0	0	5,785,303	9,050,444
19	0	0	0	0	0	0	2,600,476	6,043,036
20	0	0	0	0	0	0	1,147,452	4,723,523

- Owner capital contributions are called for when feasibility standards are not met
  - Cash on hand falls below 120 days
  - Debt service coverage falls below 125%
- Capital contributions is our indicator of infeasibility

Capital Contributions Sensitivity to **Power Cost**

Years	With Year 1 Power Cost Increased by: 22%	23%	24%	25%	26%	27%
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4	0	0	0	0	0	1,697,398
5	0	0	0	0	0	0
6	0	0	0	0	0	0
7	0	0	0	0	0	0
8	0	0	0	0	0	0
9	0	0	0	0	0	914,182
10	0	0	0	0	1,564,081	3,886,183
11	0	0	0	0	2,688,056	3,240,082
12	0	0	0	0	1,720,107	2,293,242
13	0	0	0	0	628,156	1,221,078
14	0	0	0	0	0	0
15	0	0	0	600,038	2,730,309	4,038,625
16	0	0	0	7,454,833	8,196,296	8,937,759
17	0	0	7,333,594	11,054,401	11,862,695	12,670,989
18	0	61,930	5,846,240	6,665,064	7,483,889	8,302,713
19	0	1,369,901	2,214,457	3,059,013	3,903,569	4,748,125
20	0	0	610,934	1,482,597	2,354,260	3,225,923

Capital Contributions Sensitivity to Purchase Price

Years	Purchase Price Increased by: $150,000,000 75%	$160,000,000 80%	$170,000,000 85%	$180,000,000 90%	$190,000,000 95%	$200,000,000 100%
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	323,140	1,121,122	1,919,103	2,717,085
4	0	483,142	1,768,684	2,560,511	3,352,339	4,144,166
5	0	0	0	230,174	1,015,355	1,800,535
6	0	0	0	0	0	469,017
7	0	0	0	0	0	0
8	0	0	0	0	0	0
9	0	0	0	0	0	272,846
10	0	0	0	0	0	1,880,434
11	0	0	0	0	0	361,929
12	0	0	0	0	0	0
13	0	0	0	0	0	0
14	0	0	0	0	0	0
15	0	0	0	0	0	0
16	0	0	0	0	0	0
17	0	0	0	0	0	0
18	0	0	0	0	0	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0

Summary of Sensitivity Analysis

With a 15% discount for retail rates:

- Estimated year 1 power cost could rise 23%
- Or, interest rate could rise 90%
- Or, operating expense could rise 70%
- Or, capital expenditures could rise over 200%
- Or, purchase price could rise 80% to $360,000,000

