



# Forum

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## Iceland's First Dispute Review Board: A Case Study of Kárahnjúkar Hydroelectric Project



By Páll Ólafsson

The Kárahnjúkar Hydroelectric Project, located in East Iceland, is the latest addition to the hydro-power schemes of **Landsvirkjun** – The National Power Company

of Iceland (NPC). The power station was commissioned in 2007 with a capacity of 690 MW. On this project the DRB process was adopted for construction work in Iceland for the first time.

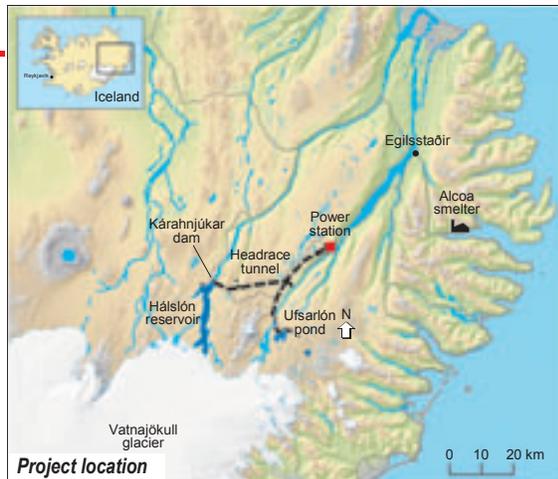
### 1. Energy resources and major hydro-power projects in Iceland

Iceland is a volcanic island situated in the North Atlantic Ocean, midway between Europe and North America. The size of the island is 103,000 km<sup>2</sup> and the population is

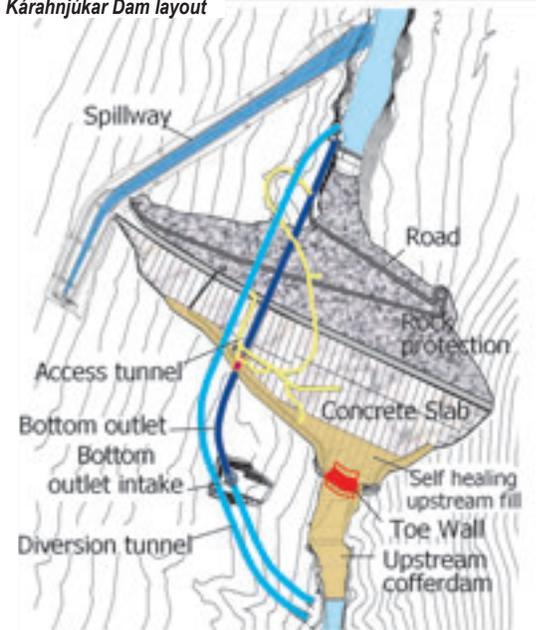
320,000. The country is endowed with great resources of hydro- and geothermal energy. Hydropower has been the main source for electricity production. The total potential amount of economically exploitable hydro-power is estimated to be 30,000 GWh/a of which 8,200 GWh/a had been developed by the end of 2007. Geothermal energy resources are mostly concentrated along the rims of the great rift which crosses the middle of the country from southwest to northeast and forms a continuation of the Atlantic ridge. It is estimated that Iceland's

*(continued on page 17)*

All construction work of the US\$2 billion Kárahnjúkar Project was completed without referring any matter to arbitration or court procedure.



Kárahnjúkar Dam layout



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## President's Page

I'm writing this message as we enter the New Year. This will be a very, very interesting year.

I've received several comments on my last President's Page. To summarize these comments, "just why and from where did I think this increase in demand for DB was going to come"? Let me share with you my thoughts. I speak directly about Region 1 – North America as the prime example, but as many of you are aware I travel out of Region 1 many times during the course of the year. The situation is basically the same the world over.

We are all aware of the present economic conditions not only in the U.S. but throughout the world. From all corners we hear "we need to get our economies moving again. We need programs that will put people to work." This usually leads to an increase in construction projects. As several recent state and federal government studies have stressed the North America infrastructure is in a sad state. The U.S. interstate highway program was started during the Eisenhower Administration. The system was launched with the signing of National Interstate and Defense Highways Act of 1955. For those interested it was signed on June 29 and construction began almost immediately. Coming out of college in 1962 as a Civil Engineer I went to work building highways, bridges and an occasional tunnel here and there throughout the northeastern U.S.

Now the interstate system has almost 50,000 miles and is over 50 years old. This is far beyond the design life of many of the components. No wonder much of it needs to be rebuilt. Actually the system is still not completed. Back in 1950 the U.S. population was just over 150,000,000. I saw an article on New Year's Day which stated the U.S. population is now 305,000,000. The infrastructure has been severely stressed to provide for this growth and shifting population centers. Let me give you a few more facts. The initial interstate system estimate was for \$25 billion and 12 years to complete. As I said above it is still not fully completed and has a current cost of \$425 billion. Couple this with the fact that much of the system needs major rehabilitation.

Infrastructure will be where the North America "pump will be primed." This is not only highways and bridges, there are water supply projects, multibillion dollar combined sewer outflow projects (CSO) in several of our major urban areas. As an example, the Washington, D.C. CSO system to clean up the Anacosta River is well over a billion dollar program, involves 15 separate contracts and is not scheduled for completion until 2025. New York's Metropolitan Transportation Authority has several multi-billion dollar programs already under construction. These programs involve many individual contracts scheduled to be bid over the next several years with final completion in 2015.

Every State and Federal agency in every corner of the country has projects on the shelves ready to go to construction and they will go. Construction for private owners and quasi private owners will not dry up. Power companies must continue to build for the 305 million people. There are at present applications for 15 nuclear plants. Twenty years have passed without one new plant application.

We are looking at a very substantial increase in construction projects not only in Region 1 but also Region 2. China has already announced a multi-billion dollar infrastructure program. About 18 months ago I attended a conference in Africa, where I learned of a proposed long range highway program for Africa that would rival the U.S. Interstate system.

So this is the answer to "just why and from where" will this increase in the need for DBs come.

This presents us, the DRBF, with two central missions:

**First** – Increase our membership and get them trained. If we don't fill this need others will.

**Second** – Spread the DB message to private owners and especially to the State and Federal agencies. The message is simple – the dollars are best spent in building projects and employing people. There is no real tangible benefit to the prolonged settlement of claims beyond the life of the contract. It is the waste of a scarce resource - money. The DB process is the best and most proven alternative to preventing this waste.

These two missions are what I see as the most important present assignment for the DRBF. I think it is possible to combine these missions into the efforts of a single committee, the DRB Advocate/Speaker Unit, led by Jack Woolf (*see page 14 for more details*). As I've said we are missing a tremendous opportunities to broadcast the DRB message. Some of the examples I have used in the past are the US and the International Mining Conferences, which attract about thirty thousand attendees. The ASCE has national, state and local conferences. The municipalities must also have numerous yearly conferences where all the managers of water works, sewer works, mass transits and airports get together. All of them have technical sessions where they are begging for presenters. I believe if we have a cadre of good speakers and could get our thinking far enough

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ahead of time we would spread our message rapidly. For the very reason stated above, “the money is best spent building the projects not litigating them years after their completion.” So these owners, agencies and design engineers need to have a DB clause in all their contracts. If the message gets out to all of the above and the DB clauses are included in the contracts and we continue and accelerate our DB training we will accomplish both our missions: to increase the DRBF membership and increase the number of DBs.