Assessment Method 3:
Consider Industry Economics

STRENGTHS AND VULNERABILITIES

Utility Industry Economics

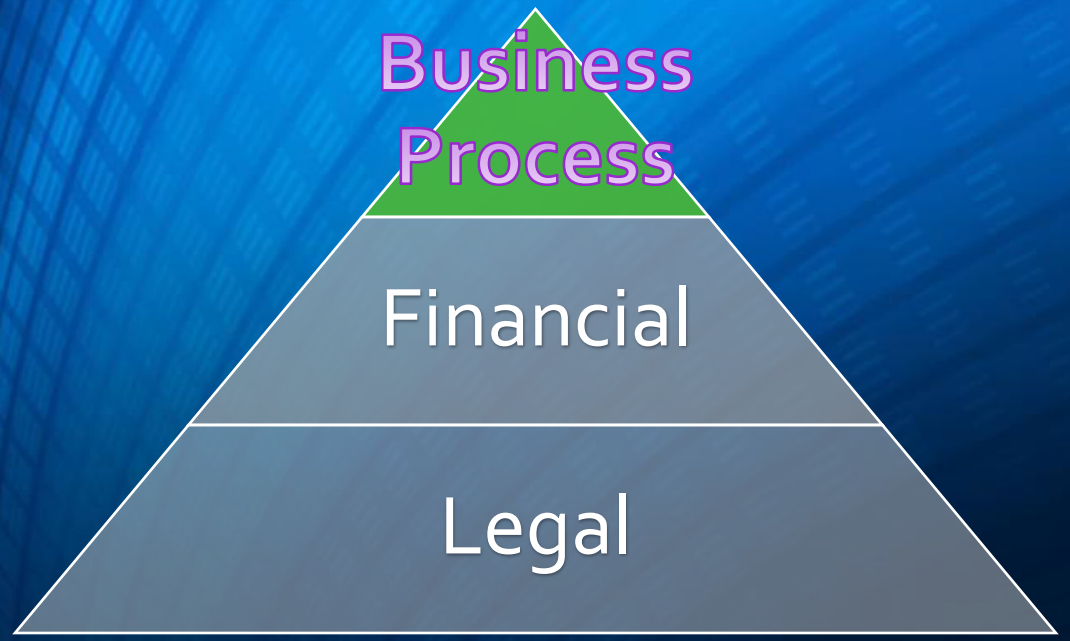
- Apart from financial analysis there are reasons SSJID's electric utility ought to be feasible:
  - We don't pay a profit to shareholders
  - We don't pay 40% income taxes
  - We borrow at lower, tax free interest rates
  - We have lower overhead expenses
    - Fewer layers of management
    - Lower paid management

Assessment Method 4: Compare to Other POUs

STRENGTHS AND VULNERABILITIES

Comparison to Other POUs in California

- California public power rates average 14.2% lower than the IOUs
- Most public power utilities collect a profit for transfer:
  - To a city general fund
  - To subsidize an irrigation business line
- Such transfers can be as much as 33% of the retail rates
- SSJID will not use electric rates for any subsidies or transfers



The Business Process

CAN SSJID EXECUTE THE BUSINESS PROCESS?

Key Issue: Can SSJID Really Pull this Off?

- SSJID proposes to:
  - Buy PG&E's electric distribution system
  - Start up a new electric utility organization
  - Run it better than PG&E
- The business process pursues these objectives

Steps in The Business Process

Phase 1: Design the business

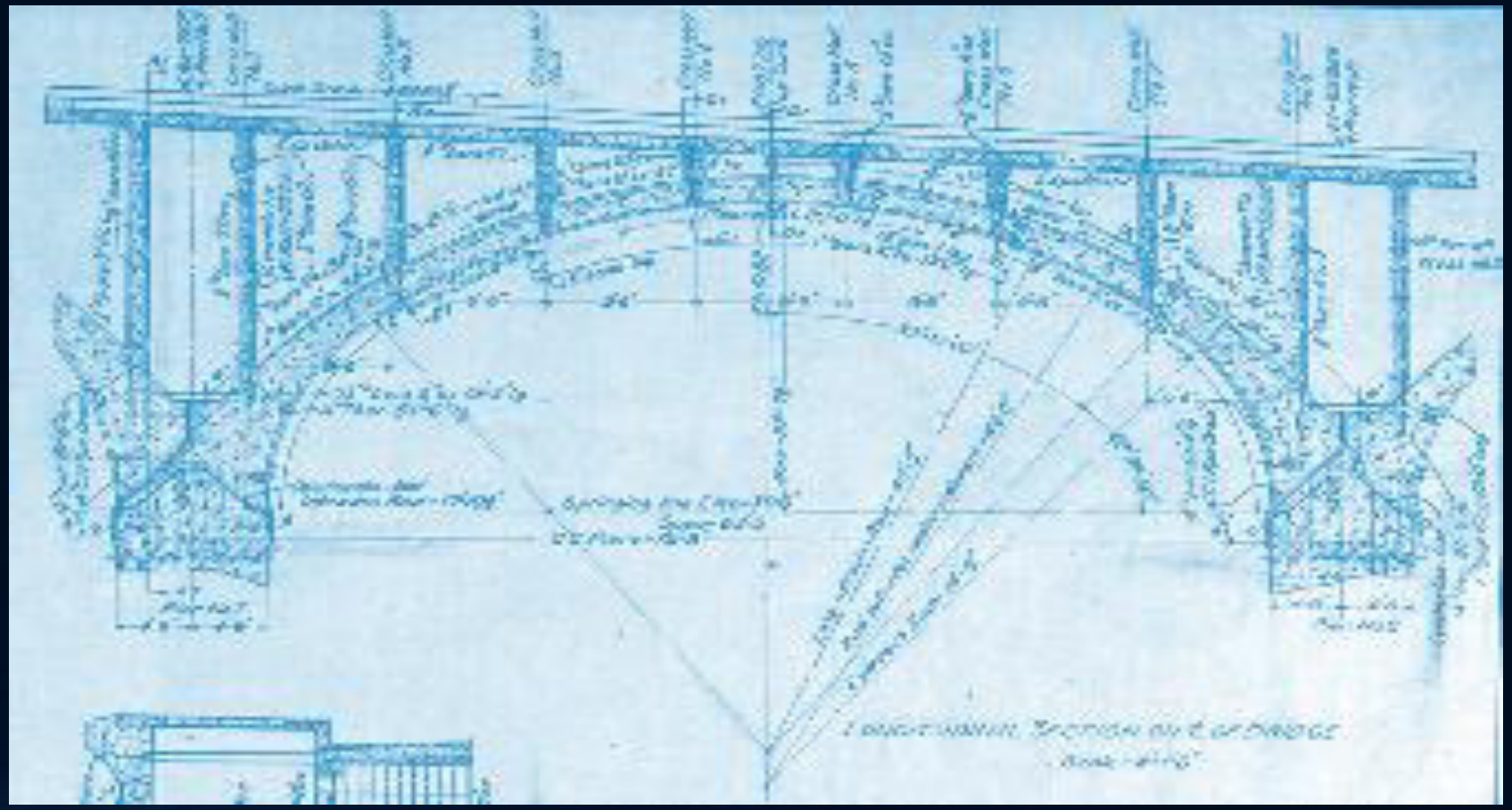
Phase 2: Design the transition

Phase 3: Conduct the transition

Phase 4: Operate the business

Phase 1: Design the business

- Accomplished by writing a business plan



About Our Business Plan

- It is a design for the business
- Addresses several audiences
- 1st draft
- It will be continuously revised
  - As new information develops
  - As new people get involved

Experts Engaged:

Don Battles

Wallace Barron

Steven Klein

Larry Dillon

Endorsement by Larry Dillon, PE

"The detail and thoroughness of the Business Plan is evidence of the overall quality and knowledge of the team you put together to build the plan. In my opinion, the quality of the plan is a good indication that SSJID is capable of starting and operating an electric utility."

Larry W Dillon
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817-448-6366
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June 15, 2016

Bere Lindley
Assistant General Manager
South San Joaquin Irrigation District
P.O. Box 747
Ripon, CA 95366-0747

Dear Mr. Lindley:

I recently had the opportunity to review the Draft Business Plan dealing with the Proposed Retail Electric Project for South San Joaquin Irrigation District (SSJID) that was forwarded to me on June 13, 2016. I am pleased that I was able to add my input to that of the other team members in the sections dealing with Equipment, Operating and Maintaining the Distribution System and Substations, and Customer Service.

While the Business Plan was not entirely complete and did not contain the financial analysis at the time of my review, the sections I did review were well written and show a very good understanding of the complexities and requirements of setting up and operating an electric utility. I am particularly pleased to see the overall focus on using the Business Plan as an educational tool for your Board of Directors so they may make an informed decision regarding their next steps. The document gives a thorough and understandable overview of the many functions and requirements necessary in organizing and operating an electric utility. The detail and thoroughness of the Business Plan is evidence of the overall quality and knowledge of the team you put together to build the plan. In my opinion, the quality of the plan is a good indication that SSJID is capable of starting and operating an electric utility.