Regards,



## Executive Board of Directors

The DRBF Executive Board of Directors met by conference call on December 19, 2008 and January 15, 2009. Some of the items discussed include:

- Membership renewals
- Training prospects for 2009
- Bylaw revisions
- 2009 budget approval

A summary of the discussion is available to all DRBF members on the DRBF web site. To access the **Board of Directors Meeting Minutes Summary**, go to [www.drb.org](http://www.drb.org). Click on the **Member Login** button, and then click on **DRBF Board of Directors**.

**Executive Board of Directors Meeting Schedule:**  
February 20, March 20 and April 17, 2009 by conference call

## Region 1 Board of Directors

The members of the Region 1 Board of Directors are:

John Norton, President  
Kerry Lawrence, President Elect  
Roger Brown  
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**Region 1 Board of Directors Meeting Schedule:**  
February 20, March 20 and April 17, 2009 by conference call

## Region 2 Board of Directors

The members of the Region 2 Board of Directors are:

Volker Jurowich, President  
Nicholas Gould, President Elect  
Richard Appuhn  
James Perry

**Region 2 Board of Directors Meeting Schedule:**  
February 6, March 6 and April 3, 2009 by conference call

# Remedies to Encountered Risks of Road Infrastructure Projects

By Alina Oprea, Country Representative for Romania

I recently presented on the “Risks Encountered in Infrastructure Projects” at the SIDiR conference “Practical Issues in Implementation of Infrastructure Projects” at the invitation of Krzysztof Woznicki, president of SIDiR and DRBF Country Representative for Poland, to participants from Central and Eastern European countries and the Netherlands. I thought each would be facing different problems and risks, but the big surprise was that after my presentations, attendees from all regions asked me why I was talking about the risks **they** encountered in **their** countries! It appears that the same problems occur in all projects, in all countries, and we are not as different as we think we are.

Here’s what I said in my presentation:

## Encountered Risks of the Road Infrastructure Projects

There are different kind of risks in projects, such as macro level ones, middles level and micro level risks. Between the **MACRO LEVEL RISKS** of the projects, the political and government policy/strategy is one of the encountered ones. I did not meet it very often, but still, all of us have seen, at least once, changes in strategy and in priorities. On a scale from 1 (the rarest) to 7 (the most frequent encountered), I’ve encountered this risk with a frequency of 2 from 7.

I have not come across with the macroeconomic risk (influential economic/financial/banks events, inflation rate volatility, interest rate volatility), but it can be expected in this period, with banks having problems all over the world.

The legal risk is not only a hypothetical one, since the change in legislation and in tax regulation occurs frequently in a world trying to become better and, therefore, changing permanently the rules. The problem is that these changes affect the projects already commenced. The level of the risk is 4 on the above frequency scale, as I’ve encountered.

Sometimes (ranked at 2 on scale) social risks become from potential problems, actual problems, when people are not sufficiently informed about the necessity and consequences of the implementation of a certain project, and refuse to accept its construction.

Natural risks become actual problems in the life of a project, still with a lower frequency than, maybe, expected: only 2 from a maximum of 7 on the frequency scale (force majeure – never encountered by me in a Romanian project, geotechnical conditions – encountered quite often, weather – rare, environment – rare).

**MIDDLE LEVEL RISKS** of the projects refer, among others, to project selection: land acquisition/site availability – at and after the signing of the works contract - ranked at 4 of 7, utility relocation - ranked at 7 from 7, and level of demand for that project – never encountered, resulting an average incidence of the risk of 4 out of 7.

Another middle level risk is project finance, which, in projects I know, came into reality with a frequency of 3 out of the maximum of 7, less because of the interest of the investors for the project, and more because of the availability of the financing for the land expropriations.

The design is a risk ranked with 4 out of

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maximum 7 (design deficiency being the most frequently encountered risk, and less frequently occurs the problems regarding obtaining the approvals and permits - delays in approving procedures and inadequacy of documents submitted).

Construction risk is another middle level risk. It is related to construction cost overrun, construction time delay, fluctuation of contractor's personnel (all of them being encountered almost in all cases), to delays in contractor's mobilization – with a frequency of 5 out of the maximum of 7, to slow progress of works, insolvency of the sub-contractors and suppliers, late design changes, poor quality of workmanship (4 of maximum 7), to insolvency/default of the contractors, unavailability of the supervising personnel (3 of 7), and to material availability and excessive contract variation (ranked at 1 out of 7). The average ranking of the construction risk is of 5 out of 7 of the frequency scale.

Operation risk is another middle level risk. It regards to higher costs for maintenance and/or more frequent maintenance than expected. This rarely occurs in Romania, since the conditions to be fulfilled at the taking over of the works are quite drastic.

**MICRO LEVEL RISKS** in infrastructure projects refer, between others, to relationship: staff crises represents the highest risk (7 of 7), followed by the lack of cooperation of the relevant authorities for the land acquisition, permits, differences in working method and know-how between partners and lack of commitment from either partner involved in each project (each ranked at 4 out of 7 as frequency of occurrence), and organization and co-ordination between authorities regarding relocation of utilities, cutting of trees, and between the institutions/bodies acting in the project – all being ranked at 3 of 7 as frequency of occurrence. The average frequency of the relationship risk is of 6 out of 7.

Third party risk is another risk at micro

level. It refers to the lack of cooperation of the authorities, especially related to utility owners, and occurs with a frequency of 5 out of 7.

To summarize, the types of risks that occur in an infrastructure project in Romania and was confirmed as occurring in other countries, are ranked as follows:

- Relationship (6)
- Third party; construction (5)
- Legal; project selection; design (4)
- Project Finance (3)
- Political and government policy/strategy; social; natural (2)
- Macroeconomic; operation*

Measures shall be taken by the parties and stakeholders of the project in order to avoid these risks to become reality or to diminish their effects, once occurred.

**Remedies**

In the works contracts, if not prevented, the hypothetical risks could become encountered risks, these ones become problems, then claims, then disputes.

To help parties avoid this, in the works contracts the engineer and Dispute Boards (DB) are used. The engineer administers the contracts, analyzes the claims, negotiates and mediates the claims/conflicts between the parties and gives determinations on the claims made by either party. When parties are dissatisfied by the engineer's determination, they could submit the dispute to the DB in order to solve it.

This way of solving conflicts and disputes is advantageous for the parties and for the project, since the conflicts are solved faster, easier, with less conflict and less costly than in courts or arbitration.

Understanding and using properly the concept of preventing and solving the disputes through dispute boards helps users and helps projects.□

**Note:** DRBF Country Representative Alina Oprea can be reached at [alina.oprea.v@gmail.com](mailto:alina.oprea.v@gmail.com)



# 9th Annual International Conference and Training Workshop

**Radisson SAS Portman Hotel, London**

The DRBF's 9th Annual International Conference offers a global overview of the Dispute Board process, practical applications in common law and civil law jurisdictions, and interactive sessions on the dispute resolution process. An optional training workshop preceding the conference enables delegates to maximize their educational opportunity. Networking opportunities abound during the weekend, including an early registration cocktail on Friday evening hosted by Probyn Miers and a cocktail reception on Saturday evening hosted by Fenwick Elliott and Navigant Consultant followed by a gala dinner at The Honourable Society of Lincoln's Inn.

## Registration and Reservations

Conference registration fees are \$475 for DRBF members, \$550 for non-members; and workshop fees are \$300 for members and \$350 for non-members. Registration is available through the DRBF website ([drb.org](http://drb.org)), or by contacting the DRBF office. The host hotel, Radisson SAS Portman, is offering reduced group rates until April 14 of £215.00 midweek and £140.00 weekends, inclusive of breakfast and 15% VAT. To make your hotel reservation, contact the Radisson by at +44 (0)20 7208 6000 and use the group code **090515DRBF**.

**May 15, 2009**

## **Training Workshop: Dispute Resolution in Multicultural Environments Agenda Highlights**

This training workshop features an introductory session followed by interactive training in small groups, each led by an experienced DRBF panel of tutors and followed by a plenary discussion.

- Topic 1**    **Standard Form Contracts for Civil Law Countries?** The World Bank Standard Bidding Document for Civil Works Contracts in Civil Law Countries and the ICC Model Form Turnkey Contract for Major Projects.
  
- Topic 2**    **Multicultural Considerations:** DBs in Countries in Transition from Communism; Countries with Religious Law as Part of Their Culture; in Developing Countries with Insecure Bureaucracies.
  
- Topic 3**    **Dispute Resolution Buffet:** UK Statutory Adjudication; Compulsory Mediation; *Ad Hoc* DBs. Do we say "Farewell" to Dispute Prevention?
  
- Topic 4**    **The Use of Experts Compared:** Civil Law/Common Law, "Expertise"/Independent Expert Witness; Witness Conferencing (a.k.a. "Hot Tubbing").

**Space is limited - Register today!  
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[www.drb.org](http://www.drb.org)**

**May 16-17, 2009**

**International Conference: Dispute Boards Worldwide  
Practical applications in common law and civil law jurisdictions  
Agenda Highlights**

**Saturday, May 16**

Opening Address: “London’s Big Projects: Crossrail, Olympics 2021, Thames Estuary Airport. What are the current plans, and what impact will the financial crisis bring?” by Douglas Oakervee

***Dispute Boards Worldwide***

**DRBF Worldwide Report** James Brady, President DRBF Executive Board

**DRBF Goes Global** Volker Jurowich, President, DRBF Region 2 Board

**DRBs - The American Preference for Non-Binding Recommendations** A US based DRB practitioner

**The DB Format in Brazil** Gilberto José Vaz, DRBF Country Representative for Brazil

**Using DBs in Eastern Europe** Alina Oprea, DRBF Country Representative for Romania

**The Use of DBs in Special Purpose Contracts in Australia and New Zealand** Graham Easton, Country Representative Coordinator for DRBA

***Operating DBs in Civil Law Countries***

**Introduction by Session Chairman** James Perry, Director, DRBF Region 2 Board Member

**Civil Law and Common Law, Still a Meaningful Difference?** Paul Gélinas, Lawyer admitted to the Paris and Montreal Bars

**Ideas for Optimizing the DB Process in a Civil Law Jurisdiction Like Brazil: Complex Dam Projects, A Case Study** Júlio César Bueno, Pinheiro Neto Advogados

**FIDIC Standard Forms and Civil Law Jurisdictions** Axel-Volkmar Jaeger, Chair of FIDIC Contracts Committee

**Maximizing Benefits and Minimizing Costs: Effective DBs in Developing Countries** Marc Frilet, DRBF Country Representative for France

**DBs in North Africa and the Near East** Emhemmed Ghula, Project Director Libya

**Sunday, May 17**

***Practical Applications in the Dispute Resolution Process***

**Introduction by Session Chairman:** Dick Appuhn; DRBF Region 2 Board Member

**Session A:**

**The Dispute Avoidance Role of Dispute Boards**

Chaired by Gordon Jaynes, Recipient, DRBF AI Mathews Award for Dispute Board Excellence; and Dr. Toshihiko Omoto, Professor of Graduate School of Management, Kyoto University, Japan

**Session B:**

**Frequently Asked Questions About Dispute Boards**

Chaired by Dick Shadbolt, Adjudicator and DRBF Member; and Dick Appuhn, DRBF Region 2 Board Member

**Session C:**

**Ad Hoc Dispute Boards, a Sensible Solution**

Chaired by Paul Taggart, Consultant; Derek Griffiths, Consultant; and Axel-Volkmar Jaeger, Chair of FIDIC Contracts Committee

**Session D:**

**DAB Decisions: Bound to pay? How enforceable are DAB decisions? How enforceable should they be? How should they be enforced?**

Chaired by Edward Corbett Lawyer, DRBF Member; and Chris Seppälä, Partner, White & Case LLP, Legal Advisor, FIDIC Contracts Committee, and Alternate Member, ICC International Court of Arbitration

Affiliating organizations:



# The Role of Dispute Review Boards in Dispute Prevention

By Kurt Dettman and Eric Kerness

## Introduction

The traditional role of the Dispute Review Board (DRB) is to conduct hearings and issue findings and recommendations on the resolution of disputes. The article explores an expanded role for the DRB in *preventing* disputes, as well as assisting parties in *resolving* disputes.

## Background

Most project specifications require some sort of notice of claim and negotiation process to address disputes between project participants. The DRB typically is established to hear and make recommendations on issues that the parties have been unable to resolve through a negotiation process. Likewise, most DRB Three-Party Agreements and DRB operating procedures focus on the manner in which disputes will be brought to the DRB and the process by which they will be heard and non-binding recommendations issued. Thus, the DRB normally acts as a “back-stop” to resolve disputes after the parties have gone through a contract-required process.

This traditional DRB process has been quite successful at preventing parties from resorting to arbitration and litigation<sup>1</sup>. However, although less antagonistic and costly than arbitration or litigation, even the formal DRB process can cost the parties effort and resources that could be better spent advancing the project than battling about time and money.

## An Expanded Role for the DRB

Under the traditional DRB process, the DRB regularly visits the project, receives project updates, and stays abreast of project developments. In doing so, the DRB has the opportunity to implement “proactive monitoring” of the project. This expanded role can be used in the following manner to assist in

preventing disputes from morphing into formal claims going to the DRB.

First, in setting the regular DRB meeting agenda, the DRB can require the parties to walk through the salient project vital signs, such as actual work vs. planned work, technical/engineering challenges, schedule updates (or lack thereof), and other issues that may impede and impact the progress of the project. By specifically addressing such key project issues, the DRB will ensure the parties are openly and forthrightly discussing issues that may actually be a simmering dispute or may be headed in that direction if not resolved.