I appreciate the opportunity to work with such an esteemed team of professionals and to have had the ability to contribute in a small way.

Sincerely,

Larry W. Dillon, PE

Texas PE #50266

South San Joaquin Irrigation District

Board of Commissioners

P.O. Box 747

Ripon, CA 95366-0747

June 20, 2016

I have served as the Senior Executive of two electric utilities located in the State of Washington and throughout my 37-year career, I have gained experience in virtually every aspect of a fully integrated utility. The utilities I managed also provided water and telecommunications services as well as operated electrical generation facilities that served both the retail and wholesale power markets.

I have had the opportunity to participate in drafting a section on Advanced Meter Infrastructure in the Proposed Retail Electric Project Plan for the South San Joaquin Irrigation District (SSJID). This has also provided me the opportunity to become familiar with the organization, leadership, and Project Business Team. I have been impressed with the business acumen that exists throughout the SSJID organization and I have come to appreciate their exemplary 100+ year history of operating a successful utility and providing irrigation water services.

I am impressed with the due diligence process that SSJID is following and the resources they have dedicated to undertaking the study and potential establishment of a retail electric utility. In all my interactions with SSJID, I have found them to demonstrate acute awareness and insight into the many business risks and challenges that they face. From my experience having observed the formation of other consumer-owned electric utilities in the northwest, SSJID is uniquely positioned to succeed based not only on the capable team and leadership they have at their disposal but also because of their experience operating an irrigation district and dealing with complex policy and customer issues.

Although the aforementioned Business Plan does not represent the final form that will constitute the ultimate plan, it is very comprehensive and thorough and demonstrates the dedication of SSJID to covering all the bases. The focused effort and quality work product being produced at this stage will serve as an excellent foundation for moving forward. The demonstrated quality of the work performed to date and the positive reputation that SSJID possesses, should bode well for the eventual recruitment of high caliber experienced electrical industry employees.

It has been my pleasure to assist in the preparation of one part of the Business Plan and to observe the strong team and effort that SSJID has put towards this important project.