Second, the DRB can encourage senior people from the owner and contractor organizations to attend DRB meetings. Thus, the front line project staffs of both the owner and the contractor are required, in effect, to give a project status report to their senior managements. This often has the ameliorative effect that the senior managers hear about and can immediately act on information about the status of the project that they might not otherwise be privy to under standard reporting relationships. In addition, by directly listening to their respective staff reports they are getting an “unvarnished” version of what is happening (or not) on the project. In a similar vein, the DRB can encourage the parties to have in attendance other project players, such as the design engineer, important supervisors, and outside funding or monitoring agencies. The more involvement by all project stakeholders, the more likely that key issues will be brought out and addressed in a timely manner.

Third, by asking pointed questions the DRB can elicit from the project staffs what issues concern them and what they are doing to resolve them. Likewise, by methodically going through potential change logs, request for

<sup>1</sup>The DRBF has found that 98% of disputes that go to a DRB are resolved without resort to arbitration or court processes.

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The DRBF attracts new members as the DRB process advances into new industries and regions throughout the world. Help us expand by sharing information with your colleagues.

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information logs, submittal logs, and schedule updates the DRB often can “smoke out” issues that may lead to potential disputes if not promptly addressed by the parties. In doing so, the DRB can encourage the parties to develop an action plan (and schedule) to address open issues. The DRB then can ask that it be kept up to date on the action plan when receiving regular project updates.

**The Use of Advisory Opinions As A Dispute Avoidance Technique**

Many projects are now implementing the use of the DRB advisory opinion process. This process involves the parties bringing an issue to the DRB before it becomes a formal dispute. Typically, the issue is addressed at a regular site meeting with the parties presenting the issue and their respective positions via one or two page papers with key documentary back-up. The DRB listens to the parties, asks questions, and confers privately on the issue. The DRB then returns to give the parties an oral report on how the DRB views the merits of the issue based on the parties’ presentations. There is no record kept and the parties do not have to accept or reject the DRB’s feedback—instead, the parties can use it to continue their negotiations. If the dispute is not resolved, the parties can still go through the formal DRB process and the dispute is heard afresh by the DRB.

The advantage of the advisory opinion process is that it is very informal, does not cost the parties much in time or effort, and can be done in “real time” at regular quarterly DRB meetings. The important thing to note here is that the advisory opinion process can take place during the parties’ negotiation process, before they have adopted “official” positions. Thus, the advisory opinion process also promotes communication and cooperation on the project and is consistent with partnering principles that most projects adopt. Finally, if the parties use the DRB’s advisory opinion feedback to resolve an issue during the negotiation process, the parties will avoid the formality and cost of a full-blown DRB hearing.

**A Cautionary Note**

Because the DRB is established at the begin-

ning of the project and is in place throughout the project, it can observe and interact with the project and the project participants as the project unfolds. This is in contrast with other dispute resolution techniques such as mediation and arbitration where the mediator or arbitrator is brought after the fact and has to learn in a truncated manner what happened on the project, sometimes years later. Thus, the DRB has the unique opportunity to learn about and focus on issues as they arise in “real time,” and that is what makes the DRB process especially effective in being able to resolve disputes.

Balanced against these considerations, however, is the fact that the DRB is not intended to act as, nor is it set up to be, a shadow management organization. The DRB is not requested to--nor should it--offer day to day management advice to the project participants. The DRB must maintain its objectivity in order to fulfill its role of providing the parties with expert, neutral recommendations on disputes that are presented to it through the contact required process. The roles of management of the project cannot be mixed with the role of neutral DRB member. So, although the DRB can be proactive in questioning parties about addressing open issues, it must in the final analysis let the parties decide how to address those open issues. All the DRB can do is assist the parties in recognizing and talking about key project issues with the objective of the parties being able to resolve them early.

**Summary**

In summary, DRBs can be used more expansively to help the project participants avoid, as well as resolve, disputes. This can be done through the use of “proactive monitoring” and advisory opinions. The DRB in doing so, however, must always keep intact its role as neutral board members. □

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# Ethics in Today's World of DRBs: DRB Member Seeking Employment With One of the Parties



By Jim Phillips Ph. D.

The question raised in the previous edition of the *Forum* involved a DRB member who, during the course of a regular project meeting, is approached by another Board member and is advised that one of the parties is seeking DRB members for another project. That Board member also tells you that he/she is applying to be seated on that DRB and encourages you to do the same.

Before discussing my thoughts on this question, I want to thank Colin Marshall of Caribbean Arbitration Services, with offices in the United Kingdom and here in the United States in Georgia, for writing in with his views on the question raised in a previous edition of the *Forum*. That question was regarding the chair of the DRB being asked essentially to serve as a mediator for a dispute for which a DRB opinion had previously been published. Colin advised that this question had recently arisen for him personally on a one person DAB project on which he was sitting in Eastern Europe. Colin indicated that when contractor on the project asked him to serve as a mediator for a dispute before the DAB he considered it, first thinking that it would cause no harm if both parties agreed to this change in his role. Colin said, on second thought however, he decided against it because it might have an impact on his **contractual** role on the DAB over the 2-3 year contract term.

This result comports with my thoughts as I discussed them previously. While it might appear that changing roles from a Board member to a mediator is inconsequential, especially if both parties agree, there is no doubt that this change would directly affect, and possibly damage, the functioning of the

Board during the remaining life of the Board's contract on the project.

Colin also commented on another question posed in a previous *Forum* where the contractor declines to put forward disputes to the DRB, despite the fact that there are multiple unresolved issues on the project. Colin suggested that because the owner may put forward disputes as well as the contractor, the owner may wish to bring disputes forward and does not have to wait on the owner to do so. In that event, the contractor would have to make his arguments on his position for the dispute, or be foreclosed from doing so in the future, once the Board heard the owner's position.

Colin has raised some good points on both of these issues and I want to thank him again for writing in to me.

As to the question I posed in the last edition of the *Forum*, and restated above, the first major point to make is whether this scenario violates Canon 3 of the DRBF's Code of Ethics. This Canon provides that Board members should not "...use information acquired during DRB activities for personal advantage..." The question then becomes whether the scenario of the question fits this Canon, and I would have to say that it depends. If the DRB member, who found out about the other project with a DRB, did so in the course of performing his/her duties as a DRB member, then this Canon would seem to address this situation. However, it seems to me that if the discovery of the fact that one of the parties is soliciting DRB members for a different project was made independent of the work of the DRB already impaneled, then this Canon may not apply. I think the key point here is whether the knowledge about a potential DRB opportunity on another project was obtained in a way that would render

## Ethics Commentary or Question?

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the DRB member biased toward the party that was looking for new DRB members.

This brings me to a discussion of another Canon of Ethics, Canon 2. Canon 2 provides that the conduct of Board members should be above reproach and that even an appearance of a conflict of interest should be avoided. This Canon goes on to prohibit one on one, or ex parte, communications between the DRB members and the parties. In the scenario as posed, it is not clear how the Board member learned of the existence of the other DRB opportunity. If he/she did so from an ex parte communication, I think clearly Canon 2 would have been violated. If not, then I would go back to my discussion above about whether this information was learned independently from performance under the DRB specifications.