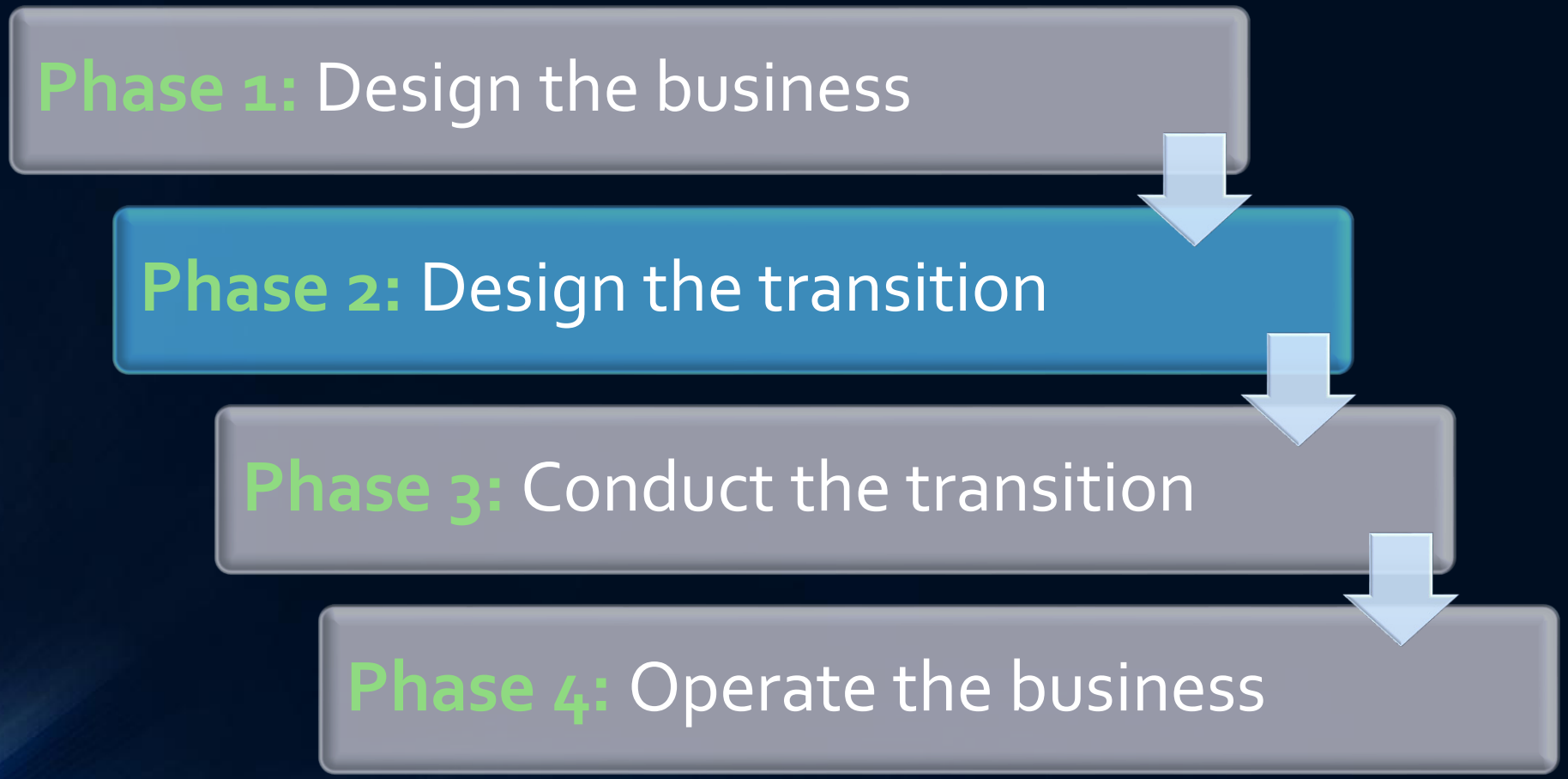
Steven J. Klein

Professional Electrical Engineer, State of Washington, Cert. No. 20741

Endorsement by Steven J. Klein, PE

"In all my interactions with SSJID, I have found them to demonstrate acute awareness and insight into the many business risks and challenges that they face. From my experience having observed the formation of other consumer-owned electric utilities in the northwest, SSJID is uniquely positioned to succeed based not only on the capable team and leadership they have at their disposal but also because of their experience operating an irrigation district and dealing with complex policy and customer issues."