It seems to me that the main points of these two Canons are that DRB members should not use confidential information learned during the course of service on a DRB for their own advantage, and that DRB members should avoid the appearance of a conflict of interest. Its one thing for a party to take a DRB member aside and advise that they want that Board member to serve on a different DRB, clearly ex parte and clearly information, confidential or not, that might lead to a direct conflict of interest. It is another if a DRB member finds out through independent sources that one party has a contract with a DRB and is looking for Board members.

One other Canon should be discussed, and that is Canon 1. That Canon provides that each Board member should disclose "...any interest or relationship that could be viewed as affecting impartiality ...' or might create the appearance of partiality. No matter how the DRB member finds out about the other DRB, if he/she is seated on a new DRB with one of the parties to a current DRB, I think a disclosure to all of the parties would go a long way toward avoiding any appearance of partiality or bias. Canon 1 also provides that disclosure, usually an issue at the beginning of a DRB, is an ongoing obligation throughout the life of the DRB.

As written, the question asks what you would do if one of your colleagues on a DRB came to you with the information that one of the parties was looking for members for another DRB. What the question is getting at here is the relationship of DRB members and their ability to discuss possible ethical infractions and counsel each other as to the proper course of action. I have sat on DRBs where we counseled each other as to whether disclosure was appropriate or what the best course might be. This has been extremely helpful and an effective way to reach a good decision.

This raises the purpose for this column and the DRBF's commitment to providing a forum for discussions about ethical issues that we all come into contact with from time to time. I would encourage all readers who are faced with an ethical challenge to take advantage of the opportunity to contact experienced colleagues or to contact me with a question. The DRBF has established a protocol whereby we can confidentially discuss an ethical dilemma that is posed and provide a consensus based answer to those in this business who might need some advice. The Foundation's commitment to providing an opportunity for discussion of ethical challenges is a large component of the DRBF's mission to ensure that the DRB and other similar processes are delivered at the highest level of professional integrity and ethical conduct.

## **NEXT ETHICS CHALLENGE**

Assume that you are sitting on a DRB and that the project has been underway for some time. Assume also that the contractor begins a practice of referring several disputes to the Board a week, requests that the Board schedule a separate hearing on each dispute and that the hearings be scheduled one at a time for over 2 months so as to not unduly interrupt the work on the project. Assume the owner objects to this request, and asks that the DRB wait until all disputes have been referred by the contractor and then schedule one hearing over the period of several days.

## **What should the Board do?**

# How to Maximize Your Involvement in the DRBF in 2009

## The Magic Question: “How Do I Get Appointed to a DRB?”

By William B. Baker, P.E.  
Arbitrator, Mediator, DRB Member

I have been fortunate to serve on nearly 60 DRB’s. How did these appointments happen?

There is no central casting office for DRB appointments. The first step is to evaluate whether you have the necessary technical skills and experience in the field and a firm understanding of the process gained by attending workshops and studying the DRBF Practice and Procedures Manual. Once you are ready to pursue DRB service, the key to enhancing your chances to serve as a DRB member is marketing yourself by networking.

Here is my networking advice:

- Get as much training as you can. You’ll hone your skills and learn every time you take a training class, and you’ll expand your network of people in the DRB business.
- Sell the DRB process every chance you get. Groups are always looking for speakers. To list a few: contractor associations, sub-contractor associations, architect/engineer associations, owners who are about to build a project, public works associations, state highway departments, universities with expansion plans, construction lawyers who write contracts, city/state attorneys, and service clubs. If you convince these folks to specify a DRB for a project, when it comes time to choose the DRB members they will remember you.
- Publish articles about the DRB process in professional and trade journals, including the DRBF Forum.
- Talk to people you know who are already on DRBs and express your interest and ask for their advice.
- Actively volunteer in organizations such as the DRBF where you will gain face-to-face exposure to people who are in a position to (a) get you on a DRB directly, or (b) introduce you to others who can get you on a DRB.
- Tailor your resume to look like an ideal DRB candidate, with an emphasis first on number of years experience in the construction industry generally, and second, years of experience in dispute resolution.
- Constantly seek to expand your network of professional associates. Face-to-face contacts are better than telephone calls and telephone calls are better than mail, including email. From every new contact you make, try and get the names of one or two more.
- Stay current on what jobs are in the pipeline in your area of expertise. Talk to the designer and/or construction manager and find out if there will be a DRB, and if so, will an RFP be issued, or will nominations be by word-of mouth.
- Come to the DRBF conferences in London (May 2009) and Houston (October 2009). These conferences are total networking.
- Put your resume on the DRBF website.
- Develop your own web page.
- And finally, the DRBF needs your help! DRBF committee work where personal marketing opportunities abound include the following:
  1. Consider serving as a Country Representative or a Regional Representative (see article on opposite page).
  2. Get involved in the new DRB Advocate/Speaker Unit committee (see President’s Letter in this issue for more details).
  3. The Training Committee seeks referrals for agencies who might need in-house training, and tutors who can speak knowledgeably about local conditions.
  4. The *Forum* welcomes letters from readers about issues raised in the newsletter, case studies, challenges faced, lessons learned, and industry news.
  5. Participate on planning committees for regional meetings, or serve on the Annual Meeting or International Conference committee when it is in your area.

Marketing yourself is hard work. But it is what it takes to be asked to serve on a DRB. □

## **DRBF Regional Representative Report**

By Blasdel Reardon

Consistent with its long range business plan, in mid 2008 the DRBF Executive Board of Directors decided to have a Director for Region 1 responsible for coordinating the activities of all Regional Representatives in the United States and Canada. I was subsequently elected to this position.

In this capacity, I am responsible for updating the Regional Representative (RR) roster in terms of geographic areas covered, stimulating a pro-active marketing approach by RR's, developing a quarterly reporting procedure for all RR's, and for securing the assistance needed by any RR from other DRBF resources as necessary. Following is a partial list of RR's and their geographic areas of DRBF support at the time of this publication:

**New England** (except Vermont): Kurt Dettman

**Vermont and New York State:** Eric Kerness

**New Jersey:** Kathleen Harmon

**Ohio and some Midwestern states:** Larry Lenahan

**South Central** (Texas and adjoining Southern states): Lynn McDonald

**Northwest** (Idaho, Washington, and Oregon): Roger Brown

**Northern California and Hawaii:** John Jacobs

**Southern California, Arizona, and Nevada:** Bill Carlson

**Alaska and Northwest Canada:** Jeff Callahan

Obviously there are large areas of the US and most of Canada with no official DRBF representation, including: the Southeast, Florida (where DRBs are flourishing), New York City, Chicago, Washington DC/Virginia, and much of the Midwest including the South Central and Rocky Mountain regions.