Steps in The Business Process



Phase 2: The Transition Plan

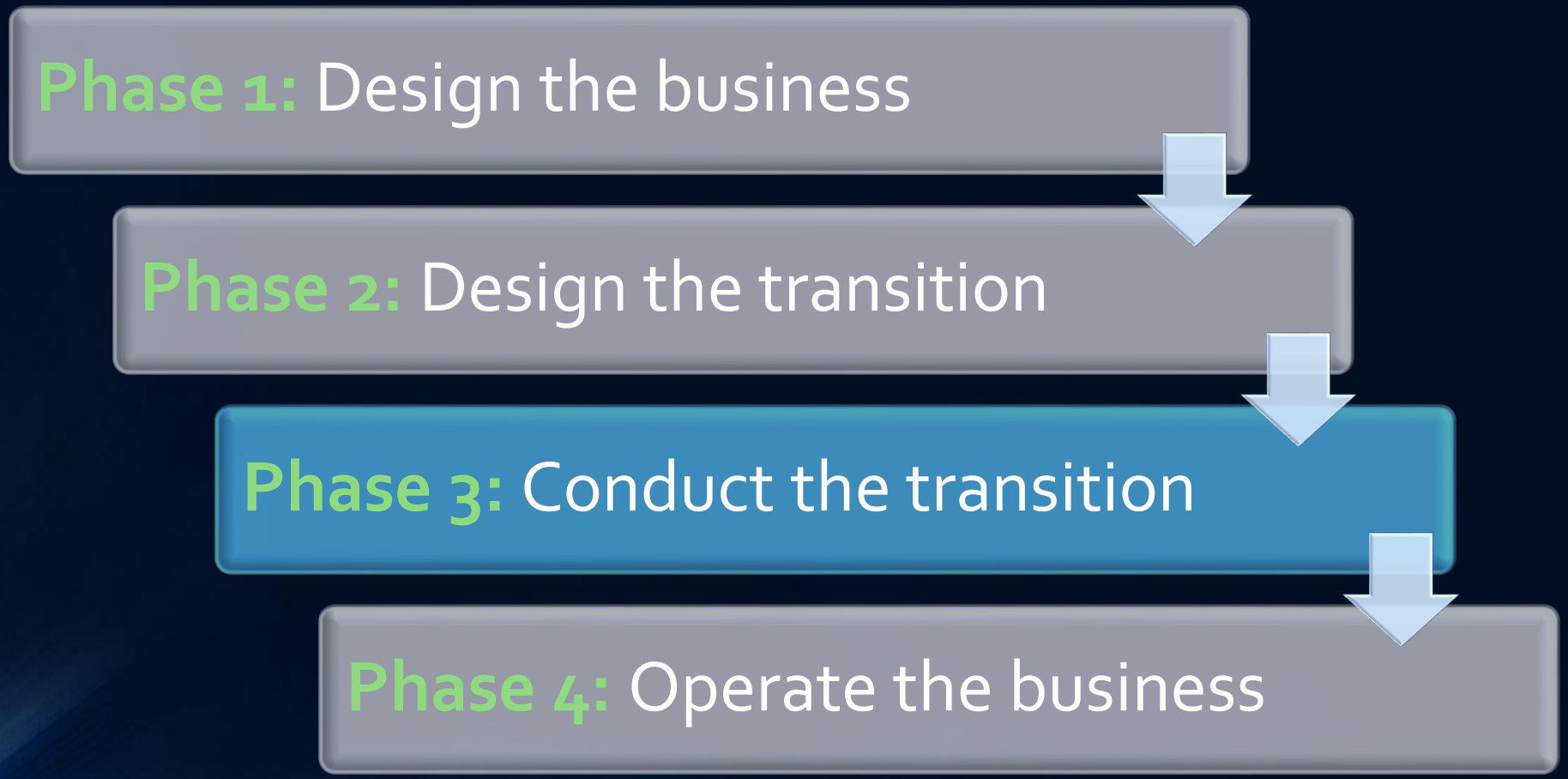
- Distinct from the business plan
- Describes how we build the business
- Currently represented by a chapter in the business plan
- Will become its own document
- Will be larger than the business plan
- Will describe every required task

Crooked River Gorge, Ore.

Transition Plan is a Major Project Description

- Business plan describes desired end result
- Work breakdown structure identifies every needed project and task
- Sequence the tasks
- Schedule the tasks

Steps in The Business Process



Phase 3: Conduct the Transition

- Work the transition plan
- This process is described in the transition plan chapter
- Major project management exercise
- A transition management team will be established

Phase 3: Conduct the Transition

- Objectives:
  - Complete everything
  - Finish on time
- Hire the needed expertise
  - Consultants
  - New employees, in the right sequence
  - Hire from the top down

Steps in The Business Process

Phase 1: Design the business

Phase 2: Design the transition

Phase 3: Conduct the transition

Phase 4: Operate the business

Phase 4: Operate the Business

- Opening day is the culmination of a months-long countdown
- Staffed with experienced, trained employees
- Systems tested
- Customer service rehearsals done

Like opening the water treatment plant . . .

Crooked River Gorge, Ore.