Volunteers for active DRBF Regional Representatives in any of these areas are welcome and needed. Specific responsibilities of the RR's for the DRBF include:

- Gather information with respect to construction projects of all kinds wherein the use of a DRB could be beneficial.
- Contact owners and contractors to promote the DRBF and the use of DRBs.
- Organize local DRB training workshops as appropriate.
- Occasionally write articles of interest for the *Forum* and other publications.
- Be willing to commit sufficient time to this marketing position to make at least six contacts and engage in several meetings per quarter to promote the DRBF and the use of DRBs.
- It is anticipated that each RR will serve a term of at least two years. An incentive such as free attendance to a DRBF Annual Meeting or other travel award will be given annually to the DRBF Regional Representative who best fulfills the foregoing responsibilities.

As DRBF President Jim Brady comments elsewhere in this issue of the *Forum*, President Barak Obama's call for massive infrastructure expenditures presents a superb opportunity for the DRBF to promote its concept of construction dispute resolution. What better time for our industry to show the nation how quality and timely construction can proceed with a minimum of aggravation for all parties? We simply need more disciples (RR's) to spread the DRBF message.

Please contact Blase Reardon (reardon@bostonsolv.com or phone 617-423-0022) if you can assist in any way with this timely endeavor. □

# What Will Obama Do?

## An opportunity for the Dispute Board process and DRBF members

By Jack Woolf

The Obama administration must restart the U.S. economy. If history repeats the mid-1930's and copies the Rooseveltian initiatives we will see appropriation increases in all Public Works budgets.

This will mean that Federal, State, County and Municipal entities will create or dust off infrastructure construction programs. These will include bridges, roads, public buildings, health-care, airports, mass transportation, water management, etc.

The construction industry has always been a significant economic driver.

We all need to be alert, and aware of early announcements of these new projects. All DRBF members are now being asked to feed this intelligence, via email, to our headquarters (info@drb.org) where we will tabulate the opportunities and 'feed' the information to the right Regional Representative who will identify the key decision makers of the project.

In a separate article in this *Forum*, Blase Reardon explains our new initiative regarding the important role our Regional Reps. play in this entire early project identification.

We are also identifying DRBF members who are experienced DB advocates/speakers, who will then be willing to call on these key officials to sell the Dispute Board process as a proven cost and time efficient methodology.

The result of our members helping to identify new projects is two fold: First, it promotes the primary charter of the DRBF in expanding the use of DB's, and second this will create many opportunities for our members to be named to the resulting panels.□

### Maximize Your DRBF Involvement!

Contact any of these committee chairs to learn more about how to get involved:

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Blasdel Reardon

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DRB Advocate/Speaker Unit

Jack Woolf

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### Forum Editorial Deadline

Our readers love to hear DRB success stories, challenges facing the process, and the latest industry news and events. If you have new information about DRBs, DRBF members, or an article to share, please tell us! Contact Forum Editor Ann McGough by email at amcough@drb.org.

Deadline for the May issue is

**April 1, 2009**

#### DRBF Country Representatives

**Australia & New Zealand**  
Graeme Maxwell Peck

**Bahamas**  
Colin Arthur Marshall

**Belgium**  
William Buyse

**Brazil**  
Gilberto José Vaz

**Canada**  
Donald L. Marston

**China**  
Hongwei Zhao

**Ethiopia**  
Michael Gunta

**France**  
James C. Perry

**Germany**  
Dr. Helmut Koentges

**Greece**  
Rohan Shorland

**Iceland**  
Páll Ólafsson

**India**  
Shri K. Subrahmanian

**Ireland**  
Dr. Nael G. Bunni

**Italy**  
Dr. Ing. Igor V. Leto

**Japan**  
Toshihiko Omoto

**Malaysia**  
Sundra Rajoo

**Mexico**  
Dr. Lic. Herfried Wöss

**Netherlands**  
S.C. Conway

**Pakistan**  
Khalil-Ur-Rehman Khan

**Phillippines**  
Salvador P. Castro, Jr.

**Poland**  
Krzysztof Woznicki

**Romania**  
Alina Oprea

**Singapore**  
Christopher Redfean

**Southern Africa**  
Andrew L. Griffiths

**Switzerland**  
Pierre M. Genton

**Thailand**  
Victor James Smith

**United Arab Emirates**  
Hamish F. MacDonald

**United Kingdom**  
Murray Armes

## WELCOME TO NEW DRBF MEMBERS

NEW MEMBERS FROM NOVEMBER 2008 THROUGH JANUARY 2009

Vittorio Agabio  
Fara Novarese, ITALY

Frederick G. Aufiero  
SEA Consultants Inc.  
Bedford, MA USA

Rolland J. Brown  
Atascadero, CA USA

Julian Cardenas  
Paris, FRANCE

John Duffy  
Matanuska-Susitna Borough  
Palmer, AK USA

Beda G. Fajardo  
Fajardo Law Offices  
Makati City, PHILIPPINES

Luke A. Frantz  
WRScompass  
Tampa, FL USA

Dave Hawley  
Hawley Enterprises LLC  
Bermuda Dunes, CA USA

Walid Khalil Heneini  
Beirut, LEBANON

Gerald McEniry  
Revay & Associates  
Montreal, Quebec CANADA

John Resting  
Bicon Consulting Engineers  
Swazi Plaza, SWAZILAND

Surendra P. Singh  
United Nations Office for Project Services  
Lucknow, U.P. INDIA

Dongsheng Song  
Sinohydro Corporation  
Beijing, PR CHINA

Bruce Tonilas  
HDR Engineering  
Denver, CO USA

Sorin Vasilescu  
Calarasi County Council  
Calarasi, ROMANIA

Cao Yingchao  
Yellow River Water & Hydropower Dev. Corp.  
Ministry of Water Resources  
Zhengzhou, Henan PR CHINA

***DRBF Practices and Procedures***  
**Dispute Review Boards**  
**Dispute Resolution Boards**  
**Dispute Adjudication Boards**

The Dispute Resolution Board Foundation publishes the *DRBF Practices and Procedures Manual*, making it available for download free of charge on the web site. Bound copies are available for purchase online. Copies are \$40 for DRBF members and \$60 for non-members. Visit the Manual section of the DRBF web site ([drb.org](http://drb.org)) to learn more.

***Have an idea or question for the Manual Committee?*** The DRBF Practices and Procedures Manual is an authoritative and up to date explanation of the dispute board process. Since the process is continuously developing, the format has been tailored to allow it to be updated as necessary. Help the Manual expand by sharing your ideas and input with the committee: [info@drb.org](mailto:info@drb.org).

## Letter to the Forum: DBs in Developing Countries

I have read the article by Peer Dalland in the November 2008 issue of the *Forum* with considerable interest and fully support his remarks. I should however like to add further comments concerning the use of Dispute Boards in different countries.

The entrenched opposition to the concept of Dispute Boards is not restricted to developing countries. Some employers, in Europe and the Middle East, are reluctant to accept a decision by an independent tribunal and still have a deep rooted belief that disputes only arise because the contractor is asking for an additional payment, which should be at the discretion of the employer. Hence the need for training in the concept of “contractual entitlements” as distinct from “claims.” Training courses on the FIDIC Contract, as well as on the principles of the DAB, are essential and are currently being presented in many parts of the world including developing countries.

The paper by Salvador Castro, in the same edition of the *Forum*, refers to a course which was recently delivered by Robert Cochrane in the Philippines. This course, Module 1 of the series written and provided by European Construction Ventures (ECV), is the introduction to the management of FIDIC Contracts and covers these requirements. Further Modules, including a course specifically about the DAB process, are also being delivered in many different countries. The problem, as mentioned by Peer Dalland, is finance. DAB courses are most effective with a small number of delegates and the cost per delegate to cover the course overheads can be prohibitive. Hence the need for support from the project financing institutions, who will benefit from the more efficient resolution of any claims and disputes. Credit must be given to the Asian Development Bank, the European Union and to FIDIC themselves for their work in organising and sponsoring training courses, but much more needs to be achieved if the value of the DB is to be recognised by employers and contractors.

In addition to formal training it is important for the DRBF to encourage discussion and stimulate best practice on DB procedures. The recent meeting in London, which was also reported in *Forum*, resulted in an unexpected bonus when it was followed by a valuable email debate on some of the matters which had been discussed at the meeting. The diversity of opinions which were expressed was proof of the value of the meeting. Small informal meetings of this type are hard work for the organiser, but are important for the recognition and development of the Dispute Board.

Yours faithfully, Brian W. Totterdill

## Report from Brazil

In São Paulo, Brazil on 7 - 8 August, 2008, an event was held on arbitration in the engineering field, promoted by the Brazilian Institute of Engineering (*Instituto de Engenharia*). The main theme discussed was the use of ADRs for resolution of controversies in construction contracts. In the morning of the second day of the event, a panel called “*Another path on the resolution of conflicts in the construction and infrastructure fields: Dispute Resolution Boards (DRBs)*” was held, with the participation of lawyers and engineers with experience on that theme.

Also, on 28 October, 2008, the Chamber of Arbitration CAMARB (*Câmara de Arbitragem Empresarial Brasil*) promoted in the city of Belo Horizonte, Brazil, an event about arbitration in the construction field, with a panel discussing the use of Dispute Resolution Boards in contracts of such nature.

The debates in these events were concentrated in the possible rules and models for DRBs, the advantages of the method for the construction industry, the concrete experiences in the country and the future perspectives for the adoption of the method in Brazil.

Mr. Gilberto José Vaz, country representative for Brazil of the Dispute Resolution Board Foundation, was invited to participate in both events and brought an overview of the method’s development throughout the last decades, showing some statistics and remarkable facts. The vision of the Foundation about the advantages of the method was showed and discussed as a balanced and secure tool for the settlement of controversies in construction contracts in Brazil. □

(continued from page 1)

geothermal resource capacity is 20,000 GWh/a and so far 9,500 GWh/a have been exploited, with 60% being used for house heating and horticultural activities. Geothermal resources are increasingly used for electricity production and now provide some 32% of the total 12,000 GWh/a of electric power produced in the country.

Landsvirkjun - NPC was founded in 1965 with the purpose of developing and constructing large hydroelectric projects in the glacial rivers and to transmit and sell wholesale energy to power-intensive industries and regional distribution networks. NPC is financially independent but wholly owned by the Icelandic state. Since 1967 the company has constructed seven major hydropower schemes with a total capacity of 1,900 MW, with the Kárahnjúkar Project being by far the largest with 690 MW. The total energy production by NPC was 8,500 GWh/a in 2007, out of which appr. 70% was sold to heavy industry.

## 2. Kárahnjúkar Hydroelectric Project

The Kárahnjúkar Project harnesses water from the largest glacial rivers in mideast Iceland. These are the *Jökulsá á Dal* and *Jökulsá í Fljótsdal*. The Jökulsá á Dal (see map) is dammed in the Hafrahvammur canyon by a 198 m high and 700 m long concrete faced rockfill dam (CFRD), the highest of its type in Europe, and two smaller rockfill saddle dams. This has created the 57 km<sup>2</sup> Háslón reservoir with a maximum water level of 625 m a.s.l.

From the reservoir, the water is diverted through a 40 km long bored headrace tunnel of 7.2 m diameter down to the intake of the powerstation in Fljótsdalur valley. At about the mid-point of the headrace tunnel the other river, the Jökulsá í Fljótsdal, is diverted from Ufsarlón pond through a 13 km long bored tunnel of 7.2 m diameter into the main Headrace tunnel. Two steel-lined vertical pressure shafts, 420 m high, lead the water from the intake to the underground powerhouse which contains six generating units each of 115 MW capacity. A tailrace tunnel and canal returns the water to the course of the Jökulsá í Fljótsdal at elevation 26 m a.s.l. The total developed head is approximately 600 m and the rated maximum discharge is 144 m<sup>3</sup>/sec.

The electricity is transmitted by two 400 kV transmission lines to the coastal town of Reydarfjordur, where a new 346,000 tons/year aluminium smelter has been erected by an Alcoa subsidiary. The Kárahnjúkar Project adds some 4,800 GWh/a to the generating capacity of NPC and brings the total up to 13,300 GWh/a in 2008.

Construction started in early 2003 and all six units had been commissioned by end of 2007. The total construction cost amounts to US\$ 2 billion including financing cost.

## 3. Dispute Review Board Process

The Kárahnjúkar Project was designed by a consortium of international consultants comprising Harza (now MWH) of the USA, Electro-Watt (now Pöyry) of Switzerland and the Icelandic consultants VST and RT (now Verkís) and AV. Tender documents were prepared by the consultants with emphasis on health, safety and environmental issues. The general conditions of contract were NPC's own, but based on the FIDIC conditions, 4<sup>th</sup> ed. Both civil and electro-mechanical works were let out for tendering on the international market. The largest civil works contracts were for the construction of the main CFRD dam and TBM bored headrace tunnel. These two contracts were awarded to the Italian contractor Impregilo S.p.A. of Milan. The construction supervision of both was carried out by a team of seven international and domestic firms led by Mott McDonald of the UK.

The third largest civil contract involved the construction of the underground powerhouse cavern, transformer hall, two raise-bored pressure shafts and the tailrace. This contract was awarded to Fosskraft, a consortium of local and international contractors led by Hochtief of Germany. The construction supervision for this contract was carried out by a consortium of four international and local consultants, led by Lahmeyer International of Germany.

During contract negotiations both Impregilo and Hochtief suggested to NPC, the owner, to amend the contracts by incorporating a DAB or DRB process for dealing with possible disputes and claims arising during construction. This was accepted by NPC and the DRB process was provided for in the final contracts.

Two separate DRB committees were accordingly established and each consisted of an international lawyer as chairman and two engineers. These DRB committees visited the Kárahnjúkar site regularly during the construction (cont.)

period. Each committee had meetings with the respective contractor, the supervision team (owner's representative) and the owner's project management on progress of work and gave advice and recommendation on outstanding differences. As Review Boards, the committees acted primarily in an advisory capacity, and their formal recommendations became binding on the parties only if not submitted to arbitration or court procedure.