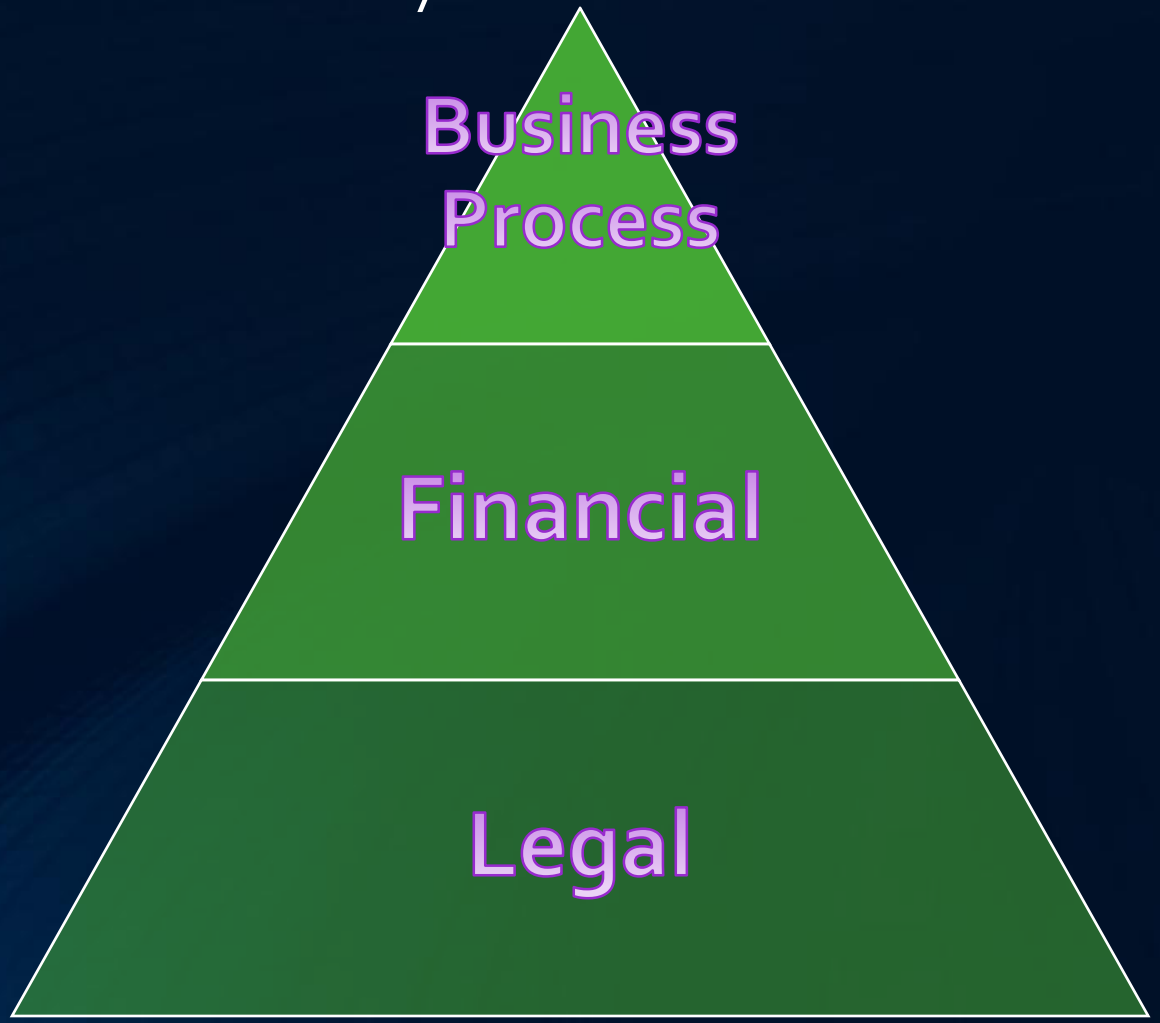
Can SSJID Really Pull this Off?

- The draft business plan is part of the answer
- This presentation provides part of the answer
- Remember a key principle:
  - Financial feasibility enables the business process

Summary

We've completed a thorough evaluation of feasibility.

1. We have legal feasibility
2. We have financial feasibility
3. The business process is feasible



Questions?