The construction of the powerhouse works by the Fosskraft group progressed well without any major unforeseen geological difficulties or construction problems. The work of the DRB committee on this contract was therefore limited to advising on interpretation of contractual matters and giving recommendations. No formal recommendation had to be made. This good result can be attributed to good planning of works, felicitous contract pricing and outstanding cooperation of all parties involved in the construction.

The execution of the two contracts by Impregilo was quite a challenge. The dam site is located in the highlands above elevation 600 m close to the largest glacier of Europe. Weather conditions are harsh in the wintertime with heavy snow storms and short daylight. The owner constructed 100 km of paved access roads from the nearest town of Egilsstadir and provided electric power for construction and telecommunication connection. The owner also provided a Labour Agreement which had been negotiated with the Workers Unions and enabled the work on site to be executed without any strikes. Work was carried out all the year around, mostly on shifts, and peak manpower reached 1,300 workers of 27 nationalities.

During the first year of construction (2003) the contractor had to mobilize the site, erect camps for more than 1000 people, build workshops and warehouses and at the same time start work on the diversion tunnels and adits for the TBM machines. To meet the demands of the tight construction schedule the contractor brought to the site a sufficient fleet of new heavy equipment and three new TBM machines tailored by Robbins of USA for the basaltic rocks prevailing on the headrace route. During this first year the contractor had to deal with labour problems. There was a shortage of local labour and obtaining work permits for import of labour was time-consuming at the outset and delayed mobilization on site. In spite of this the first important target date of the project, diversion of the river, was met on schedule in mid-December.

The construction of the Main Dam and Headrace Tunnel works by Impregilo encountered severe problems due to difficult geological conditions and changes in the work. The foundation work of the Main Dam was more extensive and difficult than expected and required some changes in the design. Difficulties and delays during the boring of the Headrace Tunnel with three TBM machines were caused on many occasions by high volumes of water ingress and also due to the geology and intensive fault zones on parts of the tunnel route. The contractor therefore repeatedly had to modify his work schedule and sequence of work to meet these problems and minimize delays.

Many differences of opinion and dispute arose between contractor and owner over various matters relating to the conditions encountered, and these were extensively dealt with by the DRB committee. Altogether 12 site visits were made to Iceland over a 4 year period, from 2004 to 2008. The DRB gave opinions and interpretation on technical and contractual matters and made recommendations for solution of differences.

There were two formal referrals to the DRB for the Dam Contract and two for the Tunnel Contract, all by the contractor. Formal Referral No. 1 on each contract was heard in June 2006 and concerned the alleged untimely issue of Variation Orders by the owner's representative and questions concerning their contents, such as whether and when to include time-related costs resulting from variations.

Formal Referral No. 2 for the Dam was a dispute mainly concerning the ongoing valuation and measurement process in the final phase of the work, which the parties had left or "carved" out for subsequent handling in a recent contract amendment otherwise providing for a settlement over variations and other matters. Formal Referral No. 2 for the Tunnel was in two parts. The first concerned alleged untimely and improper instructions for changes after acceptance of the Headrace Tunnel section, and the second related to the scope of "carved out" ongoing valuation and measurement matters in similar manner as for the Dam. Both referrals were withdrawn in mid-course in the reasonable expectation that a commercial settlement was possible. In the event, such settlement was realized for both contracts.

Informal assistance was given by the DRB for three specific claims submitted by the contractor on the Tunnel Contract. These dealt with delay and disruption caused by changed geological conditions in one of the TBM drives, the unit rates for dealing with excessive water in another TBM drive, and delays in respect of work connected with the late introduction of a Surge Shaft downstream in the tunnel.



*Overview of Kárahnjúkar Dam with spillway in operation*

Over the five year construction period, NPC and Impregilo successfully negotiated four Contract Amendments in settlement of various compelling issues concerning money and time, including work acceleration and payment of consequential cost. At the end of work in the fall of 2008, final settlement had been reached on all disputes, delays and outstanding differences between the parties.

All construction work of the Kárahnjúkar Project was completed without referring any matter to arbitration or court procedure.

#### 4. Final remarks

In general terms, the presence of the DRB had a positive impact on progress of the Kárahnjúkar Project. The recommendations given by the DRB were always valuable for the continuation of the project and usually related to points of principle rather than detailed claim processing, which was handled by the parties on a part-commercial basis. Even though the recommendations were at times disappointing for the owner, they were well received and their value, as well as the value of the DRB process, recognized by both parties. In situations where communications between the parties were at a stalemate on site, the discussion at the DRB site visits served as a catalyst for resuming dialogue and encouraging agreement, within parameters advised and/or concepts developed between the parties. However, the parties did not entirely succeed in streamlining the communications between contractor and supervision under the Impregilo contracts.

On the whole the application of the DRB process during construction of the Kárahnjúkar Project in Iceland was beneficial and contributed to the successful completion of the project, within the desired frame for time and cost. □

**About the Author:** Páll Ólafsson has been instrumental in the construction of all hydropower projects of the National Power Company (NPC) in Iceland, being the Head of the Construction Department of the company for 10 years. He was chairman of the Icelandic National Committee on Large Dams for 12 years and organized jointly with the Danish Committee the Annual Meeting of ICOLD in Copenhagen in 1989 followed by Study Tours to Iceland. He has worked in his field in Guatemala, Tanzania and in China. During construction of Tian Huan Ping Pumpstorage Project in China he met Al Matthews, founder of the DRBF, and has been the DRB Representative for Iceland since 1997. Since retirement from NPC in the year 2000 he has been the General Manager of his own firm, ProFiTec Consultants Ltd. in Iceland. During the two initial years of construction of Kárahnjúkar he was the Deputy Project Manager of the Mott McDonald supervision team. **Acknowledgement:** Special thanks to Mr. Jóhann Kröyer and Mr. Hjörtur Torfason at NPC for valuable assistance in preparing this article.



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# FOUNDATION FORUM

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## FOUNDATION FORUM

### London to Host 9th Annual International Conference

The DRBF's annual meeting of Dispute Board practitioners from around the globe will gather in London for three days of educational sessions and challenging discussions. Saturday night's optional Gala Dinner will bring a unique opportunity to dine at Lincoln's Inn, one of London's oldest buildings dating back to 1490. After a cocktail reception on the Gatehouse Court Lawn sponsored by Fenwick Elliott and Navigant Consulting, guests will proceed to the Old Hall for a three course meal in elegant surroundings. Space for this special dinner is limited, so conference delegates are urged to make their reservations early.

Conference organizers have made special plans for guests traveling with conference delegates. All are invited to attend an early registration and cocktail reception on Friday evening sponsored by Probyn Miers, and the morning coffee and opening address on Saturday morning. Douglas Oakervee, Chairman of Crossrail and advisor to the Mayor of London, will talk about some of London's most intriguing development projects, such as Olympics 2012 and the potential new Thames Estuary Airport. Group tours to some of London's popular attractions are also planned for guests who are not attending the conference.



Saturday night's Gala dinner will be held in the Old Hall at historic The Honourable Society of Lincoln's Inn